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Data obtained through Sentinel are intended to complement other types of evidence such as preclinical studies, clinical trials, postmarket studies, and adverse event reports, all of which are used by FDA to inform regulatory decisions regarding medical product safety. The information contained in this report is provided as part of FDA's commitment to place knowledge acquired from Sentinel in the public domain as soon as possible. Any public health actions taken by FDA regarding products involved in Sentinel queries will continue to be communicated through existing channels.

FDA wants to emphasize that the fact that FDA has initiated a query involving a medical product and is reporting findings related to that query does not mean that FDA is suggesting health care practitioners should change their prescribing practices for the medical product or that patients taking the medical product should stop using it. Patients who have questions about the use of an identified medical product should contact their health care practitioners.

The following report contains a description of the request, request specifications, and results from the modular program run(s).

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Overview for Request: cder_mpl2p_wp047

Request ID: cder_mpl2p_wp047

Request Description: In this report we investigated the comparative risk of thromboembolic stroke, intracranial hemorrhage, gastrointestinal bleeding, and extracranial bleeding outcomes associated with use of dabigatran and apixaban in individuals under 65 years of age with non-valvular atrial fibrillation in the Sentinel Distributed Database (SDD).

Sentinel Routine Querying Module: Cohort Identification and Descriptive Analysis (CIDA) module, version 11.3.0, with Propensity Score Analysis module and custom programming.

Data Source: We distributed this request to five Data Partners (DP) on July 7, 2023. The study period included data from October 19, 2010 to February 28, 2022. See Appendix A for a list of the latest dates of available data for each DP included in this report.

Study Design: We identified cohorts of incident dabigatran and apixaban users among health plan members who were under 65 years of age with atrial fibrillation. We evaluated the occurrence of thromboembolic stroke (stroke), intracranial hemorrhage (ICH), major extracranial bleeding (MEB), and gastrointestinal bleeding (GIB) outcomes among these cohorts. We then conducted a Propensity Score Analysis (PSA) comparing the two treatments using inverse probability of treatment weighting (IPTW) to adjust for confounding. This study used a retrospective new-user cohort design. This is a Type 2 analysis using the Propensity Score Analysis module in the Query Request Package (QRP) documentation.

Exposures: We defined the exposures of interest as new use of standard dose dabigatran (150 mg twice daily) or apixaban (5 mg twice daily). The exposure drugs were defined using National Drug Codes (NDCs). Please see Appendix B for a list of generic and brand names of medical products used to define exposures in this request.

Outcomes: We defined the following outcomes of interest. For a list of International Classification of Diseases, Ninth and Tenth Revisions, Clinical Modification (ICD-9-CM and ICD-10-CM) diagnosis codes used to define the outcomes, please see Appendix C.

1. We defined stroke and ICH using ICD-9-CM and ICD-10-CM diagnosis codes flagged as a primary diagnosis in an inpatient encounter.
2. We defined MEB as:
 - a) one ICD-9-CM or ICD-10-CM diagnosis code from "Major Extracranial Bleeding - List 1¹" as primary diagnosis from inpatient encounter AND no code from "Major Extracranial Bleeding - List 3"
 - OR
 - b) one ICD-9-CM or ICD-10-CM diagnosis code from "Major Extracranial Bleeding - List 2" as primary diagnosis from inpatient encounter AND one ICD-9-CM or ICD-10-CM diagnosis code from "Major Extracranial Bleeding - List 1" as secondary or unspecified diagnosis from inpatient encounter on the same day AND no code from "Major Extracranial Bleeding - List 3").
3. We defined GIB as:
 - a) one ICD-9-CM or ICD-10-CM diagnosis code from "Gastrointestinal Bleeding - List 1" as primary diagnosis from inpatient encounter
 - OR
 - b) one ICD-9-CM or ICD-10-CM diagnosis code from "Gastrointestinal Bleeding - List 2" as primary diagnosis from inpatient encounter AND one ICD-9-CM or ICD-10-CM diagnosis code from "Gastrointestinal Bleeding - List 1" as secondary or unspecified diagnosis from inpatient encounter on the same day.

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Cohort Eligibility Criteria: We required patients included in the cohorts to be enrolled in health plans with both medical and drug coverage for at least 183 days prior to the index exposure, during which gaps in coverage of up to 45 days were allowed and treated as continuous enrollment. Cohorts were further restricted to patients under 65 years of age. New use was defined as no use of apixaban or dabigatran at the specified index doses in the 183 days period preceding the index dispensing. We included patients with evidence of atrial fibrillation in the 183 days preceding or on the index date. We excluded patients from the cohort if they had evidence of use of alternative doses of dabigatran or apixaban or if they had any use of rivaroxaban, edoxaban, or warfarin at any dose in the 183 days prior to or on the index date. We also excluded patients from the cohort if they had evidence of dialysis, kidney replacement, deep vein thrombosis, pulmonary embolism, joint replacement, mitral stenosis, valve replacement or valve repair in the 183 days prior to and including the index date. Dialysis was only assessed in outpatient care settings. Additionally, we excluded patients from the analysis if they had evidence of an institutional stay encounter on their index date. Inclusion and exclusion criteria were defined using NDCs, ICD-9-CM, ICD-10-CM, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4) codes. Please see Appendix D for a list of generic and brand names of medical products and Appendix E for a list of diagnosis and procedure codes used to define inclusion and exclusion criteria in this request.

Follow-up: We determined follow-up time based on the length of the exposure episodes. Specifically, we created exposure episodes using outpatient pharmacy dispensing data. We bridged together exposure episodes less than three days apart and added three days at the end of each exposure episode to create continuous treatment episodes. Overlapping days supply of two dispensings were stockpiled up to 33% of the first dispensings days supply. We censored all exposure episodes upon dispensing of the comparator drug, alternative dose of the index drug, dispensing of rivaroxaban, warfarin or edoxaban, kidney transplant, dialysis, institutional stay encounter, major extracranial bleed, gastrointestinal bleed, intracranial hemorrhage, or ischemic stroke. Follow-up began on the day after exposure initiation and continued until the first occurrence of any of the following: 1) outcome occurrence; 2) requester-defined censoring criteria; 3) disenrollment; 4) recorded death; 5) end of exposure episode; 6) end of query period; or 7) end of available data. Only the first valid exposure episode that occurred during the study period was included per patient. Censoring criteria were defined using NDC, ICD-9-CM, ICD-10-CM, ICD-10-PCS and CPT-4 codes. Please see Appendix F for a list of generic and brand names of medical products and Appendix E for a list of diagnosis and procedure codes used to define censoring criteria in this request.

Baseline Covariates: Please see Appendix G for a list of generic and brand names of medical products and Appendix H for a list of ICD-9-CM and ICD-10-CM diagnosis codes used to define baseline characteristics in this request. Please see Appendix I for evaluation windows used to define baseline characteristics.

Propensity Score Estimation: We fit a logistic regression model to estimate the propensity score (PS) based on the potential confounders outlined in Appendix K. We used the PS to conduct an IPTW analysis. Specifically, after PS estimation and exclusion (i.e. trimming) of patients in non-overlapping regions of the PS distributions, we used the PS to create a stabilized average treatment effect (ATES) weight for each patient.

We initially applied three candidate weight truncation percentile thresholds to deal with potential extreme inverse probability of treatment weights: 0% (no truncation), 1%, and 2.5%. Truncation was operationalized symmetrically, in that weights smaller than the weight at the specified percentile of the weight distribution were re-assigned the value of the weight at the specified percentile of the weight distribution, while weights larger than the weight at the (100 - specified percentile) of the weight distribution were re-assigned the value of the weight at the (100 - specified percentile) of the weight distribution.

Subgroup analyses for effect estimation included age categories (21-49, 50-64), sex (male, female), CHADSVASC score² (0, 1, 2, 3, 4, 5+), and HASBLED score³ (0, 1, 2, 3+) categories. The CHADSVASC score predicts risk of stroke in patients with atrial fibrillation, while the HASBLED score predicts bleeding risk in patients taking anticoagulants. For IPTW analyses, subgroups were formed out of the post-trimming overall population to ensure only those patients contributing to the overall analysis contributed to a subgroup analysis.

After a review of the distribution of IPT Weights for the three truncation thresholds that was blinded to effect estimates, we decided to apply the 1 percentile truncation threshold to the overall cohort and the sex and age subgroups, and to apply the 2.5 percentile truncation threshold to the CHADSVASC and HASBLED subgroups.

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See Appendices J and K for the specifications or parameters used in this request.

Limitations: As with all observational studies, this evaluation was limited in its ability to control for all sources of potential bias. Algorithms used to define exposures, outcomes, inclusion and exclusion criteria, and covariates are imperfect and may be misclassified. Therefore, data should be interpreted with this limitation in mind.

Notes: Please contact the Sentinel Operations Center (info@sentinelssystem.org) for questions and to provide comments/suggestions for future enhancements to this document. For more information on Sentinel's routine querying modules, please refer to the documentation (<https://dev.sentinelssystem.org/projects/SENTINEL/repos/sentinel-routine-querying-tooldocumentation/browse>).

¹Cunningham, A., Stein, C.M., Chung, C.P., Daugherty, J.R., Smalley, W.E. and Ray, W A., 2011. An automated database case definition for serious bleeding related to oral anticoagulant use. *Pharmacoepidemiology and drug safety*, 20(6), pp.560–566.

²CHA2DS2-VASc: Lip, G.Y., Nieuwlaat, R., Pisters, R., Lane, D.A. and Crijns, H.J., 2010. Refining clinical risk stratification for predicting stroke and thromboembolism in atrial fibrillation using a novel risk factor-based approach: the euro heart survey on atrial fibrillation. *Chest*, 137(2), pp.263-272.

³HAS-BLED: Pisters, R., Lane, D.A., Nieuwlaat, R., De Vos, C.B., Crijns, H.J. and Lip, G.Y., 2010. A novel user-friendly score (HAS-BLED) to assess 1-year risk of major bleeding in patients with atrial fibrillation: the Euro Heart Survey. *Chest*, 138(5), pp.1093-1100.

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Appendix A Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (July 7, 2023)

Appendix B List of Generic and Brand Names of Medical Products Used to Define Exposures in this Request

Appendix C List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Appendix D List of Generic and Brand Names of Medical Products Used to Define Inclusion and Exclusion Criteria in this Request

Appendix E List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Appendix F List of Generic and Brand Names of Medical Products Used to Define Censoring Criteria in this Request

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Appendix H List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Appendix I Evaluation Windows Used to Define Baseline Characteristics in this Request

Appendix J Specifications Defining Parameters in this Request

Appendix K Specifications for Propensity Score (PS) Models in this Request

**Glossary of Terms for Analyses Using
Cohort Identification and Descriptive Analysis (CIDA) Module***

Amount Supplied - number of units (pills, tablets, vials) dispensed. Net amount per NDC per dispensing.

Blackout Period - number of days at the beginning of a treatment episode that events are to be ignored. If an event occurs during the blackout period, the episode is excluded.

Care Setting - type of medical encounter or facility where the exposure, event, or condition code was recorded. Possible care settings include: Inpatient Hospital Stay (IP), Non-Acute Institutional Stay (IS), Emergency Department (ED), Ambulatory Visit (AV), and Other Ambulatory Visit (OA). For laboratory results, possible care settings include: Emergency Department (E), Home (H), Inpatient (I), Outpatient (O), or Unknown or Missing (U). The Care Setting, along with the Principal Diagnosis Indicator (PDX), forms the Care Setting/PDX parameter.

Ambulatory Visit (AV) - includes visits at outpatient clinics, same-day surgeries, urgent care visits, and other same-day ambulatory hospital encounters, but excludes emergency department encounters.

Emergency Department (ED) - includes ED encounters that become inpatient stays (in which case inpatient stays would be a separate encounter). Excludes urgent care visits.

Inpatient Hospital Stay (IP) - includes all inpatient stays, same-day hospital discharges, hospital transfers, and acute hospital care where the discharge is after the admission date.

Non-Acute Institutional Stay (IS) - includes hospice, skilled nursing facility (SNF), rehab center, nursing home, residential, overnight non-hospital dialysis and other non-hospital stays.

Other Ambulatory Visit (OA) - includes other non overnight AV encounters such as hospice visits, home health visits, skilled nursing facility visits, other non-hospital visits, as well as telemedicine, telephone and email consultations.

Charlson/Elixhauser Combined Comorbidity Score - calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (e.g., in the 183 days prior to index).

Code Days - the minimum number of times the diagnosis must be found during the evaluation period in order to fulfill the algorithm to identify the corresponding patient characteristic.

Cohort Definition (drug/exposure) - indicates how the cohort will be defined: 01: Cohort includes only the first valid treatment episode during the query period; 02: Cohort includes all valid treatment episodes during the query period; 03: Cohort includes all valid treatment episodes during the query period until an event occurs.

Computed Start Marketing Date - represents the first observed dispensing date among all valid users within a GROUP (scenario) within each Data Partner site.

Days Supplied - number of days supplied for all dispensings in qualifying treatment episodes.

Eligible Members - number of members eligible for an incident treatment episode (defined by the drug/exposure and event washout periods) with drug and medical coverage during the query period.

Enrollment Gap - number of days allowed between two consecutive enrollment periods without breaking a "continuously enrolled" sequence.

Episodes - treatment episodes; length of episode is determined by days supplied in one dispensing or consecutive dispensings bridged by the episode gap.

Episode Gap - number of days allowed between two (or more) consecutive exposures (dispensings/procedures) to be considered the same treatment episode.

Event Deduplication - specifies how events are counted by the Modular Program (MP) algorithm: 0: Counts all occurrences of a health outcome of interest (HOI) during an exposure episode; 1: de-duplicates occurrences of the same HOI code and code type on the same day; 2: de-duplicates occurrences of the same HOI group on the same day (e.g., de-duplicates at the group level).

Exposure Episode Length - number of days after exposure initiation that is considered "exposed time."

Exposure Extension Period - number of days post treatment period in which the outcomes/events are counted for a treatment episode. Extensions are added after any episode gaps have been bridged.

Lookback Period - number of days wherein a member is required to have evidence of pre-existing condition (diagnosis/procedure/drug dispensing).

Maximum Episode Duration - truncates exposure episodes after a requester-specified number of exposed days. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

Member-Years - sum of all days of enrollment with medical and drug coverage in the query period preceded by an exposure washout period all divided by 365.25.

**Glossary of Terms for Analyses Using
Cohort Identification and Descriptive Analysis (CIDA) Module***

Minimum Days Supplied - specifies a minimum number of days in length of the days supplied for the episode to be considered.

Minimum Episode Duration - specifies a minimum number of days in length of the episode for it to be considered. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

Monitoring Period - used to define time periods of interest for both sequential analysis and simple cohort characterization requests.

Principal Diagnosis (PDX) - diagnosis or condition established to be chiefly responsible for admission of the patient to the hospital. 'P' = principal diagnosis, 'S' = secondary diagnosis, 'X' = unspecified diagnosis, '.' = blank. Along with the Care Setting values, forms the Caresetting/PDX parameter.

Query Period - period in which the modular program looks for exposures and outcomes of interest.

Switch Evaluation Step Value - value used to differentiate evaluation step. Each switch pattern can support up to 2 evaluation steps (0 = switch pattern evaluation start; 1 = first evaluation; 2 = second evaluation).

Switch Gap Inclusion Indicator - indicator for whether gaps in treatment episodes that are included in a switch episode will be counted as part of the switch episode duration.

Switch Pattern Cohort Inclusion Date - indicates which date to use for inclusion into the switch pattern cohort of interest as well as optionally as the index date of the treatment episode initiating the switch pattern. Valid options are the product approval date, product marketing date, other requester defined date, or computed start marketing date.

Switch Pattern Cohort Inclusion Strategy - indicates how the switch pattern cohort inclusion date will be used: 01: used only as a switch cohort entry date. First treatment episode dispensing date is used as index for computing time to first switch; 02: used as switch cohort entry date and as initial switch step index date for computing time to first switch.

Treatment Episode Truncation Indicator - indicates whether the exposure episode will be truncated at the occurrence of a requester-specified code.

Washout Period (drug/exposure) - number of days a user is required to have no evidence of prior exposure (drug dispensing/procedure) and continuous drug and medical coverage prior to an incident treatment episode.

Washout Period (event/outcome) - number of days a user is required to have no evidence of a prior event (procedure/diagnosis) and continuous drug and medical coverage prior to an incident treatment episode.

Years at Risk - number of days supplied plus any episode gaps and exposure extension periods all divided by 365.25.

*all terms may not be used in this report

**Glossary of Terms for Analyses Using
Propensity Score Analysis (PSA) Module***

Covariate - requester defined binary variable to include in the propensity score estimation model (e.g., diabetes, heart failure, etc.) during requester-defined lookback period. Requester may also choose to add any of the following categorical, continuous, or count

1. Age (continuous)
2. Sex
3. Time period (i.e., monitoring period for sequential analyses)
4. Year of exposure
5. Comorbidity score
6. Medical utilization – number of inpatient stays
7. Medical utilization – number of institutional stays
8. Medical utilization – number of emergency department visits
9. Medical utilization – number of outpatient visits
10. Health care utilization – number of other ambulatory encounters (e.g., telemedicine, email consults)
11. Drug utilization – number of dispensings
12. Drug utilization – number of unique generics dispensed
13. Drug Utilization – number of unique drug classes dispensed

Covariate Evaluation Window - specified number of days relative to index date to evaluate the occurrence of covariates of interest.

Note: members are required to have continuous enrollment during the covariate evaluation window, regardless of the value

Individual Level Data Return - program may return individual-level, de-identified datasets to the Sentinel Operations Center (SOC). While the datasets contain a single row per patient for each specified analysis, patient identifiers such as a patient ID are not included in the output. Individual-level datasets are returned to the SOC, aggregated, and used to calculate effect estimates via Cox (proportional hazards) regression.

Mahalanobis Distance - provides a measure of balance across all variables while accounting for their correlation.

Matching Caliper - maximum allowed difference in propensity scores between treatment and control patients. Requester may select any caliper (e.g., 0.01, 0.025, and 0.05).

Matching Ratio - patients in exposed and comparator groups are nearest neighbor matched by a 1:1 or 1:n (up to 10) matching

Matched Conditional and Unconditional Analysis - in a conditional matched analysis, a Cox model, stratified by Data Partner site and matched set, is run on the matched population. This can be done for both the both 1:1 and 1:n matched cohorts. In an unconditional analysis, a Cox model, stratified by Data Partner site only, is run on the matched population. This can be done for the 1:1 matched cohort only.

Propensity Score Stratification - option to stratify propensity scores based on requester-defined percentiles in the unmatched population. In a stratified analysis, a Cox model, stratified by Data Partner site, is run on the stratified population. Note that all patients identified in exposure and comparator cohorts are used in the analysis.

PSM Tool - performs effect estimation by comparing exposure propensity-score matched parallel new user cohorts. Propensity score estimation and matching are conducted within each Sentinel Data Partner site via distributed programming code; data are returned to the SOC, aggregated, and used to calculate effect estimates.

Risk-set Level Data Return - alternative to the patient-level data return approach. In this approach, the PSM tool will produce de-identified, risk-set level datasets instead of or in addition to individual-level output. Whereas each observation in the patient-level datasets represents one patient in the cohort, each observation in the risk set dataset represents one event. Risk sets are created at the Data Partner site, returned to the SOC, aggregated, and used to calculate effect estimates via case-centered logistic regression.

Subgroup Analysis - may be conducted using any requester-defined covariates. Subgroup analyses may be performed in the unmatched and the matched population.

Zero Cell Correction - indicator for whether to screen variables with a zero correction added to each cell in the confounder/outcome 2x2 table. Recommended when the number of exposed outcomes is fewer than 150.

*all terms may not be used in this report

Table 1a. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ^{1,2}	Number/Mean	Percent/Standard Deviation ^{1,2}		
Unique patients	20,163	100.0%	96,668	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	56.2	7.3	56.9	7.1	-0.671	-0.093
Age						
21-49 years	3,486	17.3%	14,513	15.0%	2.276	0.062
50-64 years	16,677	82.7%	82,155	85.0%	-2.276	-0.062
Sex						
Female	4,707	23.3%	28,463	29.4%	-6.099	-0.139
Male	15,456	76.7%	68,205	70.6%	6.099	0.139
Race ³						
American Indian or Alaska Native	4	0.0%	82	0.1%	-0.065	-0.028
Asian	29	0.1%	200	0.2%	-0.063	-0.015
Black or African American	226	1.1%	2,840	2.9%	-1.817	-0.129
Native Hawaiian or Other Pacific Islander	13	0.1%	85	0.1%	-0.023	-0.009
Unknown	17,987	89.2%	77,679	80.4%	8.851	0.248
White	1,871	9.3%	15,389	15.9%	-6.640	-0.201
Hispanic origin						
Yes	51	0.3%	530	0.5%	-0.295	-0.047
No	1,225	6.1%	11,286	11.7%	-5.600	-0.198
Unknown	18,887	93.7%	84,852	87.8%	5.895	0.204
Year						
2010	482	2.4%	0	0.0%	NaN	NaN
2011	6,808	33.8%	0	0.0%	NaN	NaN
2012	4,635	23.0%	0	0.0%	NaN	NaN
2013	2,387	11.8%	1,363	1.4%	10.429	0.429

Table 1a. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ^{1,2}	Number/Mean	Percent/Standard Deviation ^{1,2}		
2014	1,508	7.5%	3,742	3.9%	3.608	0.156
2015	1,041	5.2%	6,852	7.1%	-1.925	-0.080
2016	1,285	6.4%	9,522	9.9%	-3.477	-0.128
2017	865	4.3%	11,508	11.9%	-7.615	-0.282
2018	557	2.8%	13,206	13.7%	-10.899	-0.405
2019	302	1.5%	15,130	15.7%	-14.154	-0.522
2020	168	0.8%	15,505	16.0%	-15.206	-0.569
2021	105	0.5%	17,566	18.2%	-17.651	-0.636
2022	20	0.1%	2,274	2.4%	-2.253	-0.206
CHADVASC						
mean, std	1.5	1.1	1.8	1.3	-0.362	-0.303
0	4,126	20.5%	14,037	14.5%	5.942	0.157
1	7,295	36.2%	30,315	31.4%	4.820	0.102
2	5,418	26.9%	25,770	26.7%	0.213	0.005
3	2,270	11.3%	15,540	16.1%	-4.817	-0.141
4	802	4.0%	8,095	8.4%	-4.396	-0.183
>= 5	252	1.2%	2,911	3.0%	-1.762	-0.122
HASBLED						
mean, std	0.9	0.7	1.1	0.8	-0.199	-0.264
0	5,809	28.8%	21,863	22.6%	6.194	0.142
1	11,455	56.8%	51,632	53.4%	3.400	0.068
2	2,424	12.0%	17,406	18.0%	-5.984	-0.168
>= 3	475	2.4%	5,767	6.0%	-3.610	-0.182
Health Characteristics						
Diabetes	5,065	25.1%	28,482	29.5%	-4.343	-0.098

Table 1a. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ^{1,2}	Number/Mean	Percent/Standard Deviation ^{1,2}		
Hypercholesterolemia	5,371	26.6%	26,971	27.9%	-1.263	-0.028
Hypertension	13,717	68.0%	71,702	74.2%	-6.143	-0.136
Kidney failure (chronic)	749	3.7%	7,965	8.2%	-4.525	-0.192
Kidney failure (acute)	663	3.3%	9,210	9.5%	-6.239	-0.257
Obesity	4,564	22.6%	38,625	40.0%	-17.321	-0.380
Peptic ulcer disease	50	0.2%	407	0.4%	-0.173	-0.030
Nicotine dependency	3,305	16.4%	27,621	28.6%	-12.182	-0.295
Hospitalized AMI (past 0-30 days)	225	1.1%	2,648	2.7%	-1.623	-0.118
Hospitalized AMI (past 31-183 days)	97	0.5%	1,352	1.4%	-0.918	-0.095
Coronary revascularization	1,277	6.3%	9,479	9.8%	-3.472	-0.128
Hospitalized heart failure	2,230	11.1%	17,112	17.7%	-6.642	-0.190
Outpatient heart failure	2,387	11.8%	15,973	16.5%	-4.685	-0.135
Other ischemic heart disease	5,070	25.1%	28,007	29.0%	-3.827	-0.086
Hospitalized Thromboembolic Stroke (past 0-30 days)	231	1.1%	1,462	1.5%	-0.367	-0.032
Hospitalized Thromboembolic Stroke (past 31-183 days)	108	0.5%	871	0.9%	-0.365	-0.043
Transient ischemic attack	657	3.3%	3,229	3.3%	-0.082	-0.005
Other medical conditions (falls, fractures, syncope)	1,440	7.1%	9,533	9.9%	-2.720	-0.098
Cardioversion	3,404	16.9%	15,241	15.8%	1.116	0.030
Cardioablation	1,303	6.5%	4,224	4.4%	2.093	0.093
Hospitalized for bleeding	75	0.4%	504	0.5%	-0.149	-0.022
Medical Product Use						
Estrogen replacement	492	2.4%	2,366	2.4%	-0.007	-0.000
H2-antagonist	367	1.8%	2,798	2.9%	-1.074	-0.071
NSAIDs	3,011	14.9%	15,890	16.4%	-1.504	-0.041

Table 1a. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ^{1,2}	Number/Mean	Percent/Standard Deviation ^{1,2}		
Proton pump inhibitors	3,518	17.4%	21,065	21.8%	-4.343	-0.110
SSRI antidepressants	2,095	10.4%	12,346	12.8%	-2.381	-0.074
Insulin	1,171	5.8%	7,755	8.0%	-2.215	-0.087
Metformin (Biguanide)	2,880	14.3%	17,245	17.8%	-3.556	-0.097
Sulfonylureas	1,227	6.1%	5,197	5.4%	0.709	0.031
Other diabetes medications	1,339	6.6%	8,633	8.9%	-2.290	-0.086
ACEI/ARB	9,607	47.6%	49,354	51.1%	-3.408	-0.068
Antiarrhythmics	7,205	35.7%	27,090	28.0%	7.710	0.166
Anti-coagulant (injectable)	1,477	7.3%	11,822	12.2%	-4.904	-0.166
Anti-platelets	1,604	8.0%	12,901	13.3%	-5.391	-0.175
Beta-blockers	13,654	67.7%	69,965	72.4%	-4.658	-0.102
Calcium channel blockers	6,964	34.5%	34,619	35.8%	-1.274	-0.027
Digoxin	2,179	10.8%	5,170	5.3%	5.459	0.201
Diuretics (loop)	2,987	14.8%	19,376	20.0%	-5.230	-0.138
Diuretics (potassium sparing)	1,346	6.7%	8,523	8.8%	-2.141	-0.080
Diuretics (thiazide)	3,971	19.7%	19,871	20.6%	-0.861	-0.021
Nitrates	881	4.4%	5,863	6.1%	-1.696	-0.076
Statins	8,214	40.7%	44,236	45.8%	-5.023	-0.102
Fibrates	1,007	5.0%	3,786	3.9%	1.078	0.052
Amiodarone	1,789	8.9%	10,448	10.8%	-1.935	-0.065
Dronedarone	1,469	7.3%	2,144	2.2%	5.068	0.240
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	14,802	73.4%	62,836	65.0%	8.410	0.183
No ED encounters (past 31-183 days)	17,002	84.3%	75,823	78.4%	5.886	0.152
At least 1 ED encounter (past 0-30 days)	5,361	26.6%	33,832	35.0%	-8.410	-0.183
At least 2 ED encounters (past 0-30 days)	972	4.8%	8,122	8.4%	-3.581	-0.145

Table 1a. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

Patient Characteristics ¹	Medical Product		Covariate Balance			
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ^{1,2}	Number/Mean	Percent/Standard Deviation ^{1,2}		
At least 1 ED encounter (past 31-183 days)	3,161	15.7%	20,845	21.6%	-5.886	-0.152
At least 2 ED encounters (past 31-183 days)	872	4.3%	7,282	7.5%	-3.208	-0.136

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1b. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	18,882	N/A	96,132	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	56.6	7.1	56.8	7.2	-0.242	-0.034
Age						
21-49 years	3,031	16.1%	14,792	15.4%	0.664	0.018
50-64 years	15,851	83.9%	81,340	84.6%	-0.664	-0.018
Sex						
Female	5,190	27.5%	27,288	28.4%	-0.899	-0.020
Male	13,692	72.5%	68,845	71.6%	0.899	0.020
Race ³						
American Indian or Alaska Native	4	0.0%	78	0.1%	-0.062	-0.027
Asian	19	0.1%	209	0.2%	-0.116	-0.029
Black or African American	267	1.4%	2,656	2.8%	-1.348	-0.099
Native Hawaiian or Other Pacific Islander	16	0.1%	84	0.1%	-0.003	-0.001
Unknown	16,678	88.3%	77,715	80.8%	7.484	0.296
White	1,867	9.9%	15,003	15.6%	-5.718	-0.221
Hispanic origin						
Yes	52	0.3%	516	0.5%	-0.262	-0.041
No	1,276	6.8%	10,870	11.3%	-4.551	-0.289
Unknown	17,554	93.0%	84,746	88.2%	4.813	0.293
Year						
2010	375	2.0%	0	0.0%	NaN	NaN
2011	5,640	29.9%	0	0.0%	NaN	NaN
2012	4,061	21.5%	0	0.0%	NaN	NaN
2013	2,193	11.6%	1,511	1.6%	10.042	0.413

Table 1b. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	1,478	7.8%	4,057	4.2%	3.608	0.152
2015	1,068	5.7%	7,248	7.5%	-1.884	-0.076
2016	1,493	7.9%	9,693	10.1%	-2.175	-0.076
2017	1,056	5.6%	11,558	12.0%	-6.431	-0.228
2018	725	3.8%	13,092	13.6%	-9.778	-0.352
2019	391	2.1%	14,770	15.4%	-13.295	-0.485
2020	226	1.2%	15,062	15.7%	-14.471	-0.540
2021	146	0.8%	16,955	17.6%	-16.863	-0.611
2022	29	0.2%	2,185	2.3%	-2.119	-0.195
CHADVASC						
mean, std	1.6	1.2	1.8	1.2	-0.116	-0.095
0	3,203	17.0%	14,873	15.5%	1.490	0.041
1	6,425	34.0%	30,971	32.2%	1.809	0.039
2	5,119	27.1%	25,749	26.8%	0.326	0.007
3	2,610	13.8%	14,712	15.3%	-1.480	-0.042
4	1,151	6.1%	7,320	7.6%	-1.522	-0.061
>= 5	375	2.0%	2,507	2.6%	-0.623	-0.042
HASBLED						
mean, std	1.0	0.8	1.0	0.8	-0.060	-0.077
0	4,838	25.6%	22,706	23.6%	2.004	0.047
1	10,323	54.7%	52,039	54.1%	0.536	0.011
2	2,934	15.5%	16,333	17.0%	-1.451	-0.039
>= 3	787	4.2%	5,054	5.3%	-1.089	-0.052
Health Characteristics						
Diabetes	4,936	26.1%	27,609	28.7%	-2.579	-0.058

Table 1b. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	4,968	26.3%	26,543	27.6%	-1.300	-0.029
Hypertension	13,450	71.2%	70,338	73.2%	-1.937	-0.044
Kidney failure (chronic)	1,122	5.9%	7,063	7.3%	-1.403	-0.057
Kidney failure (acute)	1,122	5.9%	7,923	8.2%	-2.298	-0.090
Obesity	6,389	33.8%	35,462	36.9%	-3.052	-0.064
Peptic ulcer disease	63	0.3%	375	0.4%	-0.058	-0.010
Nicotine dependency	4,401	23.3%	25,342	26.4%	-3.056	-0.072
Hospitalized AMI (past 0-30 days)	333	1.8%	2,323	2.4%	-0.653	-0.046
Hospitalized AMI (past 31-183 days)	165	0.9%	1,160	1.2%	-0.334	-0.033
Coronary revascularization	1,476	7.8%	8,760	9.1%	-1.298	-0.047
Hospitalized heart failure	2,663	14.1%	15,835	16.5%	-2.367	-0.066
Outpatient heart failure	2,613	13.8%	15,101	15.7%	-1.869	-0.054
Other ischemic heart disease	5,031	26.6%	27,202	28.3%	-1.651	-0.037
Hospitalized Thromboembolic Stroke (past 0-30 days)	279	1.5%	1,388	1.4%	0.033	0.003
Hospitalized Thromboembolic Stroke (past 31-183 days)	157	0.8%	811	0.8%	-0.013	-0.001
Transient ischemic attack	646	3.4%	3,215	3.3%	0.080	0.004
Other medical conditions (falls, fractures, syncope)	1,650	8.7%	9,006	9.4%	-0.632	-0.022
Cardioversion	3,041	16.1%	15,347	16.0%	0.142	0.004
Cardioablation	907	4.8%	4,546	4.7%	0.076	0.004
Hospitalized for bleeding	84	0.4%	474	0.5%	-0.049	-0.007
Medical Product Use						
Estrogen replacement	463	2.5%	2,354	2.4%	0.003	0.000
H2-antagonist	421	2.2%	2,635	2.7%	-0.513	-0.033
NSAIDs	2,980	15.8%	15,596	16.2%	-0.438	-0.012

Table 1b. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	3,750	19.9%	20,250	21.1%	-1.203	-0.030
SSRI antidepressants	2,201	11.7%	11,923	12.4%	-0.745	-0.023
Insulin	1,230	6.5%	7,349	7.6%	-1.132	-0.045
Metformin (Biguanide)	2,925	15.5%	16,542	17.2%	-1.717	-0.047
Sulfonylureas	993	5.3%	5,315	5.5%	-0.269	-0.012
Other diabetes medications	1,408	7.5%	8,147	8.5%	-1.019	-0.038
ACEI/ARB	9,308	49.3%	48,563	50.5%	-1.220	-0.025
Antiarrhythmics	5,700	30.2%	28,236	29.4%	0.816	0.018
Anti-coagulant (injectable)	1,833	9.7%	10,955	11.4%	-1.687	-0.056
Anti-platelets	2,042	10.8%	11,837	12.3%	-1.500	-0.047
Beta-blockers	13,251	70.2%	68,782	71.5%	-1.373	-0.030
Calcium channel blockers	6,606	35.0%	34,232	35.6%	-0.625	-0.013
Digoxin	1,261	6.7%	6,079	6.3%	0.355	0.014
Diuretics (loop)	3,218	17.0%	18,424	19.2%	-2.124	-0.056
Diuretics (potassium sparing)	1,410	7.5%	8,110	8.4%	-0.966	-0.036
Diuretics (thiazide)	3,763	19.9%	19,640	20.4%	-0.503	-0.013
Nitrates	943	5.0%	5,533	5.8%	-0.759	-0.034
Statins	8,014	42.4%	43,115	44.8%	-2.406	-0.049
Fibrates	774	4.1%	3,968	4.1%	-0.031	-0.002
Amiodarone	1,864	9.9%	10,071	10.5%	-0.602	-0.020
Dronedarone	664	3.5%	2,933	3.1%	0.463	0.026
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	12,743	67.5%	64,238	66.8%	0.666	0.015
No ED encounters (past 31-183 days)	15,247	80.7%	76,434	79.5%	1.238	0.032
At least 1 ED encounter (past 0-30 days)	6,139	32.5%	31,894	33.2%	-0.666	-0.015

Table 1b. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

Patient Characteristics ¹	Dabigatran Users		Apixaban Users		Covariate Balance	
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²	Absolute Difference	Standardized Difference
At least 2 ED encounters (past 0-30 days)	1,322	7.0%	7,317	7.6%	-0.609	-0.024
At least 1 ED encounter (past 31-183 days)	3,635	19.3%	19,698	20.5%	-1.238	-0.032
At least 2 ED encounters (past 31-183 days)	1,152	6.1%	6,633	6.9%	-0.797	-0.033

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1c. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Female

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	4,706	100.0%	28,211	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	57.4	6.6	57.7	6.5	-0.295	-0.045
Age						
21-49 years	590	12.5%	3,300	11.7%	0.840	0.026
50-64 years	4,116	87.5%	24,911	88.3%	-0.840	-0.026
Sex						
Female	4,706	100.0%	28,211	100.0%	0.000	NaN
Male	0	0.0%	0	0.0%	NaN	NaN
Race ³						
American Indian or Alaska Native	1	0.0%	37	0.1%	-0.110	-0.040
Asian	8	0.2%	58	0.2%	-0.036	-0.008
Black or African American	92	2.0%	1,179	4.2%	-2.224	-0.129
Native Hawaiian or Other Pacific Islander	2	0.0%	29	0.1%	-0.060	-0.022
Unknown	4,096	87.0%	21,896	77.6%	9.423	0.249
White	500	10.6%	4,908	17.4%	-6.773	-0.196
Hispanic origin						
Yes	11	0.2%	146	0.5%	-0.284	-0.046
No	412	8.8%	4,070	14.4%	-5.672	-0.178
Unknown	4,283	91.0%	23,995	85.1%	5.956	0.184
Year						
2010	90	1.9%	0	0.0%	NaN	NaN
2011	1,537	32.7%	0	0.0%	NaN	NaN
2012	1,033	22.0%	0	0.0%	NaN	NaN
2013	530	11.3%	345	1.2%	10.041	0.424

Table 1c. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Female

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	349	7.4%	1,024	3.7%	3.765	0.165
2015	261	5.6%	1,974	7.1%	-1.501	-0.062
2016	349	7.4%	2,794	10.0%	-2.559	-0.091
2017	251	5.3%	3,386	12.1%	-6.759	-0.241
2018	143	3.0%	3,940	14.1%	-11.036	-0.402
2019	79	1.7%	4,306	15.4%	-13.705	-0.506
2020	48	1.0%	4,431	15.8%	-14.811	-0.553
2021	27	0.6%	5,141	18.4%	-17.795	-0.638
2022	4	0.1%	646	2.3%	-2.223	-0.206
CHADVASC						
mean, std	2.3	1.1	2.5	1.2	-0.205	-0.181
0	0	0.0%	0	0.0%	NaN	NaN
1	1,098	23.3%	5,907	20.9%	2.393	0.058
2	1,918	40.8%	10,556	37.4%	3.338	0.068
3	1,081	23.0%	5,880	20.8%	2.128	0.051
4	424	9.0%	3,843	13.6%	-4.613	-0.146
>= 5	185	3.9%	2,025	7.2%	-3.247	-0.142
HASBLED						
mean, std	0.9	0.7	1.1	0.8	-0.134	-0.177
0	1,207	25.6%	6,375	22.6%	3.051	0.071
1	2,694	57.2%	14,983	53.1%	4.136	0.083
2	670	14.2%	5,250	18.6%	-4.373	-0.118
>= 3	135	2.9%	1,603	5.7%	-2.814	-0.139
Health Characteristics						
Diabetes	1,271	27.0%	8,257	29.3%	-2.261	-0.050

Table 1c. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Female

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	1,147	24.4%	7,311	25.9%	-1.542	-0.036
Hypertension	3,314	70.4%	20,794	73.7%	-3.288	-0.073
Kidney failure (chronic)	195	4.1%	1,975	7.0%	-2.857	-0.125
Kidney failure (acute)	145	3.1%	2,095	7.4%	-4.345	-0.196
Obesity	1,323	28.1%	12,491	44.3%	-16.164	-0.341
Peptic ulcer disease	20	0.4%	141	0.5%	-0.075	-0.011
Nicotine dependency	758	16.1%	7,566	26.8%	-10.712	-0.263
Hospitalized AMI (past 0-30 days)	50	1.1%	582	2.1%	-1.001	-0.081
Hospitalized AMI (past 31-183 days)	23	0.5%	338	1.2%	-0.709	-0.078
Coronary revascularization	161	3.4%	1,687	6.0%	-2.559	-0.121
Hospitalized heart failure	538	11.4%	4,552	16.1%	-4.703	-0.137
Outpatient heart failure	522	11.1%	4,222	15.0%	-3.874	-0.115
Other ischemic heart disease	929	19.7%	6,485	23.0%	-3.247	-0.079
Hospitalized Thromboembolic Stroke (past 0-30 days)	69	1.5%	482	1.7%	-0.242	-0.019
Hospitalized Thromboembolic Stroke (past 31-183 days)	38	0.8%	290	1.0%	-0.220	-0.023
Transient ischemic attack	202	4.3%	1,156	4.1%	0.195	0.010
Other medical conditions (falls, fractures, syncope)	444	9.4%	3,197	11.3%	-1.898	-0.062
Cardioversion	623	13.2%	3,311	11.7%	1.502	0.045
Cardioablation	293	6.2%	1,160	4.1%	2.114	0.096
Hospitalized for bleeding	26	0.6%	171	0.6%	-0.054	-0.007
Medical Product Use						
Estrogen replacement	490	10.4%	2,346	8.3%	2.096	0.072
H2-antagonist	121	2.6%	1,070	3.8%	-1.222	-0.070
NSAIDs	857	18.2%	5,550	19.7%	-1.462	-0.037

Table 1c. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Female

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	1,060	22.5%	7,371	26.1%	-3.604	-0.084
SSRI antidepressants	856	18.2%	5,687	20.2%	-1.969	-0.050
Insulin	318	6.8%	2,358	8.4%	-1.601	-0.061
Metformin (Biguanide)	705	15.0%	4,815	17.1%	-2.087	-0.057
Sulfonylureas	270	5.7%	1,364	4.8%	0.902	0.040
Other diabetes medications	349	7.4%	2,443	8.7%	-1.244	-0.046
ACEI/ARB	2,123	45.1%	12,914	45.8%	-0.664	-0.013
Antiarrhythmics	1,800	38.2%	7,956	28.2%	10.047	0.215
Anti-coagulant (injectable)	343	7.3%	3,631	12.9%	-5.582	-0.186
Anti-platelets	301	6.4%	2,973	10.5%	-4.142	-0.149
Beta-blockers	3,173	67.4%	20,194	71.6%	-4.157	-0.090
Calcium channel blockers	1,781	37.8%	10,363	36.7%	1.111	0.023
Digoxin	511	10.9%	1,386	4.9%	5.946	0.222
Diuretics (loop)	839	17.8%	5,896	20.9%	-3.071	-0.078
Diuretics (potassium sparing)	373	7.9%	2,732	9.7%	-1.758	-0.062
Diuretics (thiazide)	1,141	24.2%	6,710	23.8%	0.461	0.011
Nitrates	190	4.0%	1,452	5.1%	-1.110	-0.053
Statins	1,675	35.6%	11,289	40.0%	-4.423	-0.091
Fibrates	167	3.5%	749	2.7%	0.894	0.052
Amiodarone	351	7.5%	2,429	8.6%	-1.152	-0.042
Dronedarone	372	7.9%	637	2.3%	5.647	0.259
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	3,286	69.8%	17,610	62.4%	7.403	0.157
No ED encounters (past 31-183 days)	3,761	79.9%	21,089	74.8%	5.165	0.124
At least 1 ED encounter (past 0-30 days)	1,420	30.2%	10,601	37.6%	-7.403	-0.157

Table 1c. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Female

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 2 ED encounters (past 0-30 days)	260	5.5%	2,644	9.4%	-3.847	-0.147
At least 1 ED encounter (past 31-183 days)	945	20.1%	7,122	25.2%	-5.165	-0.124
At least 2 ED encounters (past 31-183 days)	284	6.0%	2,654	9.4%	-3.373	-0.127

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1d. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Female

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	4,394	N/A	27,965	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	57.6	6.5	57.7	6.6	-0.139	-0.021
Age						
21-49 years	542	12.3%	3,294	11.8%	0.548	0.017
50-64 years	3,852	87.7%	24,671	88.2%	-0.548	-0.017
Sex						
Female	4,394	100.0%	27,965	100.0%	0.000	NaN
Male	0	0.0%	0	0.0%	NaN	NaN
Race ³						
American Indian or Alaska Native	0	0.0%	33	0.1%	-0.108	-0.043
Asian	5	0.1%	62	0.2%	-0.108	-0.026
Black or African American	101	2.3%	1,121	4.0%	-1.717	-0.105
Native Hawaiian or Other Pacific Islander	2	0.0%	28	0.1%	-0.058	-0.022
Unknown	3,804	86.6%	21,839	78.1%	8.483	0.337
White	476	10.8%	4,779	17.1%	-6.251	-0.236
Hispanic origin						
Yes	10	0.2%	142	0.5%	-0.288	-0.048
No	392	8.9%	3,914	14.0%	-5.070	-0.319
Unknown	3,992	90.9%	23,909	85.5%	5.359	0.325
Year						
2010	64	1.5%	0	0.0%	NaN	NaN
2011	1,254	28.5%	0	0.0%	NaN	NaN
2012	880	20.0%	0	0.0%	NaN	NaN

Table 1d. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATES Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Female

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2013	494	11.2%	375	1.3%	9.893	0.416
2014	336	7.6%	1,105	4.0%	3.685	0.158
2015	262	6.0%	2,073	7.4%	-1.445	-0.058
2016	399	9.1%	2,846	10.2%	-1.092	-0.037
2017	311	7.1%	3,402	12.2%	-5.082	-0.173
2018	184	4.2%	3,926	14.0%	-9.844	-0.347
2019	99	2.2%	4,253	15.2%	-12.959	-0.472
2020	68	1.5%	4,345	15.5%	-13.996	-0.517
2021	37	0.8%	5,015	17.9%	-17.098	-0.615
2022	5	0.1%	625	2.2%	-2.109	-0.197
CHADVASC						
mean, std	2.4	1.1	2.5	1.2	-0.092	-0.080
0	0	0.0%	0	0.0%	NaN	NaN
1	998	22.7%	5,949	21.3%	1.441	0.035
2	1,741	39.6%	10,632	38.0%	1.595	0.033
3	909	20.7%	5,924	21.2%	-0.491	-0.012
4	510	11.6%	3,612	12.9%	-1.309	-0.040
>= 5	236	5.4%	1,848	6.6%	-1.236	-0.053
HASBLED						
mean, std	1.0	0.8	1.1	0.8	-0.051	-0.066
0	1,092	24.8%	6,439	23.0%	1.825	0.043
1	2,377	54.1%	15,043	53.8%	0.302	0.006
2	736	16.8%	5,018	17.9%	-1.185	-0.031
>= 3	189	4.3%	1,465	5.2%	-0.942	-0.044

Table 1d. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Female

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Characteristics						
Diabetes	1,182	26.9%	8,083	28.9%	-2.013	-0.045
Hypercholesterolemia	1,052	23.9%	7,170	25.6%	-1.692	-0.039
Hypertension	3,132	71.3%	20,481	73.2%	-1.951	-0.044
Kidney failure (chronic)	242	5.5%	1,837	6.6%	-1.056	-0.045
Kidney failure (acute)	223	5.1%	1,864	6.7%	-1.595	-0.068
Obesity	1,702	38.7%	11,711	41.9%	-3.135	-0.064
Peptic ulcer disease	17	0.4%	135	0.5%	-0.094	-0.014
Nicotine dependency	980	22.3%	7,020	25.1%	-2.806	-0.067
Hospitalized AMI (past 0-30 days)	62	1.4%	522	1.9%	-0.456	-0.036
Hospitalized AMI (past 31-183 days)	34	0.8%	276	1.0%	-0.205	-0.022
Coronary revascularization	203	4.6%	1,539	5.5%	-0.890	-0.041
Hospitalized heart failure	581	13.2%	4,289	15.3%	-2.125	-0.061
Outpatient heart failure	541	12.3%	3,995	14.3%	-1.972	-0.059
Other ischemic heart disease	929	21.1%	6,272	22.4%	-1.287	-0.031
Hospitalized Thromboembolic Stroke (past 0-30 days)	76	1.7%	466	1.7%	0.064	0.005
Hospitalized Thromboembolic Stroke (past 31-183 days)	53	1.2%	280	1.0%	0.203	0.019
Transient ischemic attack	185	4.2%	1,157	4.1%	0.072	0.004
Other medical conditions (falls, fractures, syncope)	469	10.7%	3,090	11.0%	-0.383	-0.012
Cardioversion	537	12.2%	3,353	12.0%	0.231	0.007
Cardioablation	201	4.6%	1,249	4.5%	0.112	0.005
Hospitalized for bleeding	30	0.7%	167	0.6%	0.090	0.011

Table 1d. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Female

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Medical Product Use						
Estrogen replacement	391	8.9%	2,413	8.6%	0.273	0.010
H2-antagonist	135	3.1%	1,008	3.6%	-0.540	-0.030
NSAIDs	829	18.9%	5,455	19.5%	-0.633	-0.016
Proton pump inhibitors	1,074	24.4%	7,171	25.6%	-1.193	-0.028
SSRI antidepressants	813	18.5%	5,560	19.9%	-1.383	-0.035
Insulin	307	7.0%	2,269	8.1%	-1.128	-0.043
Metformin (Biguanide)	672	15.3%	4,670	16.7%	-1.397	-0.038
Sulfonylureas	210	4.8%	1,387	5.0%	-0.186	-0.009
Other diabetes medications	331	7.5%	2,357	8.4%	-0.894	-0.033
ACEI/ARB	1,968	44.8%	12,777	45.7%	-0.905	-0.018
Antiarrhythmics	1,347	30.7%	8,268	29.6%	1.099	0.024
Anti-coagulant (injectable)	437	9.9%	3,348	12.0%	-2.032	-0.066
Anti-platelets	388	8.8%	2,761	9.9%	-1.039	-0.036
Beta-blockers	3,072	69.9%	19,848	71.0%	-1.052	-0.023
Calcium channel blockers	1,595	36.3%	10,331	36.9%	-0.641	-0.013
Digoxin	271	6.2%	1,619	5.8%	0.373	0.016
Diuretics (loop)	813	18.5%	5,719	20.4%	-1.940	-0.050
Diuretics (potassium sparing)	368	8.4%	2,614	9.3%	-0.973	-0.034
Diuretics (thiazide)	1,029	23.4%	6,680	23.9%	-0.468	-0.011
Nitrates	183	4.2%	1,391	5.0%	-0.807	-0.039
Statins	1,632	37.2%	11,003	39.3%	-2.194	-0.046
Fibrates	122	2.8%	774	2.8%	0.002	0.000
Amiodarone	345	7.8%	2,332	8.3%	-0.495	-0.018

Table 1d. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Female

	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
Patient Characteristics ¹	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Dronedarone	155	3.5%	839	3.0%	0.521	0.029
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	2,823	64.2%	17,853	63.8%	0.395	0.009
No ED encounters (past 31-183 days)	3,381	76.9%	21,141	75.6%	1.353	0.032
At least 1 ED encounter (past 0-30 days)	1,571	35.8%	10,112	36.2%	-0.395	-0.009
At least 2 ED encounters (past 0-30 days)	339	7.7%	2,407	8.6%	-0.883	-0.033
At least 1 ED encounter (past 31-183 days)	1,013	23.1%	6,824	24.4%	-1.353	-0.032
At least 2 ED encounters (past 31-183 days)	341	7.8%	2,475	8.8%	-1.082	-0.040

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1e. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Male

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	15,453	100.0%	67,989	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	55.9	7.5	56.5	7.3	-0.676	-0.091
Age						
21-49 years	2,894	18.7%	11,185	16.5%	2.277	0.060
50-64 years	12,559	81.3%	56,804	83.5%	-2.277	-0.060
Sex						
Female	0	0.0%	0	0.0%	NaN	NaN
Male	15,453	100.0%	67,989	100.0%	0.000	NaN
Race ³						
American Indian or Alaska Native	3	0.0%	42	0.1%	-0.042	-0.021
Asian	21	0.1%	142	0.2%	-0.073	-0.018
Black or African American	134	0.9%	1,588	2.3%	-1.469	-0.117
Native Hawaiian or Other Pacific Islander	11	0.1%	56	0.1%	-0.011	-0.004
Unknown	13,889	89.9%	55,613	81.8%	8.082	0.233
White	1,369	8.9%	10,262	15.1%	-6.234	-0.193
Hispanic origin						
Yes	40	0.3%	382	0.6%	-0.303	-0.047
No	811	5.2%	6,987	10.3%	-5.028	-0.189
Unknown	14,602	94.5%	60,620	89.2%	5.331	0.196
Year						
2010	392	2.5%	0	0.0%	NaN	NaN
2011	5,268	34.1%	0	0.0%	NaN	NaN
2012	3,600	23.3%	0	0.0%	NaN	NaN
2013	1,856	12.0%	1,018	1.5%	10.513	0.428

Table 1e. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Male

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	1,158	7.5%	2,709	4.0%	3.509	0.151
2015	780	5.0%	4,868	7.2%	-2.112	-0.088
2016	936	6.1%	6,688	9.8%	-3.780	-0.140
2017	614	4.0%	8,066	11.9%	-7.890	-0.295
2018	412	2.7%	9,193	13.5%	-10.855	-0.406
2019	223	1.4%	10,685	15.7%	-14.273	-0.527
2020	120	0.8%	10,923	16.1%	-15.289	-0.573
2021	78	0.5%	12,243	18.0%	-17.503	-0.633
2022	16	0.1%	1,596	2.3%	-2.244	-0.205
CHADVASC						
mean, std	1.2	1.0	1.5	1.2	-0.320	-0.290
0	4,125	26.7%	14,037	20.6%	6.048	0.143
1	6,195	40.1%	24,403	35.9%	4.197	0.087
2	3,499	22.6%	15,187	22.3%	0.305	0.007
3	1,189	7.7%	9,553	14.1%	-6.357	-0.205
4	378	2.4%	4,096	6.0%	-3.578	-0.178
>= 5	67	0.4%	713	1.0%	-0.615	-0.072
HASBLED						
mean, std	0.9	0.7	1.1	0.8	-0.211	-0.280
0	4,602	29.8%	15,487	22.8%	7.002	0.160
1	8,757	56.7%	36,574	53.8%	2.875	0.058
2	1,754	11.4%	11,966	17.6%	-6.249	-0.178
>= 3	340	2.2%	3,962	5.8%	-3.627	-0.186
Health Characteristics						
Diabetes	3,794	24.6%	19,908	29.3%	-4.729	-0.107

Table 1e. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Male

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	4,223	27.3%	19,455	28.6%	-1.287	-0.029
Hypertension	10,400	67.3%	50,448	74.2%	-6.899	-0.152
Kidney failure (chronic)	554	3.6%	5,708	8.4%	-4.810	-0.204
Kidney failure (acute)	518	3.4%	6,744	9.9%	-6.567	-0.266
Obesity	3,241	21.0%	25,724	37.8%	-16.862	-0.377
Peptic ulcer disease	30	0.2%	256	0.4%	-0.182	-0.034
Nicotine dependency	2,545	16.5%	19,651	28.9%	-12.434	-0.300
Hospitalized AMI (past 0-30 days)	175	1.1%	1,987	2.9%	-1.790	-0.127
Hospitalized AMI (past 31-183 days)	74	0.5%	948	1.4%	-0.915	-0.095
Coronary revascularization	1,115	7.2%	7,576	11.1%	-3.928	-0.136
Hospitalized heart failure	1,691	10.9%	12,218	18.0%	-7.028	-0.201
Outpatient heart failure	1,865	12.1%	11,459	16.9%	-4.785	-0.136
Other ischemic heart disease	4,140	26.8%	21,178	31.1%	-4.358	-0.096
Hospitalized Thromboembolic Stroke (past 0-30 days)	162	1.0%	961	1.4%	-0.365	-0.033
Hospitalized Thromboembolic Stroke (past 31-183 days)	70	0.5%	572	0.8%	-0.388	-0.048
Transient ischemic attack	455	2.9%	2,065	3.0%	-0.093	-0.005
Other medical conditions (falls, fractures, syncope)	993	6.4%	6,212	9.1%	-2.711	-0.101
Cardioversion	2,777	18.0%	11,887	17.5%	0.487	0.013
Cardioablation	1,007	6.5%	3,057	4.5%	2.020	0.089
Hospitalized for bleeding	49	0.3%	326	0.5%	-0.162	-0.026
Medical Product Use						
Estrogen replacement	2	0.0%	14	0.0%	-0.008	-0.006
H2-antagonist	246	1.6%	1,675	2.5%	-0.872	-0.062
NSAIDs	2,153	13.9%	10,248	15.1%	-1.140	-0.032

Table 1e. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Male

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	2,456	15.9%	13,437	19.8%	-3.870	-0.101
SSRI antidepressants	1,238	8.0%	6,524	9.6%	-1.584	-0.056
Insulin	853	5.5%	5,268	7.7%	-2.228	-0.090
Metformin (Biguanide)	2,175	14.1%	12,247	18.0%	-3.938	-0.107
Sulfonylureas	957	6.2%	3,810	5.6%	0.589	0.025
Other diabetes medications	990	6.4%	6,054	8.9%	-2.498	-0.094
ACEI/ARB	7,481	48.4%	36,127	53.1%	-4.725	-0.095
Antiarrhythmics	5,401	35.0%	19,017	28.0%	6.980	0.151
Anti-coagulant (injectable)	1,132	7.3%	7,962	11.7%	-4.385	-0.150
Anti-platelets	1,302	8.4%	9,687	14.2%	-5.822	-0.184
Beta-blockers	10,477	67.8%	49,344	72.6%	-4.777	-0.105
Calcium channel blockers	5,182	33.5%	24,070	35.4%	-1.869	-0.039
Digoxin	1,664	10.8%	3,783	5.6%	5.204	0.191
Diuretics (loop)	2,146	13.9%	13,191	19.4%	-5.514	-0.148
Diuretics (potassium sparing)	973	6.3%	5,674	8.3%	-2.049	-0.079
Diuretics (thiazide)	2,828	18.3%	13,050	19.2%	-0.894	-0.023
Nitrates	691	4.5%	4,280	6.3%	-1.824	-0.081
Statins	6,537	42.3%	32,565	47.9%	-5.595	-0.113
Fibrates	840	5.4%	3,028	4.5%	0.982	0.045
Amiodarone	1,437	9.3%	7,917	11.6%	-2.345	-0.077
Dronedarone	1,096	7.1%	1,506	2.2%	4.877	0.233
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	11,512	74.5%	45,110	66.3%	8.148	0.179
No ED encounters (past 31-183 days)	13,241	85.7%	54,572	80.3%	5.420	0.145
At least 1 ED encounter (past 0-30 days)	3,941	25.5%	22,879	33.7%	-8.148	-0.179

Table 1e. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Male

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 2 ED encounters (past 0-30 days)	712	4.6%	5,269	7.7%	-3.142	-0.131
At least 1 ED encounter (past 31-183 days)	2,212	14.3%	13,417	19.7%	-5.420	-0.145
At least 2 ED encounters (past 31-183 days)	587	3.8%	4,413	6.5%	-2.692	-0.122

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1f. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Male

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	14,465	N/A	67,595	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	56.2	7.3	56.4	7.4	-0.264	-0.036
Age						
21-49 years	2,532	17.5%	11,402	16.9%	0.637	0.017
50-64 years	11,933	82.5%	56,193	83.1%	-0.637	-0.017
Sex						
Female	0	0.0%	0	0.0%	NaN	NaN
Male	14,465	100.0%	67,595	100.0%	0.000	NaN
Race ³						
American Indian or Alaska Native	4	0.0%	43	0.1%	-0.039	-0.019
Asian	14	0.1%	145	0.2%	-0.118	-0.030
Black or African American	161	1.1%	1,474	2.2%	-1.065	-0.087
Native Hawaiian or Other Pacific Islander	15	0.1%	56	0.1%	0.020	0.007
Unknown	12,855	88.9%	55,602	82.3%	6.615	0.262
White	1,390	9.6%	9,993	14.8%	-5.172	-0.202
Hispanic origin						
Yes	44	0.3%	370	0.5%	-0.244	-0.038
No	878	6.1%	6,690	9.9%	-3.827	-0.246
Unknown	13,543	93.6%	60,536	89.6%	4.071	0.249
Year						
2010	319	2.2%	0	0.0%	NaN	NaN
2011	4,372	30.2%	0	0.0%	NaN	NaN
2012	3,188	22.0%	0	0.0%	NaN	NaN
2013	1,710	11.8%	1,137	1.7%	10.138	0.413

Table 1f. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Male

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	1,125	7.8%	2,944	4.4%	3.423	0.144
2015	804	5.6%	5,159	7.6%	-2.072	-0.084
2016	1,089	7.5%	6,807	10.1%	-2.543	-0.090
2017	739	5.1%	8,105	12.0%	-6.883	-0.248
2018	539	3.7%	9,077	13.4%	-9.706	-0.352
2019	289	2.0%	10,401	15.4%	-13.389	-0.489
2020	159	1.1%	10,596	15.7%	-14.577	-0.545
2021	108	0.7%	11,827	17.5%	-16.751	-0.609
2022	25	0.2%	1,542	2.3%	-2.111	-0.193
CHADVASC						
mean, std	1.4	1.1	1.5	1.2	-0.107	-0.095
0	3,396	23.5%	14,653	21.7%	1.802	0.043
1	5,565	38.5%	24,838	36.7%	1.725	0.036
2	3,236	22.4%	15,187	22.5%	-0.096	-0.002
3	1,588	11.0%	8,706	12.9%	-1.903	-0.059
4	576	4.0%	3,594	5.3%	-1.335	-0.064
>= 5	104	0.7%	618	0.9%	-0.194	-0.022
HASBLED						
mean, std	1.0	0.8	1.0	0.8	-0.062	-0.080
0	3,775	26.1%	16,231	24.0%	2.082	0.048
1	7,963	55.0%	36,828	54.5%	0.562	0.011
2	2,154	14.9%	11,107	16.4%	-1.543	-0.043
>= 3	574	4.0%	3,429	5.1%	-1.101	-0.053
Health Characteristics						
Diabetes	3,723	25.7%	19,202	28.4%	-2.668	-0.061

Table 1f. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Male

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	3,934	27.2%	19,164	28.4%	-1.154	-0.026
Hypertension	10,270	71.0%	49,328	73.0%	-1.977	-0.044
Kidney failure (chronic)	855	5.9%	4,995	7.4%	-1.477	-0.060
Kidney failure (acute)	898	6.2%	5,761	8.5%	-2.311	-0.089
Obesity	4,613	31.9%	23,427	34.7%	-2.765	-0.059
Peptic ulcer disease	40	0.3%	219	0.3%	-0.045	-0.008
Nicotine dependency	3,406	23.5%	17,927	26.5%	-2.975	-0.069
Hospitalized AMI (past 0-30 days)	269	1.9%	1,718	2.5%	-0.686	-0.047
Hospitalized AMI (past 31-183 days)	131	0.9%	816	1.2%	-0.301	-0.030
Coronary revascularization	1,301	9.0%	7,011	10.4%	-1.381	-0.047
Hospitalized heart failure	2,080	14.4%	11,237	16.6%	-2.244	-0.062
Outpatient heart failure	2,094	14.5%	10,829	16.0%	-1.544	-0.044
Other ischemic heart disease	4,143	28.6%	20,533	30.4%	-1.737	-0.038
Hospitalized Thromboembolic Stroke (past 0-30 days)	195	1.3%	899	1.3%	0.019	0.002
Hospitalized Thromboembolic Stroke (past 31-183 days)	99	0.7%	516	0.8%	-0.080	-0.009
Transient ischemic attack	454	3.1%	2,044	3.0%	0.113	0.007
Other medical conditions (falls, fractures, syncope)	1,159	8.0%	5,823	8.6%	-0.599	-0.022
Cardioversion	2,539	17.5%	11,883	17.6%	-0.031	-0.001
Cardioablation	709	4.9%	3,282	4.9%	0.047	0.002
Hospitalized for bleeding	47	0.3%	296	0.4%	-0.112	-0.018
Medical Product Use						
Estrogen replacement	1	0.0%	5	0.0%	-0.002	-0.003
H2-antagonist	275	1.9%	1,579	2.3%	-0.436	-0.030

Table 1f. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Male

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
NSAIDs	2,102	14.5%	10,064	14.9%	-0.358	-0.010
Proton pump inhibitors	2,600	18.0%	12,899	19.1%	-1.111	-0.029
SSRI antidepressants	1,295	9.0%	6,338	9.4%	-0.421	-0.015
Insulin	918	6.3%	4,959	7.3%	-0.992	-0.040
Metformin (Biguanide)	2,236	15.5%	11,669	17.3%	-1.807	-0.049
Sulfonylureas	792	5.5%	3,884	5.7%	-0.267	-0.012
Other diabetes medications	1,059	7.3%	5,669	8.4%	-1.063	-0.040
ACEI/ARB	7,345	50.8%	35,354	52.3%	-1.525	-0.031
Antiarrhythmics	4,335	30.0%	19,790	29.3%	0.693	0.015
Anti-coagulant (injectable)	1,385	9.6%	7,461	11.0%	-1.464	-0.049
Anti-platelets	1,666	11.5%	8,848	13.1%	-1.572	-0.048
Beta-blockers	10,160	70.2%	48,449	71.7%	-1.441	-0.032
Calcium channel blockers	4,963	34.3%	23,694	35.1%	-0.740	-0.016
Digoxin	995	6.9%	4,432	6.6%	0.322	0.013
Diuretics (loop)	2,389	16.5%	12,449	18.4%	-1.902	-0.051
Diuretics (potassium sparing)	1,038	7.2%	5,387	8.0%	-0.790	-0.030
Diuretics (thiazide)	2,695	18.6%	12,860	19.0%	-0.391	-0.010
Nitrates	758	5.2%	4,041	6.0%	-0.738	-0.032
Statins	6,419	44.4%	31,649	46.8%	-2.448	-0.049
Fibrates	659	4.6%	3,151	4.7%	-0.107	-0.005
Amiodarone	1,531	10.6%	7,588	11.2%	-0.640	-0.021
Dronedarone	506	3.5%	2,070	3.1%	0.439	0.025
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	9,949	68.8%	46,155	68.3%	0.494	0.011
No ED encounters (past 31-183 days)	11,906	82.3%	54,961	81.3%	0.997	0.026

Table 1f. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Male

Patient Characteristics ¹	Dabigatran Users		Apixaban Users		Covariate Balance	
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²	Absolute Difference	Standardized Difference
At least 1 ED encounter (past 0-30 days)	4,517	31.2%	21,440	31.7%	-0.494	-0.011
At least 2 ED encounters (past 0-30 days)	960	6.6%	4,738	7.0%	-0.375	-0.015
At least 1 ED encounter (past 31-183 days)	2,559	17.7%	12,634	18.7%	-0.997	-0.026
At least 2 ED encounters (past 31-183 days)	783	5.4%	4,013	5.9%	-0.522	-0.023

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1g. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 21-49 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	3,484	100.0%	14,485	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	43.5	6.0	43.3	6.0	0.136	0.023
Age						
21-49 years	3,484	100.0%	14,485	100.0%	0.000	NaN
50-64 years	0	0.0%	0	0.0%	NaN	NaN
Sex						
Female	590	16.9%	3,300	22.8%	-5.848	-0.147
Male	2,894	83.1%	11,185	77.2%	5.848	0.147
Race ³						
American Indian or Alaska Native	1	0.0%	7	0.0%	-0.020	-0.010
Asian	5	0.1%	44	0.3%	-0.160	-0.034
Black or African American	30	0.9%	372	2.6%	-1.707	-0.132
Native Hawaiian or Other Pacific Islander	0	0.0%	8	0.1%	NaN	NaN
Unknown	3,215	92.3%	12,631	87.2%	5.078	0.168
White	227	6.5%	1,355	9.4%	-2.839	-0.105
Hispanic origin						
Yes	10	0.3%	118	0.8%	-0.528	-0.071
No	81	2.3%	768	5.3%	-2.977	-0.156
Unknown	3,393	97.4%	13,599	93.9%	3.505	0.172
Year						
2010	79	2.3%	0	0.0%	NaN	NaN
2011	1,225	35.2%	0	0.0%	NaN	NaN
2012	861	24.7%	0	0.0%	NaN	NaN
2013	421	12.1%	219	1.5%	10.572	0.430

Table 1g. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 21-49 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	247	7.1%	536	3.7%	3.389	0.150
2015	148	4.2%	982	6.8%	-2.531	-0.111
2016	195	5.6%	1,366	9.4%	-3.833	-0.146
2017	124	3.6%	1,705	11.8%	-8.212	-0.312
2018	80	2.3%	2,057	14.2%	-11.905	-0.443
2019	56	1.6%	2,305	15.9%	-14.306	-0.523
2020	34	1.0%	2,351	16.2%	-15.255	-0.565
2021	9	0.3%	2,628	18.1%	-17.885	-0.651
2022	5	0.1%	336	2.3%	-2.176	-0.198
CHADVASC						
mean, std	1.1	1.0	1.4	1.2	-0.323	-0.289
0	1,151	33.0%	3,832	26.5%	6.582	0.144
1	1,332	38.2%	4,991	34.5%	3.776	0.079
2	689	19.8%	3,075	21.2%	-1.453	-0.036
3	235	6.7%	1,600	11.0%	-4.301	-0.152
4	65	1.9%	749	5.2%	-3.305	-0.180
>= 5	12	0.3%	238	1.6%	-1.299	-0.131
HASBLED						
mean, std	0.7	0.7	0.9	0.8	-0.164	-0.219
0	1,492	42.8%	5,227	36.1%	6.739	0.138
1	1,622	46.6%	6,705	46.3%	0.266	0.005
2	322	9.2%	2,021	14.0%	-4.710	-0.148
>= 3	48	1.4%	532	3.7%	-2.295	-0.147
Health Characteristics						
Diabetes	548	15.7%	2,891	20.0%	-4.230	-0.111

Table 1g. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 21-49 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	597	17.1%	2,406	16.6%	0.525	0.014
Hypertension	1,829	52.5%	8,504	58.7%	-6.212	-0.125
Kidney failure (chronic)	76	2.2%	733	5.1%	-2.879	-0.155
Kidney failure (acute)	81	2.3%	1,098	7.6%	-5.255	-0.244
Obesity	904	25.9%	6,140	42.4%	-16.441	-0.352
Peptic ulcer disease	6	0.2%	39	0.3%	-0.097	-0.021
Nicotine dependency	614	17.6%	3,899	26.9%	-9.294	-0.225
Hospitalized AMI (past 0-30 days)	20	0.6%	273	1.9%	-1.311	-0.119
Hospitalized AMI (past 31-183 days)	10	0.3%	107	0.7%	-0.452	-0.063
Coronary revascularization	101	2.9%	584	4.0%	-1.133	-0.062
Hospitalized heart failure	352	10.1%	2,224	15.4%	-5.250	-0.158
Outpatient heart failure	351	10.1%	1,933	13.3%	-3.270	-0.102
Other ischemic heart disease	540	15.5%	2,406	16.6%	-1.111	-0.030
Hospitalized Thromboembolic Stroke (past 0-30 days)	17	0.5%	172	1.2%	-0.699	-0.077
Hospitalized Thromboembolic Stroke (past 31-183 days)	19	0.5%	103	0.7%	-0.166	-0.021
Transient ischemic attack	64	1.8%	424	2.9%	-1.090	-0.072
Other medical conditions (falls, fractures, syncope)	244	7.0%	1,339	9.2%	-2.241	-0.082
Cardioversion	796	22.8%	3,015	20.8%	2.033	0.049
Cardioablation	370	10.6%	971	6.7%	3.916	0.140
Hospitalized for bleeding	5	0.1%	61	0.4%	-0.278	-0.052
Medical Product Use						
Estrogen replacement	76	2.2%	306	2.1%	0.069	0.005
H2-antagonist	45	1.3%	311	2.1%	-0.855	-0.066
NSAIDs	445	12.8%	2,054	14.2%	-1.408	-0.041

Table 1g. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 21-49 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	482	13.8%	2,509	17.3%	-3.487	-0.096
SSRI antidepressants	335	9.6%	1,604	11.1%	-1.458	-0.048
Insulin	114	3.3%	759	5.2%	-1.968	-0.098
Metformin (Biguanide)	306	8.8%	1,717	11.9%	-3.071	-0.101
Sulfonylureas	124	3.6%	434	3.0%	0.563	0.032
Other diabetes medications	114	3.3%	805	5.6%	-2.285	-0.111
ACEI/ARB	1,202	34.5%	5,534	38.2%	-3.704	-0.077
Antiarrhythmics	1,306	37.5%	4,270	29.5%	8.007	0.170
Anti-coagulant (injectable)	329	9.4%	1,962	13.5%	-4.102	-0.129
Anti-platelets	132	3.8%	1,270	8.8%	-4.979	-0.206
Beta-blockers	2,260	64.9%	9,971	68.8%	-3.969	-0.084
Calcium channel blockers	1,036	29.7%	4,582	31.6%	-1.897	-0.041
Digoxin	338	9.7%	700	4.8%	4.869	0.188
Diuretics (loop)	390	11.2%	2,196	15.2%	-3.966	-0.117
Diuretics (potassium sparing)	185	5.3%	1,159	8.0%	-2.691	-0.108
Diuretics (thiazide)	434	12.5%	2,040	14.1%	-1.627	-0.048
Nitrates	92	2.6%	472	3.3%	-0.618	-0.037
Statins	787	22.6%	3,646	25.2%	-2.582	-0.061
Fibrates	102	2.9%	348	2.4%	0.525	0.033
Amiodarone	270	7.7%	1,269	8.8%	-1.011	-0.037
Dronedarone	259	7.4%	328	2.3%	5.170	0.242
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	2,279	65.4%	8,534	58.9%	6.497	0.134
No ED encounters (past 31-183 days)	2,827	81.1%	10,970	75.7%	5.409	0.132
At least 1 ED encounter (past 0-30 days)	1,205	34.6%	5,951	41.1%	-6.497	-0.134

Table 1g. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 21-49 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 2 ED encounters (past 0-30 days)	207	5.9%	1,334	9.2%	-3.268	-0.124
At least 1 ED encounter (past 31-183 days)	657	18.9%	3,515	24.3%	-5.409	-0.132
At least 2 ED encounters (past 31-183 days)	185	5.3%	1,233	8.5%	-3.202	-0.127

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1h. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 21-49 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	3,285	N/A	14,098	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	43.3	6.1	43.4	6.0	-0.047	-0.008
Age						
21-49 years	3,285	100.0%	14,098	100.0%	0.000	NaN
50-64 years	0	0.0%	0	0.0%	NaN	NaN
Sex						
Female	683	20.8%	2,986	21.2%	-0.386	-0.009
Male	2,602	79.2%	11,112	78.8%	0.386	0.009
Race ³						
American Indian or Alaska Native	3	0.1%	6	0.0%	0.053	0.021
Asian	3	0.1%	42	0.3%	-0.200	-0.045
Black or African American	36	1.1%	307	2.2%	-1.077	-0.089
Native Hawaiian or Other Pacific Islander	0	0.0%	9	0.1%	NaN	NaN
Unknown	3,013	91.7%	12,408	88.0%	3.704	0.152
White	225	6.8%	1,259	8.9%	-2.085	-0.090
Hispanic origin						
Yes	9	0.3%	107	0.8%	-0.489	-0.069
No	86	2.6%	638	4.5%	-1.918	-0.142
Unknown	3,190	97.1%	13,353	94.7%	2.406	0.160
Year						
2010	59	1.8%	0	0.0%	NaN	NaN
2011	1,035	31.5%	0	0.0%	NaN	NaN
2012	742	22.6%	0	0.0%	NaN	NaN

Table 1h. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 21-49 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2013	396	12.1%	238	1.7%	10.363	0.418
2014	257	7.8%	569	4.0%	3.781	0.161
2015	150	4.6%	1,011	7.2%	-2.602	-0.111
2016	254	7.7%	1,365	9.7%	-1.962	-0.070
2017	161	4.9%	1,684	11.9%	-7.052	-0.256
2018	103	3.1%	1,989	14.1%	-10.960	-0.398
2019	70	2.1%	2,195	15.6%	-13.429	-0.486
2020	42	1.3%	2,234	15.8%	-14.584	-0.541
2021	10	0.3%	2,496	17.7%	-17.385	-0.638
2022	7	0.2%	317	2.2%	-2.045	-0.187
CHADVASC						
mean, std	1.2	1.1	1.3	1.2	-0.068	-0.060
0	955	29.1%	3,970	28.2%	0.906	0.020
1	1,221	37.2%	5,055	35.9%	1.317	0.027
2	677	20.6%	2,951	20.9%	-0.311	-0.008
3	307	9.4%	1,404	10.0%	-0.607	-0.021
4	100	3.1%	580	4.1%	-1.057	-0.057
>= 5	24	0.7%	137	1.0%	-0.248	-0.027
HASBLED						
mean, std	0.8	0.7	0.8	0.8	-0.028	-0.037
0	1,279	38.9%	5,353	38.0%	0.964	0.020
1	1,539	46.8%	6,585	46.7%	0.139	0.003
2	394	12.0%	1,773	12.6%	-0.594	-0.018
>= 3	74	2.2%	388	2.8%	-0.510	-0.033

Table 1h. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 21-49 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Characteristics						
Diabetes	533	16.2%	2,590	18.4%	-2.137	-0.057
Hypercholesterolemia	519	15.8%	2,325	16.5%	-0.680	-0.018
Hypertension	1,849	56.3%	8,024	56.9%	-0.631	-0.013
Kidney failure (chronic)	111	3.4%	562	4.0%	-0.617	-0.033
Kidney failure (acute)	142	4.3%	811	5.8%	-1.430	-0.065
Obesity	1,207	36.7%	5,441	38.6%	-1.857	-0.038
Peptic ulcer disease	6	0.2%	27	0.2%	-0.014	-0.003
Nicotine dependency	759	23.1%	3,454	24.5%	-1.395	-0.033
Hospitalized AMI (past 0-30 days)	27	0.8%	195	1.4%	-0.569	-0.055
Hospitalized AMI (past 31-183 days)	17	0.5%	78	0.6%	-0.040	-0.006
Coronary revascularization	105	3.2%	512	3.6%	-0.444	-0.024
Hospitalized heart failure	402	12.3%	1,931	13.7%	-1.447	-0.043
Outpatient heart failure	382	11.6%	1,718	12.2%	-0.550	-0.017
Other ischemic heart disease	515	15.7%	2,264	16.1%	-0.390	-0.011
Hospitalized Thromboembolic Stroke (past 0-30 days)	29	0.9%	118	0.8%	0.060	0.007
Hospitalized Thromboembolic Stroke (past 31-183 days)	25	0.8%	90	0.6%	0.125	0.015
Transient ischemic attack	88	2.7%	364	2.6%	0.084	0.005
Other medical conditions (falls, fractures, syncope)	279	8.5%	1,212	8.6%	-0.111	-0.004
Cardioversion	706	21.5%	3,020	21.4%	0.075	0.002
Cardioablation	233	7.1%	1,055	7.5%	-0.391	-0.015
Hospitalized for bleeding	7	0.2%	42	0.3%	-0.089	-0.018

Table 1h. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 21-49 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Medical Product Use						
Estrogen replacement	64	1.9%	298	2.1%	-0.170	-0.012
H2-antagonist	45	1.4%	269	1.9%	-0.550	-0.044
NSAIDs	439	13.4%	1,926	13.7%	-0.306	-0.009
Proton pump inhibitors	525	16.0%	2,309	16.4%	-0.392	-0.011
SSRI antidepressants	347	10.6%	1,513	10.7%	-0.168	-0.005
Insulin	119	3.6%	616	4.4%	-0.753	-0.039
Metformin (Biguanide)	314	9.6%	1,534	10.9%	-1.318	-0.044
Sulfonylureas	84	2.5%	416	3.0%	-0.406	-0.025
Other diabetes medications	139	4.2%	678	4.8%	-0.572	-0.028
ACEI/ARB	1,190	36.2%	5,214	37.0%	-0.759	-0.016
Antiarrhythmics	1,062	32.3%	4,377	31.0%	1.294	0.028
Anti-coagulant (injectable)	395	12.0%	1,807	12.8%	-0.804	-0.025
Anti-platelets	197	6.0%	1,013	7.2%	-1.178	-0.048
Beta-blockers	2,197	66.9%	9,565	67.8%	-0.955	-0.020
Calcium channel blockers	994	30.3%	4,380	31.1%	-0.810	-0.018
Digoxin	188	5.7%	821	5.8%	-0.092	-0.004
Diuretics (loop)	417	12.7%	1,967	14.0%	-1.271	-0.038
Diuretics (potassium sparing)	203	6.2%	1,001	7.1%	-0.911	-0.037
Diuretics (thiazide)	428	13.0%	1,923	13.6%	-0.610	-0.018
Nitrates	99	3.0%	432	3.1%	-0.064	-0.004
Statins	760	23.1%	3,381	24.0%	-0.848	-0.020
Fibrates	77	2.4%	351	2.5%	-0.137	-0.009
Amiodarone	279	8.5%	1,187	8.4%	0.058	0.002

Table 1h. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 21-49 years

	Medical Product		Covariate Balance			
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
Patient Characteristics ¹	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Dronedarone	109	3.3%	440	3.1%	0.205	0.012
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	1,938	59.0%	8,598	61.0%	-1.986	-0.043
No ED encounters (past 31-183 days)	2,558	77.9%	10,924	77.5%	0.382	0.009
At least 1 ED encounter (past 0-30 days)	1,347	41.0%	5,500	39.0%	1.986	0.043
At least 2 ED encounters (past 0-30 days)	293	8.9%	1,134	8.0%	0.870	0.032
At least 1 ED encounter (past 31-183 days)	727	22.1%	3,174	22.5%	-0.382	-0.009
At least 2 ED encounters (past 31-183 days)	230	7.0%	1,038	7.4%	-0.364	-0.014

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1i. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 50-64 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	16,675	100.0%	81,715	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	58.9	4.1	59.3	4.0	-0.396	-0.098
Age						
21-49 years	0	0.0%	0	0.0%	NaN	NaN
50-64 years	16,675	100.0%	81,715	100.0%	0.000	NaN
Sex						
Female	4,116	24.7%	24,911	30.5%	-5.802	-0.130
Male	12,559	75.3%	56,804	69.5%	5.802	0.130
Race ³						
American Indian or Alaska Native	3	0.0%	72	0.1%	-0.070	-0.030
Asian	24	0.1%	156	0.2%	-0.047	-0.011
Black or African American	196	1.2%	2,395	2.9%	-1.756	-0.124
Native Hawaiian or Other Pacific Islander	13	0.1%	77	0.1%	-0.016	-0.006
Unknown	14,770	88.6%	64,878	79.4%	9.180	0.252
White	1,642	9.8%	13,815	16.9%	-7.059	-0.209
Hispanic origin						
Yes	41	0.2%	410	0.5%	-0.256	-0.042
No	1,142	6.8%	10,289	12.6%	-5.743	-0.195
Unknown	15,492	92.9%	71,016	86.9%	5.999	0.200
Year						
2010	403	2.4%	0	0.0%	NaN	NaN
2011	5,582	33.5%	0	0.0%	NaN	NaN
2012	3,773	22.6%	0	0.0%	NaN	NaN
2013	1,965	11.8%	1,144	1.4%	10.384	0.428

Table 1i. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 50-64 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	1,260	7.6%	3,203	3.9%	3.637	0.157
2015	893	5.4%	5,864	7.2%	-1.821	-0.075
2016	1,090	6.5%	8,132	10.0%	-3.415	-0.124
2017	741	4.4%	9,769	12.0%	-7.511	-0.276
2018	477	2.9%	11,107	13.6%	-10.732	-0.398
2019	246	1.5%	12,734	15.6%	-14.108	-0.522
2020	134	0.8%	13,042	16.0%	-15.157	-0.569
2021	96	0.6%	14,806	18.1%	-17.543	-0.632
2022	15	0.1%	1,914	2.3%	-2.252	-0.207
CHADVASC						
mean, std	1.5	1.1	1.9	1.3	-0.344	-0.288
0	2,974	17.8%	10,205	12.5%	5.347	0.149
1	5,961	35.7%	25,319	31.0%	4.764	0.101
2	4,728	28.4%	22,668	27.7%	0.614	0.014
3	2,035	12.2%	13,833	16.9%	-4.724	-0.134
4	737	4.4%	7,190	8.8%	-4.379	-0.177
>= 5	240	1.4%	2,500	3.1%	-1.620	-0.109
HASBLED						
mean, std	0.9	0.7	1.1	0.8	-0.193	-0.257
0	4,317	25.9%	16,635	20.4%	5.532	0.131
1	9,829	58.9%	44,852	54.9%	4.056	0.082
2	2,102	12.6%	15,195	18.6%	-5.989	-0.166
>= 3	427	2.6%	5,033	6.2%	-3.598	-0.177
Health Characteristics						
Diabetes	4,517	27.1%	25,274	30.9%	-3.841	-0.085

Table 1i. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 50-64 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	4,773	28.6%	24,360	29.8%	-1.187	-0.026
Hypertension	11,885	71.3%	62,738	76.8%	-5.502	-0.126
Kidney failure (chronic)	673	4.0%	6,950	8.5%	-4.469	-0.185
Kidney failure (acute)	582	3.5%	7,741	9.5%	-5.983	-0.245
Obesity	3,660	21.9%	32,075	39.3%	-17.303	-0.382
Peptic ulcer disease	44	0.3%	358	0.4%	-0.174	-0.029
Nicotine dependency	2,689	16.1%	23,318	28.5%	-12.410	-0.301
Hospitalized AMI (past 0-30 days)	205	1.2%	2,296	2.8%	-1.580	-0.113
Hospitalized AMI (past 31-183 days)	87	0.5%	1,179	1.4%	-0.921	-0.093
Coronary revascularization	1,175	7.0%	8,679	10.6%	-3.575	-0.126
Hospitalized heart failure	1,877	11.3%	14,546	17.8%	-6.545	-0.187
Outpatient heart failure	2,036	12.2%	13,748	16.8%	-4.614	-0.131
Other ischemic heart disease	4,529	27.2%	25,257	30.9%	-3.748	-0.083
Hospitalized Thromboembolic Stroke (past 0-30 days)	214	1.3%	1,271	1.6%	-0.272	-0.023
Hospitalized Thromboembolic Stroke (past 31-183 days)	89	0.5%	759	0.9%	-0.395	-0.046
Transient ischemic attack	593	3.6%	2,797	3.4%	0.133	0.007
Other medical conditions (falls, fractures, syncope)	1,193	7.2%	8,070	9.9%	-2.721	-0.098
Cardioversion	2,604	15.6%	12,183	14.9%	0.707	0.020
Cardioablation	930	5.6%	3,246	4.0%	1.605	0.075
Hospitalized for bleeding	70	0.4%	436	0.5%	-0.114	-0.017
Medical Product Use						
Estrogen replacement	416	2.5%	2,054	2.5%	-0.019	-0.001
H2-antagonist	322	1.9%	2,434	3.0%	-1.048	-0.068
NSAIDs	2,565	15.4%	13,744	16.8%	-1.437	-0.039

Table 1i. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 50-64 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	3,034	18.2%	18,299	22.4%	-4.199	-0.105
SSRI antidepressants	1,759	10.5%	10,607	13.0%	-2.432	-0.076
Insulin	1,057	6.3%	6,867	8.4%	-2.065	-0.079
Metformin (Biguanide)	2,574	15.4%	15,345	18.8%	-3.342	-0.089
Sulfonylureas	1,103	6.6%	4,740	5.8%	0.814	0.034
Other diabetes medications	1,225	7.3%	7,692	9.4%	-2.067	-0.075
ACEI/ARB	8,402	50.4%	43,507	53.2%	-2.856	-0.057
Antiarrhythmics	5,895	35.4%	22,703	27.8%	7.569	0.163
Anti-coagulant (injectable)	1,146	6.9%	9,631	11.8%	-4.914	-0.170
Anti-platelets	1,471	8.8%	11,390	13.9%	-5.117	-0.162
Beta-blockers	11,390	68.3%	59,567	72.9%	-4.590	-0.101
Calcium channel blockers	5,927	35.5%	29,851	36.5%	-0.986	-0.021
Digoxin	1,837	11.0%	4,469	5.5%	5.547	0.203
Diuretics (loop)	2,595	15.6%	16,891	20.7%	-5.108	-0.133
Diuretics (potassium sparing)	1,161	7.0%	7,247	8.9%	-1.906	-0.071
Diuretics (thiazide)	3,535	21.2%	17,720	21.7%	-0.486	-0.012
Nitrates	789	4.7%	5,260	6.4%	-1.705	-0.074
Statins	7,425	44.5%	40,208	49.2%	-4.677	-0.094
Fibrates	905	5.4%	3,429	4.2%	1.231	0.058
Amiodarone	1,518	9.1%	9,077	11.1%	-2.005	-0.067
Dronedarone	1,209	7.3%	1,815	2.2%	5.029	0.238
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	12,519	75.1%	54,186	66.3%	8.766	0.193
No ED encounters (past 31-183 days)	14,175	85.0%	64,691	79.2%	5.841	0.153
At least 1 ED encounter (past 0-30 days)	4,156	24.9%	27,529	33.7%	-8.766	-0.193

Table 1i. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 50-64 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 2 ED encounters (past 0-30 days)	765	4.6%	6,579	8.1%	-3.463	-0.143
At least 1 ED encounter (past 31-183 days)	2,500	15.0%	17,024	20.8%	-5.841	-0.153
At least 2 ED encounters (past 31-183 days)	686	4.1%	5,834	7.1%	-3.026	-0.132

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1j. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATES Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 50-64 years

Patient Characteristics ¹	Medical Product		Covariate Balance			
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	15,562	N/A	81,592	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	59.1	4.1	59.2	4.0	-0.108	-0.027
Age						
21-49 years	0	0.0%	0	0.0%	NaN	NaN
50-64 years	15,562	100.0%	81,592	100.0%	0.000	NaN
Sex						
Female	4,473	28.7%	24,135	29.6%	-0.837	-0.018
Male	11,089	71.3%	57,458	70.4%	0.837	0.018
Race ³						
American Indian or Alaska Native	1	0.0%	71	0.1%	-0.081	-0.037
Asian	16	0.1%	163	0.2%	-0.099	-0.026
Black or African American	228	1.5%	2,300	2.8%	-1.353	-0.098
Native Hawaiian or Other Pacific Islander	15	0.1%	76	0.1%	0.006	0.002
Unknown	13,666	87.8%	65,004	79.7%	8.149	0.324
White	1,610	10.3%	13,657	16.7%	-6.394	-0.245
Hispanic origin						
Yes	42	0.3%	405	0.5%	-0.226	-0.037
No	1,163	7.5%	10,130	12.4%	-4.941	-0.315
Unknown	14,357	92.3%	71,058	87.1%	5.168	0.317
Year						
2010	313	2.0%	0	0.0%	NaN	NaN
2011	4,601	29.6%	0	0.0%	NaN	NaN
2012	3,306	21.2%	0	0.0%	NaN	NaN

Table 1j. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATES Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 50-64 years

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2013	1,795	11.5%	1,271	1.6%	9.976	0.412
2014	1,216	7.8%	3,485	4.3%	3.540	0.149
2015	918	5.9%	6,215	7.6%	-1.717	-0.068
2016	1,236	7.9%	8,299	10.2%	-2.229	-0.078
2017	903	5.8%	9,822	12.0%	-6.235	-0.220
2018	619	4.0%	11,028	13.5%	-9.535	-0.343
2019	316	2.0%	12,496	15.3%	-13.284	-0.486
2020	183	1.2%	12,744	15.6%	-14.442	-0.539
2021	134	0.9%	14,379	17.6%	-16.764	-0.606
2022	22	0.1%	1,854	2.3%	-2.129	-0.196
CHADVASC						
mean, std	1.7	1.2	1.8	1.2	-0.117	-0.096
0	2,281	14.7%	10,841	13.3%	1.369	0.040
1	5,218	33.5%	25,856	31.7%	1.844	0.040
2	4,423	28.4%	22,725	27.9%	0.569	0.013
3	2,279	14.6%	13,221	16.2%	-1.556	-0.043
4	1,022	6.6%	6,650	8.1%	-1.585	-0.061
>= 5	339	2.2%	2,300	2.8%	-0.641	-0.041
HASBLED						
mean, std	1.0	0.8	1.1	0.8	-0.061	-0.079
0	3,592	23.1%	17,266	21.2%	1.920	0.047
1	8,765	56.3%	45,338	55.6%	0.761	0.015
2	2,506	16.1%	14,420	17.7%	-1.568	-0.042
>= 3	698	4.5%	4,569	5.6%	-1.113	-0.051

Table 1j. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATES Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 50-64 years

Patient Characteristics ¹	Medical Product		Covariate Balance			
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Characteristics						
Diabetes	4,341	27.9%	24,835	30.4%	-2.542	-0.057
Hypercholesterolemia	4,415	28.4%	24,147	29.6%	-1.221	-0.027
Hypertension	11,530	74.1%	61,989	76.0%	-1.882	-0.044
Kidney failure (chronic)	988	6.4%	6,388	7.8%	-1.477	-0.058
Kidney failure (acute)	964	6.2%	6,935	8.5%	-2.303	-0.089
Obesity	5,164	33.2%	29,721	36.4%	-3.242	-0.068
Peptic ulcer disease	55	0.4%	335	0.4%	-0.060	-0.010
Nicotine dependency	3,615	23.2%	21,655	26.5%	-3.310	-0.078
Hospitalized AMI (past 0-30 days)	298	1.9%	2,083	2.6%	-0.635	-0.043
Hospitalized AMI (past 31-183 days)	146	0.9%	1,060	1.3%	-0.358	-0.034
Coronary revascularization	1,352	8.7%	8,211	10.1%	-1.378	-0.047
Hospitalized heart failure	2,234	14.4%	13,711	16.8%	-2.448	-0.068
Outpatient heart failure	2,215	14.2%	13,227	16.2%	-1.978	-0.056
Other ischemic heart disease	4,473	28.7%	24,821	30.4%	-1.675	-0.037
Hospitalized Thromboembolic Stroke (past 0-30 days)	241	1.6%	1,236	1.5%	0.036	0.003
Hospitalized Thromboembolic Stroke (past 31-183 days)	127	0.8%	707	0.9%	-0.048	-0.005
Transient ischemic attack	552	3.5%	2,820	3.5%	0.093	0.005
Other medical conditions (falls, fractures, syncope)	1,369	8.8%	7,708	9.4%	-0.648	-0.023
Cardioversion	2,345	15.1%	12,252	15.0%	0.052	0.001
Cardioablation	673	4.3%	3,462	4.2%	0.080	0.004
Hospitalized for bleeding	77	0.5%	420	0.5%	-0.023	-0.003

Table 1j. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATES Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 50-64 years

Patient Characteristics ¹	Medical Product		Covariate Balance			
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Medical Product Use						
Estrogen replacement	391	2.5%	2,046	2.5%	0.006	0.000
H2-antagonist	367	2.4%	2,336	2.9%	-0.503	-0.032
NSAIDs	2,517	16.2%	13,571	16.6%	-0.461	-0.012
Proton pump inhibitors	3,200	20.6%	17,816	21.8%	-1.271	-0.031
SSRI antidepressants	1,838	11.8%	10,334	12.7%	-0.852	-0.026
Insulin	1,091	7.0%	6,643	8.1%	-1.129	-0.043
Metformin (Biguanide)	2,581	16.6%	14,909	18.3%	-1.688	-0.045
Sulfonylureas	893	5.7%	4,873	6.0%	-0.231	-0.010
Other diabetes medications	1,251	8.0%	7,406	9.1%	-1.036	-0.037
ACEI/ARB	8,060	51.8%	43,137	52.9%	-1.073	-0.022
Antiarrhythmics	4,639	29.8%	23,718	29.1%	0.739	0.016
Anti-coagulant (injectable)	1,446	9.3%	9,041	11.1%	-1.788	-0.060
Anti-platelets	1,814	11.7%	10,707	13.1%	-1.467	-0.045
Beta-blockers	11,026	70.9%	58,882	72.2%	-1.310	-0.029
Calcium channel blockers	5,571	35.8%	29,696	36.4%	-0.595	-0.012
Digoxin	1,064	6.8%	5,235	6.4%	0.424	0.017
Diuretics (loop)	2,763	17.8%	16,305	20.0%	-2.228	-0.058
Diuretics (potassium sparing)	1,196	7.7%	7,011	8.6%	-0.908	-0.033
Diuretics (thiazide)	3,313	21.3%	17,655	21.6%	-0.347	-0.008
Nitrates	835	5.4%	5,072	6.2%	-0.854	-0.037
Statins	7,178	46.1%	39,574	48.5%	-2.375	-0.048
Fibrates	685	4.4%	3,607	4.4%	-0.017	-0.001
Amiodarone	1,577	10.1%	8,815	10.8%	-0.669	-0.022

Table 1j. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 1%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 1%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 50-64 years

	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
Patient Characteristics ¹	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Dronedarone	549	3.5%	2,474	3.0%	0.495	0.028
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	10,768	69.2%	55,482	68.0%	1.194	0.027
No ED encounters (past 31-183 days)	12,669	81.4%	65,305	80.0%	1.374	0.035
At least 1 ED encounter (past 0-30 days)	4,794	30.8%	26,110	32.0%	-1.194	-0.027
At least 2 ED encounters (past 0-30 days)	1,037	6.7%	6,061	7.4%	-0.767	-0.031
At least 1 ED encounter (past 31-183 days)	2,893	18.6%	16,288	20.0%	-1.374	-0.035
At least 2 ED encounters (past 31-183 days)	911	5.9%	5,461	6.7%	-0.839	-0.035

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1k. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	4,125	100.0%	14,037	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	53.5	8.7	53.9	9.0	-0.436	-0.049
Age						
21-49 years	1,151	27.9%	3,832	27.3%	0.604	0.014
50-64 years	2,974	72.1%	10,205	72.7%	-0.604	-0.014
Sex						
Female	0	0.0%	0	0.0%	NaN	NaN
Male	4,125	100.0%	14,037	100.0%	0.000	NaN
Race ³						
American Indian or Alaska Native	0	0.0%	7	0.0%	NaN	NaN
Asian	4	0.1%	38	0.3%	-0.174	-0.041
Black or African American	8	0.2%	54	0.4%	-0.191	-0.036
Native Hawaiian or Other Pacific Islander	1	0.0%	0	0.0%	NaN	NaN
Unknown	3,855	93.5%	12,477	88.9%	4.568	0.162
White	251	6.1%	1,408	10.0%	-3.946	-0.145
Hispanic origin						
Yes	3	0.1%	67	0.5%	-0.405	-0.077
No	62	1.5%	375	2.7%	-1.168	-0.082
Unknown	4,060	98.4%	13,595	96.9%	1.573	0.104
Year						
2010	113	2.7%	0	0.0%	NaN	NaN
2011	1,508	36.6%	0	0.0%	NaN	NaN
2012	1,021	24.8%	0	0.0%	NaN	NaN
2013	540	13.1%	235	1.7%	11.417	0.447

Table 1k. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	256	6.2%	622	4.4%	1.775	0.079
2015	182	4.4%	1,080	7.7%	-3.282	-0.138
2016	194	4.7%	1,424	10.1%	-5.442	-0.209
2017	119	2.9%	1,636	11.7%	-8.770	-0.343
2018	95	2.3%	1,946	13.9%	-11.560	-0.434
2019	50	1.2%	2,098	14.9%	-13.734	-0.521
2020	29	0.7%	2,208	15.7%	-15.027	-0.569
2021	14	0.3%	2,468	17.6%	-17.243	-0.633
2022	4	0.1%	320	2.3%	-2.183	-0.202
CHADVASC						
mean, std	0.0	NaN	0.0	NaN	NaN	NaN
0	4,125	100.0%	14,037	100.0%	0.000	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	0	0.0%	0	0.0%	NaN	NaN
3	0	0.0%	0	0.0%	NaN	NaN
4	0	0.0%	0	0.0%	NaN	NaN
>= 5	0	0.0%	0	0.0%	NaN	NaN
HASBLED						
mean, std	0.1	0.3	0.1	0.3	-0.028	-0.086
0	3,798	92.1%	12,603	89.8%	2.289	0.080
1	305	7.4%	1,302	9.3%	-1.882	-0.068
2	22	0.5%	119	0.8%	-0.314	-0.038
>= 3	0	0.0%	13	0.1%	NaN	NaN
Health Characteristics						
Diabetes	9	0.2%	50	0.4%	-0.138	-0.026

Table 1k. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	596	14.4%	1,908	13.6%	0.856	0.025
Hypertension	57	1.4%	418	3.0%	-1.596	-0.109
Kidney failure (chronic)	24	0.6%	169	1.2%	-0.622	-0.066
Kidney failure (acute)	31	0.8%	268	1.9%	-1.158	-0.101
Obesity	343	8.3%	2,534	18.1%	-9.737	-0.291
Peptic ulcer disease	4	0.1%	29	0.2%	-0.110	-0.028
Nicotine dependency	472	11.4%	2,458	17.5%	-6.068	-0.173
Hospitalized AMI (past 0-30 days)	0	0.0%	0	0.0%	NaN	NaN
Hospitalized AMI (past 31-183 days)	0	0.0%	0	0.0%	NaN	NaN
Coronary revascularization	65	1.6%	279	2.0%	-0.412	-0.031
Hospitalized heart failure	0	0.0%	0	0.0%	NaN	NaN
Outpatient heart failure	195	4.7%	629	4.5%	0.246	0.012
Other ischemic heart disease	477	11.6%	1,701	12.1%	-0.554	-0.017
Hospitalized Thromboembolic Stroke (past 0-30 days)	0	0.0%	0	0.0%	NaN	NaN
Hospitalized Thromboembolic Stroke (past 31-183 days)	0	0.0%	0	0.0%	NaN	NaN
Transient ischemic attack	0	0.0%	8	0.1%	NaN	NaN
Other medical conditions (falls, fractures, syncope)	225	5.5%	934	6.7%	-1.199	-0.050
Cardioversion	682	16.5%	2,260	16.1%	0.433	0.012
Cardioablation	373	9.0%	822	5.9%	3.186	0.122
Hospitalized for bleeding	8	0.2%	27	0.2%	0.002	0.000
Medical Product Use						
Estrogen replacement	0	0.0%	6	0.0%	NaN	NaN
H2-antagonist	28	0.7%	157	1.1%	-0.440	-0.047
NSAIDs	476	11.5%	1,456	10.4%	1.167	0.037

Table 1k. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	464	11.2%	1,837	13.1%	-1.838	-0.056
SSRI antidepressants	243	5.9%	820	5.8%	0.049	0.002
Insulin	4	0.1%	21	0.1%	-0.053	-0.015
Metformin (Biguanide)	31	0.8%	142	1.0%	-0.260	-0.028
Sulfonylureas	7	0.2%	11	0.1%	0.091	0.026
Other diabetes medications	11	0.3%	51	0.4%	-0.097	-0.017
ACEI/ARB	533	12.9%	1,423	10.1%	2.784	0.087
Antiarrhythmics	1,482	35.9%	3,830	27.3%	8.642	0.187
Anti-coagulant (injectable)	292	7.1%	1,439	10.3%	-3.173	-0.113
Anti-platelets	119	2.9%	696	5.0%	-2.073	-0.107
Beta-blockers	2,328	56.4%	8,085	57.6%	-1.161	-0.023
Calcium channel blockers	855	20.7%	2,902	20.7%	0.053	0.001
Digoxin	330	8.0%	451	3.2%	4.787	0.209
Diuretics (loop)	171	4.1%	573	4.1%	0.063	0.003
Diuretics (potassium sparing)	92	2.2%	234	1.7%	0.563	0.041
Diuretics (thiazide)	146	3.5%	337	2.4%	1.139	0.067
Nitrates	32	0.8%	174	1.2%	-0.464	-0.046
Statins	949	23.0%	3,045	21.7%	1.313	0.032
Fibrates	62	1.5%	166	1.2%	0.320	0.028
Amiodarone	229	5.6%	729	5.2%	0.358	0.016
Dronedarone	315	7.6%	384	2.7%	4.901	0.222
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	3,278	79.5%	9,914	70.6%	8.839	0.205
No ED encounters (past 31-183 days)	3,716	90.1%	12,297	87.6%	2.481	0.079
At least 1 ED encounter (past 0-30 days)	847	20.5%	4,123	29.4%	-8.839	-0.205

Table 1k. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 2 ED encounters (past 0-30 days)	115	2.8%	656	4.7%	-1.885	-0.100
At least 1 ED encounter (past 31-183 days)	409	9.9%	1,740	12.4%	-2.481	-0.079
At least 2 ED encounters (past 31-183 days)	86	2.1%	411	2.9%	-0.843	-0.054

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1I. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	3,881	N/A	13,719	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	53.7	8.5	53.8	9.0	-0.119	-0.014
Age						
21-49 years	1,050	27.1%	3,780	27.6%	-0.497	-0.011
50-64 years	2,831	72.9%	9,939	72.4%	0.497	0.011
Sex						
Female	0	0.0%	0	0.0%	NaN	NaN
Male	3,881	100.0%	13,719	100.0%	0.000	NaN
Race ³						
American Indian or Alaska Native	0	0.0%	7	0.1%	NaN	NaN
Asian	3	0.1%	38	0.3%	-0.202	-0.048
Black or African American	9	0.2%	43	0.3%	-0.092	-0.018
Native Hawaiian or Other Pacific Islander	2	0.0%	0	0.0%	NaN	NaN
Unknown	3,631	93.6%	12,291	89.6%	3.965	0.172
White	230	5.9%	1,290	9.4%	-3.479	-0.154
Hispanic origin						
Yes	2	0.1%	62	0.5%	-0.390	-0.078
No	59	1.5%	288	2.1%	-0.568	-0.052
Unknown	3,819	98.4%	13,369	97.5%	0.959	0.079
Year						
2010	102	2.6%	0	0.0%	NaN	NaN
2011	1,308	33.7%	0	0.0%	NaN	NaN
2012	934	24.1%	0	0.0%	NaN	NaN

Table 1. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2013	536	13.8%	253	1.8%	11.969	0.457
2014	254	6.5%	646	4.7%	1.827	0.079
2015	185	4.8%	1,118	8.2%	-3.380	-0.138
2016	213	5.5%	1,421	10.4%	-4.869	-0.181
2017	135	3.5%	1,625	11.8%	-8.358	-0.318
2018	106	2.7%	1,884	13.7%	-10.993	-0.408
2019	57	1.5%	2,009	14.6%	-13.173	-0.499
2020	32	0.8%	2,116	15.4%	-14.608	-0.555
2021	13	0.3%	2,347	17.1%	-16.762	-0.622
2022	6	0.2%	301	2.2%	-2.044	-0.191
CHADVASC						
mean, std	0.0	NaN	0.0	NaN	0.000	NaN
0	3,881	100.0%	13,719	100.0%	0.000	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	0	0.0%	0	0.0%	NaN	NaN
3	0	0.0%	0	0.0%	NaN	NaN
4	0	0.0%	0	0.0%	NaN	NaN
>= 5	0	0.0%	0	0.0%	NaN	NaN
HASBLED						
mean, std	0.1	0.3	0.1	0.3	-0.008	-0.024
0	3,547	91.4%	12,437	90.7%	0.727	0.025
1	309	8.0%	1,184	8.6%	-0.677	-0.025
2	26	0.7%	98	0.7%	-0.050	-0.006
>= 3	0	0.0%	0	0.0%	NaN	NaN

Table 1I. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 0

Patient Characteristics ¹	Medical Product		Covariate Balance			
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Characteristics						
Diabetes	7	0.2%	30	0.2%	-0.041	-0.009
Hypercholesterolemia	533	13.7%	1,886	13.7%	-0.025	-0.001
Hypertension	77	2.0%	306	2.2%	-0.234	-0.016
Kidney failure (chronic)	30	0.8%	132	1.0%	-0.186	-0.020
Kidney failure (acute)	46	1.2%	197	1.4%	-0.255	-0.023
Obesity	504	13.0%	2,117	15.4%	-2.439	-0.070
Peptic ulcer disease	2	0.1%	12	0.1%	-0.028	-0.010
Nicotine dependency	545	14.1%	2,146	15.6%	-1.592	-0.045
Hospitalized AMI (past 0-30 days)	0	0.0%	0	0.0%	NaN	NaN
Hospitalized AMI (past 31-183 days)	0	0.0%	0	0.0%	NaN	NaN
Coronary revascularization	66	1.7%	251	1.8%	-0.126	-0.010
Hospitalized heart failure	0	0.0%	0	0.0%	NaN	NaN
Outpatient heart failure	185	4.8%	622	4.5%	0.228	0.011
Other ischemic heart disease	453	11.7%	1,625	11.8%	-0.181	-0.006
Hospitalized Thromboembolic Stroke (past 0-30 days)	0	0.0%	0	0.0%	NaN	NaN
Hospitalized Thromboembolic Stroke (past 31-183 days)	0	0.0%	0	0.0%	NaN	NaN
Transient ischemic attack	0	0.0%	0	0.0%	NaN	NaN
Other medical conditions (falls, fractures, syncope)	230	5.9%	853	6.2%	-0.304	-0.013
Cardioversion	622	16.0%	2,223	16.2%	-0.177	-0.005
Cardioablation	260	6.7%	871	6.4%	0.350	0.014
Hospitalized for bleeding	7	0.2%	24	0.2%	0.007	0.002
Medical Product Use						

Table 1. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Estrogen replacement	0	0.0%	0	0.0%	NaN	NaN
H2-antagonist	32	0.8%	127	0.9%	-0.093	-0.010
NSAIDs	419	10.8%	1,447	10.5%	0.246	0.008
Proton pump inhibitors	478	12.3%	1,699	12.4%	-0.082	-0.002
SSRI antidepressants	222	5.7%	786	5.7%	-0.001	-0.000
Insulin	3	0.1%	9	0.1%	0.018	0.007
Metformin (Biguanide)	32	0.8%	118	0.9%	-0.033	-0.004
Sulfonylureas	3	0.1%	10	0.1%	0.004	0.001
Other diabetes medications	8	0.2%	37	0.3%	-0.070	-0.014
ACEI/ARB	432	11.1%	1,458	10.6%	0.510	0.016
Antiarrhythmics	1,181	30.4%	4,008	29.2%	1.217	0.027
Anti-coagulant (injectable)	330	8.5%	1,291	9.4%	-0.905	-0.032
Anti-platelets	137	3.5%	597	4.4%	-0.832	-0.043
Beta-blockers	2,207	56.9%	7,861	57.3%	-0.437	-0.009
Calcium channel blockers	779	20.1%	2,823	20.6%	-0.516	-0.013
Digoxin	188	4.9%	574	4.2%	0.666	0.032
Diuretics (loop)	158	4.1%	547	4.0%	0.090	0.005
Diuretics (potassium sparing)	76	2.0%	244	1.8%	0.174	0.013
Diuretics (thiazide)	105	2.7%	359	2.6%	0.092	0.006
Nitrates	35	0.9%	152	1.1%	-0.198	-0.020
Statins	835	21.5%	2,990	21.8%	-0.273	-0.007
Fibrates	48	1.2%	173	1.3%	-0.013	-0.001
Amiodarone	199	5.1%	716	5.2%	-0.087	-0.004
Dronedarone	170	4.4%	504	3.7%	0.709	0.036

Table 1I. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	2,883	74.3%	10,048	73.2%	1.036	0.024
No ED encounters (past 31-183 days)	3,449	88.9%	12,143	88.5%	0.370	0.012
At least 1 ED encounter (past 0-30 days)	998	25.7%	3,671	26.8%	-1.036	-0.024
At least 2 ED encounters (past 0-30 days)	140	3.6%	531	3.9%	-0.258	-0.014
At least 1 ED encounter (past 31-183 days)	432	11.1%	1,577	11.5%	-0.370	-0.012
At least 2 ED encounters (past 31-183 days)	97	2.5%	349	2.5%	-0.037	-0.002

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1m. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	7,293	100.0%	30,310	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	56.0	7.4	56.5	7.3	-0.586	-0.080
Age						
21-49 years	1,332	18.3%	4,991	16.5%	1.798	0.047
50-64 years	5,961	81.7%	25,319	83.5%	-1.798	-0.047
Sex						
Female	1,098	15.1%	5,907	19.5%	-4.433	-0.117
Male	6,195	84.9%	24,403	80.5%	4.433	0.117
Race ³						
American Indian or Alaska Native	1	0.0%	14	0.0%	-0.032	-0.019
Asian	11	0.2%	49	0.2%	-0.011	-0.003
Black or African American	39	0.5%	329	1.1%	-0.551	-0.061
Native Hawaiian or Other Pacific Islander	5	0.1%	14	0.0%	0.022	0.009
Unknown	6,667	91.4%	26,153	86.3%	5.131	0.164
White	553	7.6%	3,622	11.9%	-4.367	-0.148
Hispanic origin						
Yes	15	0.2%	125	0.4%	-0.207	-0.037
No	264	3.6%	1,787	5.9%	-2.276	-0.107
Unknown	7,014	96.2%	28,398	93.7%	2.483	0.113
Year						
2010	181	2.5%	0	0.0%	NaN	NaN
2011	2,506	34.4%	0	0.0%	NaN	NaN
2012	1,703	23.4%	0	0.0%	NaN	NaN
2013	857	11.8%	517	1.7%	10.045	0.409

Table 1m. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	577	7.9%	1,263	4.2%	3.745	0.158
2015	379	5.2%	2,333	7.7%	-2.500	-0.102
2016	448	6.1%	3,005	9.9%	-3.771	-0.139
2017	285	3.9%	3,674	12.1%	-8.214	-0.306
2018	178	2.4%	4,145	13.7%	-11.235	-0.422
2019	104	1.4%	4,660	15.4%	-13.948	-0.520
2020	42	0.6%	4,682	15.4%	-14.871	-0.570
2021	25	0.3%	5,338	17.6%	-17.269	-0.634
2022	8	0.1%	693	2.3%	-2.177	-0.201
CHADVASC						
mean, std	1.0	0.0	1.0	0.0	0.000	NaN
0	0	0.0%	0	0.0%	NaN	NaN
1	7,293	100.0%	30,310	100.0%	0.000	NaN
2	0	0.0%	0	0.0%	NaN	NaN
3	0	0.0%	0	0.0%	NaN	NaN
4	0	0.0%	0	0.0%	NaN	NaN
>= 5	0	0.0%	0	0.0%	NaN	NaN
HASBLED						
mean, std	0.9	0.6	0.9	0.7	-0.037	-0.058
0	1,604	22.0%	7,111	23.5%	-1.467	-0.035
1	4,949	67.9%	18,957	62.5%	5.316	0.112
2	653	9.0%	3,538	11.7%	-2.719	-0.089
>= 3	87	1.2%	704	2.3%	-1.130	-0.086
Health Characteristics						
Diabetes	323	4.4%	951	3.1%	1.291	0.068

Table 1m. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	1,853	25.4%	7,536	24.9%	0.545	0.013
Hypertension	5,466	74.9%	22,019	72.6%	2.303	0.052
Kidney failure (chronic)	140	1.9%	1,060	3.5%	-1.578	-0.097
Kidney failure (acute)	120	1.6%	1,226	4.0%	-2.399	-0.145
Obesity	1,349	18.5%	9,832	32.4%	-13.941	-0.324
Peptic ulcer disease	15	0.2%	79	0.3%	-0.055	-0.011
Nicotine dependency	1,115	15.3%	7,389	24.4%	-9.089	-0.229
Hospitalized AMI (past 0-30 days)	8	0.1%	102	0.3%	-0.227	-0.048
Hospitalized AMI (past 31-183 days)	3	0.0%	27	0.1%	-0.048	-0.019
Coronary revascularization	341	4.7%	1,728	5.7%	-1.025	-0.046
Hospitalized heart failure	264	3.6%	1,097	3.6%	0.001	0.000
Outpatient heart failure	565	7.7%	2,062	6.8%	0.944	0.036
Other ischemic heart disease	1,569	21.5%	6,559	21.6%	-0.126	-0.003
Hospitalized Thromboembolic Stroke (past 0-30 days)	0	0.0%	0	0.0%	NaN	NaN
Hospitalized Thromboembolic Stroke (past 31-183 days)	0	0.0%	0	0.0%	NaN	NaN
Transient ischemic attack	5	0.1%	21	0.1%	-0.001	-0.000
Other medical conditions (falls, fractures, syncope)	442	6.1%	2,433	8.0%	-1.966	-0.077
Cardioversion	1,313	18.0%	4,709	15.5%	2.467	0.066
Cardioablation	499	6.8%	1,491	4.9%	1.923	0.082
Hospitalized for bleeding	22	0.3%	107	0.4%	-0.051	-0.009
Medical Product Use						
Estrogen replacement	181	2.5%	721	2.4%	0.103	0.007
H2-antagonist	108	1.5%	619	2.0%	-0.561	-0.043
NSAIDs	1,034	14.2%	4,710	15.5%	-1.361	-0.038

Table 1m. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	1,164	16.0%	5,664	18.7%	-2.726	-0.072
SSRI antidepressants	623	8.5%	3,099	10.2%	-1.682	-0.058
Insulin	60	0.8%	147	0.5%	0.338	0.042
Metformin (Biguanide)	258	3.5%	957	3.2%	0.380	0.021
Sulfonylureas	63	0.9%	138	0.5%	0.409	0.050
Other diabetes medications	79	1.1%	302	1.0%	0.087	0.009
ACEI/ARB	3,419	46.9%	14,092	46.5%	0.388	0.008
Antiarrhythmics	2,687	36.8%	8,568	28.3%	8.576	0.184
Anti-coagulant (injectable)	503	6.9%	3,425	11.3%	-4.403	-0.154
Anti-platelets	430	5.9%	2,700	8.9%	-3.012	-0.115
Beta-blockers	4,921	67.5%	21,180	69.9%	-2.402	-0.052
Calcium channel blockers	2,520	34.6%	10,923	36.0%	-1.484	-0.031
Digoxin	676	9.3%	1,217	4.0%	5.254	0.212
Diuretics (loop)	660	9.0%	2,802	9.2%	-0.195	-0.007
Diuretics (potassium sparing)	344	4.7%	1,435	4.7%	-0.018	-0.001
Diuretics (thiazide)	1,363	18.7%	5,696	18.8%	-0.103	-0.003
Nitrates	207	2.8%	983	3.2%	-0.405	-0.024
Statins	2,713	37.2%	11,293	37.3%	-0.058	-0.001
Fibrates	297	4.1%	838	2.8%	1.308	0.072
Amiodarone	542	7.4%	2,363	7.8%	-0.364	-0.014
Dronedarone	600	8.2%	890	2.9%	5.291	0.232
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	5,625	77.1%	21,333	70.4%	6.746	0.154
No ED encounters (past 31-183 days)	6,339	86.9%	25,308	83.5%	3.422	0.096
At least 1 ED encounter (past 0-30 days)	1,668	22.9%	8,977	29.6%	-6.746	-0.154

Table 1m. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 2 ED encounters (past 0-30 days)	279	3.8%	1,775	5.9%	-2.031	-0.095
At least 1 ED encounter (past 31-183 days)	954	13.1%	5,002	16.5%	-3.422	-0.096
At least 2 ED encounters (past 31-183 days)	235	3.2%	1,309	4.3%	-1.096	-0.058

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1n. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATES Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	6,746	N/A	30,000	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	56.2	7.2	56.4	7.4	-0.224	-0.031
Age						
21-49 years	1,155	17.1%	5,063	16.9%	0.243	0.006
50-64 years	5,591	82.9%	24,938	83.1%	-0.243	-0.006
Sex						
Female	1,195	17.7%	5,577	18.6%	-0.881	-0.023
Male	5,551	82.3%	24,424	81.4%	0.881	0.023
Race ³						
American Indian or Alaska Native	2	0.0%	13	0.0%	-0.018	-0.009
Asian	9	0.1%	50	0.2%	-0.035	-0.009
Black or African American	39	0.6%	309	1.0%	-0.449	-0.051
Native Hawaiian or Other Pacific Islander	6	0.1%	12	0.0%	0.051	0.020
Unknown	6,149	91.1%	26,056	86.9%	4.294	0.174
White	525	7.8%	3,431	11.4%	-3.648	-0.150
Hispanic origin						
Yes	13	0.2%	124	0.4%	-0.229	-0.042
No	260	3.9%	1,617	5.4%	-1.538	-0.106
Unknown	6,474	96.0%	28,259	94.2%	1.767	0.115
Year						
2010	151	2.2%	0	0.0%	NaN	NaN
2011	2,157	32.0%	0	0.0%	NaN	NaN
2012	1,527	22.6%	0	0.0%	NaN	NaN

Table 1n. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATES Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2013	766	11.4%	564	1.9%	9.473	0.388
2014	565	8.4%	1,345	4.5%	3.895	0.159
2015	387	5.7%	2,425	8.1%	-2.352	-0.093
2016	478	7.1%	3,039	10.1%	-3.047	-0.109
2017	319	4.7%	3,665	12.2%	-7.492	-0.272
2018	203	3.0%	4,070	13.6%	-10.563	-0.391
2019	112	1.7%	4,519	15.1%	-13.398	-0.499
2020	43	0.6%	4,542	15.1%	-14.499	-0.559
2021	28	0.4%	5,159	17.2%	-16.788	-0.621
2022	11	0.2%	673	2.2%	-2.085	-0.192
CHADVASC						
mean, std	1.0	0.0	1.0	0.0	0.000	NaN
0	0	0.0%	0	0.0%	NaN	NaN
1	6,746	100.0%	30,000	100.0%	0.000	NaN
2	0	0.0%	0	0.0%	NaN	NaN
3	0	0.0%	0	0.0%	NaN	NaN
4	0	0.0%	0	0.0%	NaN	NaN
>= 5	0	0.0%	0	0.0%	NaN	NaN
HASBLED						
mean, std	0.9	0.6	0.9	0.7	-0.014	-0.021
0	1,551	23.0%	6,936	23.1%	-0.128	-0.003
1	4,383	65.0%	19,131	63.8%	1.205	0.025
2	695	10.3%	3,321	11.1%	-0.761	-0.025
>= 3	116	1.7%	612	2.0%	-0.315	-0.023

Table 1n. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Characteristics						
Diabetes	241	3.6%	1,009	3.4%	0.207	0.011
Hypercholesterolemia	1,662	24.6%	7,477	24.9%	-0.281	-0.007
Hypertension	4,970	73.7%	21,953	73.2%	0.505	0.011
Kidney failure (chronic)	171	2.5%	927	3.1%	-0.556	-0.034
Kidney failure (acute)	164	2.4%	1,030	3.4%	-0.998	-0.059
Obesity	1,765	26.2%	8,889	29.6%	-3.469	-0.077
Peptic ulcer disease	15	0.2%	73	0.2%	-0.017	-0.004
Nicotine dependency	1,305	19.3%	6,698	22.3%	-2.977	-0.074
Hospitalized AMI (past 0-30 days)	12	0.2%	70	0.2%	-0.058	-0.013
Hospitalized AMI (past 31-183 days)	5	0.1%	21	0.1%	-0.000	-0.000
Coronary revascularization	335	5.0%	1,622	5.4%	-0.437	-0.020
Hospitalized heart failure	247	3.7%	1,093	3.6%	0.024	0.001
Outpatient heart failure	496	7.3%	2,100	7.0%	0.348	0.014
Other ischemic heart disease	1,435	21.3%	6,456	21.5%	-0.249	-0.006
Hospitalized Thromboembolic Stroke (past 0-30 days)	0	0.0%	0	0.0%	NaN	NaN
Hospitalized Thromboembolic Stroke (past 31-183 days)	0	0.0%	0	0.0%	NaN	NaN
Transient ischemic attack	3	0.0%	15	0.0%	0.002	0.001
Other medical conditions (falls, fractures, syncope)	481	7.1%	2,273	7.6%	-0.451	-0.017
Cardioversion	1,120	16.6%	4,802	16.0%	0.599	0.016
Cardioablation	369	5.5%	1,571	5.2%	0.231	0.010
Hospitalized for bleeding	17	0.3%	99	0.3%	-0.076	-0.014

Table 1n. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATES Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Medical Product Use						
Estrogen replacement	164	2.4%	718	2.4%	0.039	0.003
H2-antagonist	108	1.6%	580	1.9%	-0.333	-0.025
NSAIDs	999	14.8%	4,578	15.3%	-0.448	-0.013
Proton pump inhibitors	1,171	17.4%	5,418	18.1%	-0.705	-0.019
SSRI antidepressants	628	9.3%	2,969	9.9%	-0.592	-0.020
Insulin	38	0.6%	160	0.5%	0.026	0.003
Metformin (Biguanide)	210	3.1%	963	3.2%	-0.096	-0.005
Sulfonylureas	40	0.6%	156	0.5%	0.080	0.011
Other diabetes medications	65	1.0%	295	1.0%	-0.016	-0.002
ACEI/ARB	3,161	46.9%	13,993	46.6%	0.219	0.004
Antiarrhythmics	2,149	31.9%	8,964	29.9%	1.975	0.043
Anti-coagulant (injectable)	576	8.5%	3,148	10.5%	-1.959	-0.068
Anti-platelets	491	7.3%	2,471	8.2%	-0.960	-0.036
Beta-blockers	4,626	68.6%	20,809	69.4%	-0.785	-0.017
Calcium channel blockers	2,378	35.3%	10,709	35.7%	-0.444	-0.009
Digoxin	392	5.8%	1,497	5.0%	0.817	0.036
Diuretics (loop)	618	9.2%	2,761	9.2%	-0.035	-0.001
Diuretics (potassium sparing)	312	4.6%	1,419	4.7%	-0.099	-0.005
Diuretics (thiazide)	1,260	18.7%	5,646	18.8%	-0.137	-0.004
Nitrates	200	3.0%	934	3.1%	-0.146	-0.008
Statins	2,468	36.6%	11,150	37.2%	-0.578	-0.012
Fibrates	212	3.1%	901	3.0%	0.145	0.008
Amiodarone	513	7.6%	2,310	7.7%	-0.094	-0.004

Table 1n. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 1

	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
Patient Characteristics ¹	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Dronedarone	333	4.9%	1,163	3.9%	1.058	0.052
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	4,955	73.4%	21,665	72.2%	1.235	0.028
No ED encounters (past 31-183 days)	5,754	85.3%	25,333	84.4%	0.852	0.024
At least 1 ED encounter (past 0-30 days)	1,791	26.6%	8,336	27.8%	-1.235	-0.028
At least 2 ED encounters (past 0-30 days)	337	5.0%	1,567	5.2%	-0.229	-0.011
At least 1 ED encounter (past 31-183 days)	992	14.7%	4,667	15.6%	-0.852	-0.024
At least 2 ED encounters (past 31-183 days)	262	3.9%	1,174	3.9%	-0.026	-0.001

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1o. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	5,417	100.0%	25,743	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	57.5	6.2	57.6	6.3	-0.132	-0.021
Age						
21-49 years	689	12.7%	3,075	11.9%	0.774	0.024
50-64 years	4,728	87.3%	22,668	88.1%	-0.774	-0.024
Sex						
Female	1,918	35.4%	10,556	41.0%	-5.598	-0.115
Male	3,499	64.6%	15,187	59.0%	5.598	0.115
Race ³						
American Indian or Alaska Native	3	0.1%	25	0.1%	-0.042	-0.015
Asian	6	0.1%	55	0.2%	-0.103	-0.026
Black or African American	77	1.4%	739	2.9%	-1.449	-0.100
Native Hawaiian or Other Pacific Islander	3	0.1%	20	0.1%	-0.022	-0.009
Unknown	4,759	87.9%	20,690	80.4%	7.482	0.206
White	564	10.4%	4,092	15.9%	-5.484	-0.163
Hispanic origin						
Yes	18	0.3%	127	0.5%	-0.161	-0.025
No	415	7.7%	3,002	11.7%	-4.000	-0.136
Unknown	4,984	92.0%	22,614	87.8%	4.161	0.139
Year						
2010	123	2.3%	0	0.0%	NaN	NaN
2011	1,830	33.8%	0	0.0%	NaN	NaN
2012	1,217	22.5%	0	0.0%	NaN	NaN
2013	618	11.4%	384	1.5%	9.917	0.412

Table 1o. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	444	8.2%	1,175	4.6%	3.632	0.149
2015	271	5.0%	1,936	7.5%	-2.518	-0.104
2016	347	6.4%	2,540	9.9%	-3.461	-0.127
2017	258	4.8%	3,166	12.3%	-7.536	-0.272
2018	155	2.9%	3,540	13.8%	-10.890	-0.403
2019	78	1.4%	3,998	15.5%	-14.091	-0.523
2020	41	0.8%	4,020	15.6%	-14.859	-0.563
2021	33	0.6%	4,437	17.2%	-16.627	-0.610
2022	2	0.0%	547	2.1%	-2.088	-0.203
CHADVASC						
mean, std	2.0	0.0	2.0	0.0	0.000	NaN
0	0	0.0%	0	0.0%	NaN	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	5,417	100.0%	25,743	100.0%	0.000	NaN
3	0	0.0%	0	0.0%	NaN	NaN
4	0	0.0%	0	0.0%	NaN	NaN
>= 5	0	0.0%	0	0.0%	NaN	NaN
HASBLED						
mean, std	1.1	0.6	1.3	0.7	-0.109	-0.177
0	334	6.2%	1,623	6.3%	-0.139	-0.006
1	4,118	76.0%	17,487	67.9%	8.091	0.181
2	830	15.3%	5,283	20.5%	-5.200	-0.136
>= 3	135	2.5%	1,350	5.2%	-2.752	-0.143
Health Characteristics						
Diabetes	2,373	43.8%	7,912	30.7%	13.072	0.273

Table 1o. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	1,717	31.7%	7,426	28.8%	2.850	0.062
Hypertension	4,988	92.1%	23,534	91.4%	0.661	0.024
Kidney failure (chronic)	236	4.4%	1,958	7.6%	-3.249	-0.137
Kidney failure (acute)	206	3.8%	2,304	9.0%	-5.147	-0.212
Obesity	1,569	29.0%	11,359	44.1%	-15.160	-0.319
Peptic ulcer disease	15	0.3%	102	0.4%	-0.119	-0.021
Nicotine dependency	953	17.6%	7,575	29.4%	-11.833	-0.282
Hospitalized AMI (past 0-30 days)	60	1.1%	497	1.9%	-0.823	-0.067
Hospitalized AMI (past 31-183 days)	22	0.4%	217	0.8%	-0.437	-0.055
Coronary revascularization	388	7.2%	2,322	9.0%	-1.857	-0.068
Hospitalized heart failure	783	14.5%	5,077	19.7%	-5.267	-0.140
Outpatient heart failure	774	14.3%	4,520	17.6%	-3.270	-0.089
Other ischemic heart disease	1,644	30.3%	7,665	29.8%	0.574	0.013
Hospitalized Thromboembolic Stroke (past 0-30 days)	25	0.5%	118	0.5%	0.003	0.000
Hospitalized Thromboembolic Stroke (past 31-183 days)	6	0.1%	51	0.2%	-0.087	-0.022
Transient ischemic attack	90	1.7%	338	1.3%	0.348	0.029
Other medical conditions (falls, fractures, syncope)	389	7.2%	2,371	9.2%	-2.029	-0.074
Cardioversion	904	16.7%	4,268	16.6%	0.109	0.003
Cardioablation	286	5.3%	1,007	3.9%	1.368	0.065
Hospitalized for bleeding	13	0.2%	127	0.5%	-0.253	-0.042
Medical Product Use						
Estrogen replacement	193	3.6%	947	3.7%	-0.116	-0.006
H2-antagonist	110	2.0%	743	2.9%	-0.856	-0.055

Table 1o. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
NSAIDs	925	17.1%	4,622	18.0%	-0.879	-0.023
Proton pump inhibitors	1,078	19.9%	5,774	22.4%	-2.529	-0.062
SSRI antidepressants	657	12.1%	3,547	13.8%	-1.650	-0.049
Insulin	439	8.1%	1,285	5.0%	3.112	0.126
Metformin (Biguanide)	1,347	24.9%	4,982	19.4%	5.513	0.133
Sulfonylureas	588	10.9%	1,378	5.4%	5.502	0.203
Other diabetes medications	627	11.6%	2,181	8.5%	3.102	0.103
ACEI/ARB	3,344	61.7%	15,466	60.1%	1.653	0.034
Antiarrhythmics	1,862	34.4%	7,249	28.2%	6.214	0.134
Anti-coagulant (injectable)	388	7.2%	3,135	12.2%	-5.015	-0.170
Anti-platelets	479	8.8%	3,156	12.3%	-3.417	-0.111
Beta-blockers	3,892	71.8%	19,608	76.2%	-4.320	-0.099
Calcium channel blockers	2,178	40.2%	9,910	38.5%	1.711	0.035
Digoxin	677	12.5%	1,581	6.1%	6.356	0.220
Diuretics (loop)	1,039	19.2%	5,737	22.3%	-3.105	-0.077
Diuretics (potassium sparing)	475	8.8%	2,705	10.5%	-1.739	-0.059
Diuretics (thiazide)	1,495	27.6%	6,717	26.1%	1.506	0.034
Nitrates	296	5.5%	1,505	5.8%	-0.382	-0.017
Statins	2,600	48.0%	11,895	46.2%	1.790	0.036
Fibrates	367	6.8%	1,091	4.2%	2.537	0.111
Amiodarone	554	10.2%	2,988	11.6%	-1.380	-0.044
Dronedarone	378	7.0%	522	2.0%	4.950	0.240
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	3,822	70.6%	16,647	64.7%	5.890	0.126
No ED encounters (past 31-183 days)	4,513	83.3%	20,228	78.6%	4.735	0.121

Table 1o. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 1 ED encounter (past 0-30 days)	1,595	29.4%	9,096	35.3%	-5.890	-0.126
At least 2 ED encounters (past 0-30 days)	288	5.3%	2,132	8.3%	-2.965	-0.118
At least 1 ED encounter (past 31-183 days)	904	16.7%	5,515	21.4%	-4.735	-0.121
At least 2 ED encounters (past 31-183 days)	231	4.3%	1,781	6.9%	-2.654	-0.116

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1p. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	4,886	N/A	25,510	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	57.5	6.3	57.6	6.3	-0.097	-0.015
Age						
21-49 years	614	12.6%	3,036	11.9%	0.665	0.020
50-64 years	4,272	87.4%	22,474	88.1%	-0.665	-0.020
Sex						
Female	1,961	40.1%	10,256	40.2%	-0.061	-0.001
Male	2,925	59.9%	15,254	59.8%	0.061	0.001
Race ³						
American Indian or Alaska Native	1	0.0%	25	0.1%	-0.066	-0.026
Asian	3	0.1%	58	0.2%	-0.160	-0.042
Black or African American	74	1.5%	712	2.8%	-1.267	-0.091
Native Hawaiian or Other Pacific Islander	3	0.1%	21	0.1%	-0.012	-0.004
Unknown	4,283	87.6%	20,554	80.6%	7.076	0.283
White	517	10.6%	4,020	15.8%	-5.179	-0.202
Hispanic origin						
Yes	19	0.4%	127	0.5%	-0.117	-0.018
No	379	7.8%	2,925	11.5%	-3.704	-0.237
Unknown	4,488	91.9%	22,458	88.0%	3.821	0.233
Year						
2010	97	2.0%	0	0.0%	NaN	NaN
2011	1,508	30.9%	0	0.0%	NaN	NaN
2012	1,027	21.0%	0	0.0%	NaN	NaN

Table 1p. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2013	556	11.4%	425	1.7%	9.713	0.401
2014	415	8.5%	1,262	4.9%	3.541	0.142
2015	254	5.2%	2,034	8.0%	-2.769	-0.112
2016	363	7.4%	2,557	10.0%	-2.597	-0.092
2017	286	5.9%	3,153	12.4%	-6.510	-0.228
2018	186	3.8%	3,482	13.7%	-9.844	-0.354
2019	101	2.1%	3,890	15.2%	-13.186	-0.483
2020	50	1.0%	3,882	15.2%	-14.202	-0.539
2021	42	0.9%	4,294	16.8%	-15.984	-0.588
2022	3	0.1%	530	2.1%	-2.018	-0.198
CHADVASC						
mean, std	2.0	0.0	2.0	0.0	0.000	NaN
0	0	0.0%	0	0.0%	NaN	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	4,886	100.0%	25,510	100.0%	0.000	NaN
3	0	0.0%	0	0.0%	NaN	NaN
4	0	0.0%	0	0.0%	NaN	NaN
>= 5	0	0.0%	0	0.0%	NaN	NaN
HASBLED						
mean, std	1.2	0.6	1.2	0.6	-0.045	-0.072
0	331	6.8%	1,611	6.3%	0.469	0.019
1	3,512	71.9%	17,710	69.4%	2.451	0.054
2	864	17.7%	4,989	19.6%	-1.876	-0.048
>= 3	179	3.7%	1,200	4.7%	-1.044	-0.052

Table 1p. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Characteristics						
Diabetes	1,749	35.8%	8,407	33.0%	2.836	0.060
Hypercholesterolemia	1,430	29.3%	7,461	29.2%	0.019	0.000
Hypertension	4,462	91.3%	23,359	91.6%	-0.246	-0.009
Kidney failure (chronic)	291	6.0%	1,780	7.0%	-1.013	-0.041
Kidney failure (acute)	265	5.4%	2,005	7.9%	-2.436	-0.098
Obesity	1,858	38.0%	10,594	41.5%	-3.501	-0.072
Peptic ulcer disease	15	0.3%	94	0.4%	-0.063	-0.011
Nicotine dependency	1,134	23.2%	6,963	27.3%	-4.092	-0.095
Hospitalized AMI (past 0-30 days)	65	1.3%	446	1.7%	-0.408	-0.033
Hospitalized AMI (past 31-183 days)	28	0.6%	192	0.8%	-0.175	-0.022
Coronary revascularization	378	7.7%	2,204	8.6%	-0.899	-0.033
Hospitalized heart failure	813	16.6%	4,777	18.7%	-2.080	-0.055
Outpatient heart failure	753	15.4%	4,336	17.0%	-1.581	-0.043
Other ischemic heart disease	1,412	28.9%	7,602	29.8%	-0.896	-0.020
Hospitalized Thromboembolic Stroke (past 0-30 days)	20	0.4%	114	0.4%	-0.037	-0.006
Hospitalized Thromboembolic Stroke (past 31-183 days)	8	0.2%	35	0.1%	0.027	0.007
Transient ischemic attack (syncope)	71	1.5%	345	1.4%	0.109	0.009
Cardioversion	404	8.3%	2,253	8.8%	-0.570	-0.020
Cardioablation	818	16.7%	4,232	16.6%	0.147	0.004
Hospitalized for bleeding	206	4.2%	1,054	4.1%	0.087	0.004
	12	0.3%	107	0.4%	-0.169	-0.029

Table 1p. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Medical Product Use						
Estrogen replacement	172	3.5%	928	3.6%	-0.115	-0.006
H2-antagonist	109	2.2%	706	2.8%	-0.525	-0.034
NSAIDs	854	17.5%	4,554	17.9%	-0.369	-0.010
Proton pump inhibitors	1,025	21.0%	5,619	22.0%	-1.045	-0.026
SSRI antidepressants	638	13.1%	3,454	13.5%	-0.483	-0.014
Insulin	299	6.1%	1,408	5.5%	0.592	0.025
Metformin (Biguanide)	1,046	21.4%	5,179	20.3%	1.095	0.027
Sulfonylureas	357	7.3%	1,598	6.3%	1.038	0.041
Other diabetes medications	473	9.7%	2,291	9.0%	0.694	0.024
ACEI/ARB	2,943	60.2%	15,388	60.3%	-0.100	-0.002
Antiarrhythmics	1,503	30.8%	7,435	29.1%	1.606	0.035
Anti-coagulant (injectable)	431	8.8%	2,908	11.4%	-2.579	-0.087
Anti-platelets	508	10.4%	2,962	11.6%	-1.222	-0.039
Beta-blockers	3,607	73.8%	19,248	75.5%	-1.626	-0.037
Calcium channel blockers	1,906	39.0%	9,898	38.8%	0.217	0.004
Digoxin	401	8.2%	1,824	7.2%	1.050	0.039
Diuretics (loop)	983	20.1%	5,550	21.8%	-1.646	-0.041
Diuretics (potassium sparing)	454	9.3%	2,600	10.2%	-0.898	-0.030
Diuretics (thiazide)	1,309	26.8%	6,724	26.4%	0.427	0.010
Nitrates	264	5.4%	1,478	5.8%	-0.389	-0.017
Statins	2,262	46.3%	11,870	46.5%	-0.235	-0.005
Fibrates	249	5.1%	1,187	4.7%	0.433	0.020
Amiodarone	532	10.9%	2,902	11.4%	-0.486	-0.015

Table 1p. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Dronedarone	175	3.6%	683	2.7%	0.902	0.052
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	3,275	67.0%	16,884	66.2%	0.845	0.019
No ED encounters (past 31-183 days)	3,966	81.2%	20,291	79.5%	1.633	0.042
At least 1 ED encounter (past 0-30 days)	1,611	33.0%	8,626	33.8%	-0.845	-0.019
At least 2 ED encounters (past 0-30 days)	329	6.7%	1,938	7.6%	-0.875	-0.035
At least 1 ED encounter (past 31-183 days)	920	18.8%	5,219	20.5%	-1.633	-0.042
At least 2 ED encounters (past 31-183 days)	263	5.4%	1,615	6.3%	-0.943	-0.041

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1q. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 3

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	2,270	100.0%	15,433	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	57.9	6.2	58.0	6.0	-0.127	-0.021
Age						
21-49 years	235	10.4%	1,600	10.4%	-0.015	-0.000
50-64 years	2,035	89.6%	13,833	89.6%	0.015	0.000
Sex						
Female	1,081	47.6%	5,880	38.1%	9.521	0.193
Male	1,189	52.4%	9,553	61.9%	-9.521	-0.193
Race ³						
American Indian or Alaska Native	0	0.0%	18	0.1%	NaN	NaN
Asian	5	0.2%	36	0.2%	-0.013	-0.003
Black or African American	60	2.6%	760	4.9%	-2.281	-0.120
Native Hawaiian or Other Pacific Islander	1	0.0%	25	0.2%	-0.118	-0.037
Unknown	1,900	83.7%	11,335	73.4%	10.254	0.252
White	301	13.3%	3,205	20.8%	-7.507	-0.201
Hispanic origin						
Yes	10	0.4%	114	0.7%	-0.298	-0.039
No	270	11.9%	2,914	18.9%	-6.987	-0.195
Unknown	1,990	87.7%	12,405	80.4%	7.285	0.200
Year						
2010	47	2.1%	0	0.0%	NaN	NaN
2011	695	30.6%	0	0.0%	NaN	NaN
2012	495	21.8%	0	0.0%	NaN	NaN
2013	252	11.1%	163	1.1%	10.045	0.430

Table 1q. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 3

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	172	7.6%	476	3.1%	4.493	0.201
2015	146	6.4%	1,002	6.5%	-0.061	-0.002
2016	190	8.4%	1,483	9.6%	-1.239	-0.043
2017	114	5.0%	1,775	11.5%	-6.479	-0.237
2018	59	2.6%	2,092	13.6%	-10.956	-0.410
2019	44	1.9%	2,553	16.5%	-14.604	-0.521
2020	35	1.5%	2,577	16.7%	-15.156	-0.546
2021	19	0.8%	2,927	19.0%	-18.129	-0.637
2022	2	0.1%	385	2.5%	-2.407	-0.214
CHADVASC						
mean, std	3.0	0.0	3.0	0.0	0.000	NaN
0	0	0.0%	0	0.0%	NaN	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	0	0.0%	0	0.0%	NaN	NaN
3	2,270	100.0%	15,433	100.0%	0.000	NaN
4	0	0.0%	0	0.0%	NaN	NaN
>= 5	0	0.0%	0	0.0%	NaN	NaN
HASBLED						
mean, std	1.3	0.6	1.5	0.7	-0.141	-0.210
0	62	2.7%	458	3.0%	-0.236	-0.014
1	1,555	68.5%	9,148	59.3%	9.227	0.193
2	539	23.7%	4,354	28.2%	-4.468	-0.102
>= 3	114	5.0%	1,473	9.5%	-4.522	-0.175
Health Characteristics						
Diabetes	1,555	68.5%	10,351	67.1%	1.432	0.031

Table 1q. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 3

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	810	35.7%	5,588	36.2%	-0.525	-0.011
Hypertension	2,170	95.6%	14,733	95.5%	0.130	0.006
Kidney failure (chronic)	191	8.4%	2,019	13.1%	-4.668	-0.151
Kidney failure (acute)	172	7.6%	2,299	14.9%	-7.320	-0.233
Obesity	852	37.5%	8,168	52.9%	-15.393	-0.313
Peptic ulcer disease	7	0.3%	87	0.6%	-0.255	-0.039
Nicotine dependency	495	21.8%	5,490	35.6%	-13.767	-0.308
Hospitalized AMI (past 0-30 days)	78	3.4%	967	6.3%	-2.830	-0.132
Hospitalized AMI (past 31-183 days)	33	1.5%	423	2.7%	-1.287	-0.090
Coronary revascularization	280	12.3%	2,425	15.7%	-3.378	-0.097
Hospitalized heart failure	701	30.9%	4,640	30.1%	0.816	0.018
Outpatient heart failure	503	22.2%	3,903	25.3%	-3.131	-0.074
Other ischemic heart disease	855	37.7%	6,200	40.2%	-2.508	-0.051
Hospitalized Thromboembolic Stroke (past 0-30 days)	81	3.6%	427	2.8%	0.801	0.046
Hospitalized Thromboembolic Stroke (past 31-183 days)	33	1.5%	222	1.4%	0.015	0.001
Transient ischemic attack	236	10.4%	934	6.1%	4.345	0.159
syncope)	212	9.3%	1,808	11.7%	-2.376	-0.077
Cardioversion	374	16.5%	2,400	15.6%	0.925	0.025
Cardioablation	106	4.7%	539	3.5%	1.177	0.060
Hospitalized for bleeding	15	0.7%	102	0.7%	-0.000	-0.000
Medical Product Use						
Estrogen replacement	77	3.4%	391	2.5%	0.859	0.051
H2-antagonist	69	3.0%	627	4.1%	-1.023	-0.055
NSAIDs	383	16.9%	2,988	19.4%	-2.489	-0.065

Table 1q. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 3

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	512	22.6%	4,092	26.5%	-3.960	-0.092
SSRI antidepressants	387	17.0%	2,445	15.8%	1.206	0.033
Insulin	390	17.2%	2,701	17.5%	-0.321	-0.008
Metformin (Biguanide)	839	37.0%	6,165	39.9%	-2.987	-0.061
Sulfonylureas	370	16.3%	1,937	12.6%	3.749	0.107
Other diabetes medications	422	18.6%	3,202	20.7%	-2.157	-0.054
ACEI/ARB	1,573	69.3%	10,430	67.6%	1.713	0.037
Antiarrhythmics	804	35.4%	4,202	27.2%	8.191	0.177
Anti-coagulant (injectable)	181	8.0%	2,021	13.1%	-5.122	-0.167
Anti-platelets	323	14.2%	3,048	19.7%	-5.521	-0.147
Beta-blockers	1,703	75.0%	12,001	77.8%	-2.740	-0.065
Calcium channel blockers	973	42.9%	6,271	40.6%	2.230	0.045
Digoxin	332	14.6%	1,073	7.0%	7.673	0.249
Diuretics (loop)	695	30.6%	4,931	32.0%	-1.334	-0.029
Diuretics (potassium sparing)	268	11.8%	2,054	13.3%	-1.503	-0.045
Diuretics (thiazide)	663	29.2%	4,091	26.5%	2.699	0.060
Nitrates	206	9.1%	1,488	9.6%	-0.567	-0.019
Statins	1,271	56.0%	9,687	62.8%	-6.777	-0.138
Fibrates	188	8.3%	980	6.4%	1.932	0.074
Amiodarone	300	13.2%	2,282	14.8%	-1.571	-0.045
Dronedarone	127	5.6%	220	1.4%	4.169	0.228
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	1,468	64.7%	9,222	59.8%	4.915	0.101
No ED encounters (past 31-183 days)	1,764	77.7%	11,327	73.4%	4.315	0.101
At least 1 ED encounter (past 0-30 days)	802	35.3%	6,211	40.2%	-4.915	-0.101

Table 1q. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 3

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 2 ED encounters (past 0-30 days)	167	7.4%	1,702	11.0%	-3.671	-0.127
At least 1 ED encounter (past 31-183 days)	506	22.3%	4,106	26.6%	-4.315	-0.101
At least 2 ED encounters (past 31-183 days)	169	7.4%	1,600	10.4%	-2.922	-0.103

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1r. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 3

Patient Characteristics ¹	Medical Product		Covariate Balance			
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	1,913	N/A	15,147	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	57.8	6.2	58.0	6.0	-0.177	-0.029
Age						
21-49 years	207	10.8%	1,562	10.3%	0.498	0.016
50-64 years	1,706	89.2%	13,585	89.7%	-0.498	-0.016
Sex						
Female	813	42.5%	5,950	39.3%	3.216	0.066
Male	1,100	57.5%	9,197	60.7%	-3.216	-0.066
Race ³						
American Indian or Alaska Native	0	0.0%	18	0.1%	NaN	NaN
Asian	2	0.1%	36	0.2%	-0.135	-0.033
Black or African American	58	3.0%	713	4.7%	-1.697	-0.094
Native Hawaiian or Other Pacific Islander	1	0.1%	25	0.2%	-0.103	-0.030
Unknown	1,600	83.6%	11,277	74.5%	9.187	0.369
White	251	13.1%	3,024	20.0%	-6.855	-0.251
Hispanic origin						
Yes	11	0.6%	111	0.7%	-0.179	-0.022
No	233	12.2%	2,717	17.9%	-5.751	-0.356
Unknown	1,669	87.3%	12,318	81.3%	5.930	0.350
Year						
2010	30	1.6%	0	0.0%	NaN	NaN
2011	513	26.8%	0	0.0%	NaN	NaN
2012	382	20.0%	0	0.0%	NaN	NaN

Table 1r. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 3

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2013	195	10.2%	180	1.2%	8.983	0.396
2014	141	7.4%	519	3.4%	3.936	0.175
2015	128	6.7%	1,058	7.0%	-0.300	-0.012
2016	199	10.4%	1,503	9.9%	0.461	0.015
2017	126	6.6%	1,754	11.6%	-5.018	-0.175
2018	74	3.8%	2,042	13.5%	-9.642	-0.348
2019	48	2.5%	2,459	16.2%	-13.711	-0.484
2020	49	2.6%	2,461	16.2%	-13.676	-0.482
2021	27	1.4%	2,806	18.5%	-17.135	-0.598
2022	2	0.1%	365	2.4%	-2.287	-0.206
CHADVASC						
mean, std	3.0	0.0	3.0	0.0	0.000	NaN
0	0	0.0%	0	0.0%	NaN	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	0	0.0%	0	0.0%	NaN	NaN
3	1,913	100.0%	15,147	100.0%	0.000	NaN
4	0	0.0%	0	0.0%	NaN	NaN
>= 5	0	0.0%	0	0.0%	NaN	NaN
HASBLED						
mean, std	1.4	0.7	1.4	0.7	-0.058	-0.085
0	54	2.8%	401	2.6%	0.156	0.010
1	1,220	63.8%	9,224	60.9%	2.860	0.059
2	509	26.6%	4,188	27.6%	-1.042	-0.023
>= 3	131	6.8%	1,334	8.8%	-1.973	-0.074

Table 1r. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 3

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Characteristics						
Diabetes	1,281	67.0%	10,214	67.4%	-0.484	-0.010
Hypercholesterolemia	670	35.0%	5,473	36.1%	-1.134	-0.024
Hypertension	1,826	95.4%	14,509	95.8%	-0.349	-0.017
Kidney failure (chronic)	195	10.2%	1,884	12.4%	-2.243	-0.071
Kidney failure (acute)	210	11.0%	2,094	13.8%	-2.832	-0.086
Obesity	890	46.5%	7,726	51.0%	-4.468	-0.090
Peptic ulcer disease	5	0.2%	55	0.4%	-0.120	-0.022
Nicotine dependency	542	28.3%	5,072	33.5%	-5.177	-0.114
Hospitalized AMI (past 0-30 days)	88	4.6%	880	5.8%	-1.236	-0.056
Hospitalized AMI (past 31-183 days)	39	2.1%	380	2.5%	-0.450	-0.030
Coronary revascularization	262	13.7%	2,300	15.2%	-1.495	-0.043
Hospitalized heart failure	560	29.3%	4,559	30.1%	-0.804	-0.018
Outpatient heart failure	452	23.6%	3,773	24.9%	-1.286	-0.030
Other ischemic heart disease	748	39.1%	6,038	39.9%	-0.785	-0.016
Hospitalized Thromboembolic Stroke (past 0-30 days)	66	3.5%	433	2.9%	0.596	0.034
Hospitalized Thromboembolic Stroke (past 31-183 days)	31	1.6%	200	1.3%	0.275	0.023
Transient ischemic attack (syncope)	161	8.4%	989	6.5%	1.888	0.072
Cardioversion	303	15.9%	2,381	15.7%	0.145	0.004
Cardioablation	75	3.9%	556	3.7%	0.260	0.014
Hospitalized for bleeding	13	0.7%	90	0.6%	0.070	0.009

Table 1r. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 3

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Medical Product Use						
Estrogen replacement	52	2.7%	394	2.6%	0.113	0.007
H2-antagonist	62	3.2%	589	3.9%	-0.665	-0.036
NSAIDs	343	17.9%	2,868	18.9%	-1.013	-0.026
Proton pump inhibitors	463	24.2%	3,928	25.9%	-1.750	-0.041
SSRI antidepressants	307	16.0%	2,427	16.0%	0.015	0.000
Insulin	315	16.5%	2,656	17.5%	-1.087	-0.029
Metformin (Biguanide)	735	38.4%	6,010	39.7%	-1.276	-0.026
Sulfonylureas	262	13.7%	1,976	13.0%	0.653	0.019
Other diabetes medications	364	19.0%	3,109	20.5%	-1.477	-0.037
ACEI/ARB	1,310	68.5%	10,305	68.0%	0.446	0.010
Antiarrhythmics	577	30.1%	4,266	28.2%	1.976	0.043
Anti-coagulant (injectable)	184	9.6%	1,878	12.4%	-2.790	-0.091
Anti-platelets	327	17.1%	2,873	19.0%	-1.887	-0.049
Beta-blockers	1,462	76.5%	11,739	77.5%	-1.043	-0.025
Calcium channel blockers	778	40.7%	6,194	40.9%	-0.198	-0.004
Digoxin	187	9.8%	1,199	7.9%	1.853	0.065
Diuretics (loop)	582	30.4%	4,821	31.8%	-1.424	-0.031
Diuretics (potassium sparing)	229	12.0%	1,992	13.2%	-1.175	-0.036
Diuretics (thiazide)	511	26.7%	4,061	26.8%	-0.118	-0.003
Nitrates	163	8.5%	1,443	9.5%	-1.020	-0.036
Statins	1,131	59.1%	9,377	61.9%	-2.761	-0.057
Fibrates	140	7.3%	1,004	6.6%	0.694	0.027
Amiodarone	274	14.3%	2,209	14.6%	-0.267	-0.008

Table 1r. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 3

Patient Characteristics ¹	Medical Product		Covariate Balance			
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Dronedarone	52	2.7%	275	1.8%	0.915	0.061
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	1,190	62.2%	9,229	60.9%	1.273	0.029
No ED encounters (past 31-183 days)	1,445	75.5%	11,250	74.3%	1.258	0.030
At least 1 ED encounter (past 0-30 days)	723	37.8%	5,918	39.1%	-1.273	-0.029
At least 2 ED encounters (past 0-30 days)	184	9.6%	1,558	10.3%	-0.681	-0.023
At least 1 ED encounter (past 31-183 days)	468	24.5%	3,897	25.7%	-1.258	-0.030
At least 2 ED encounters (past 31-183 days)	163	8.5%	1,467	9.7%	-1.180	-0.042

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1s. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 4

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	802	100.0%	7,939	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	58.6	5.2	58.2	5.8	0.369	0.067
Age						
21-49 years	65	8.1%	749	9.4%	-1.330	-0.047
50-64 years	737	91.9%	7,190	90.6%	1.330	0.047
Sex						
Female	424	52.9%	3,843	48.4%	4.461	0.089
Male	378	47.1%	4,096	51.6%	-4.461	-0.089
Race ³						
American Indian or Alaska Native	0	0.0%	13	0.2%	NaN	NaN
Asian	3	0.4%	16	0.2%	0.173	0.032
Black or African American	30	3.7%	567	7.1%	-3.401	-0.150
Native Hawaiian or Other Pacific Islander	3	0.4%	21	0.3%	0.110	0.019
Unknown	614	76.6%	5,225	65.8%	10.744	0.239
White	151	18.8%	2,071	26.1%	-7.258	-0.175
Hispanic origin						
Yes	3	0.4%	64	0.8%	-0.432	-0.056
No	163	20.3%	2,119	26.7%	-6.367	-0.151
Unknown	636	79.3%	5,756	72.5%	6.799	0.159
Year						
2010	13	1.6%	0	0.0%	NaN	NaN
2011	202	25.2%	0	0.0%	NaN	NaN
2012	151	18.8%	0	0.0%	NaN	NaN
2013	93	11.6%	50	0.6%	10.966	0.470

Table 1s. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 4

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	49	6.1%	145	1.8%	4.283	0.221
2015	45	5.6%	370	4.7%	0.950	0.043
2016	80	10.0%	774	9.7%	0.226	0.008
2017	68	8.5%	948	11.9%	-3.462	-0.115
2018	52	6.5%	1,071	13.5%	-7.007	-0.235
2019	22	2.7%	1,320	16.6%	-13.884	-0.483
2020	14	1.7%	1,378	17.4%	-15.612	-0.551
2021	9	1.1%	1,660	20.9%	-19.787	-0.666
2022	4	0.5%	223	2.8%	-2.310	-0.182
CHADVASC						
mean, std	4.0	0.0	4.0	0.0	0.000	NaN
0	0	0.0%	0	0.0%	NaN	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	0	0.0%	0	0.0%	NaN	NaN
3	0	0.0%	0	0.0%	NaN	NaN
4	802	100.0%	7,939	100.0%	0.000	NaN
>= 5	0	0.0%	0	0.0%	NaN	NaN
HASBLED						
mean, std	1.6	0.7	1.7	0.8	-0.118	-0.158
0	8	1.0%	60	0.8%	0.242	0.026
1	420	52.4%	3,768	47.5%	4.907	0.098
2	283	35.3%	2,807	35.4%	-0.070	-0.001
>= 3	91	11.3%	1,304	16.4%	-5.079	-0.147
Health Characteristics						
Diabetes	594	74.1%	6,479	81.6%	-7.545	-0.182

Table 1s. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 4

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	291	36.3%	3,117	39.3%	-2.978	-0.061
Hypertension	784	97.8%	7,813	98.4%	-0.657	-0.048
Kidney failure (chronic)	117	14.6%	1,773	22.3%	-7.744	-0.201
Kidney failure (acute)	94	11.7%	1,941	24.4%	-12.728	-0.335
Obesity	343	42.8%	4,675	58.9%	-16.118	-0.327
Peptic ulcer disease	6	0.7%	64	0.8%	-0.058	-0.007
Nicotine dependency	203	25.3%	3,147	39.6%	-14.328	-0.310
Hospitalized AMI (past 0-30 days)	61	7.6%	760	9.6%	-1.967	-0.070
Hospitalized AMI (past 31-183 days)	23	2.9%	440	5.5%	-2.674	-0.134
Coronary revascularization	157	19.6%	1,828	23.0%	-3.450	-0.084
Hospitalized heart failure	371	46.3%	4,206	53.0%	-6.720	-0.135
Outpatient heart failure	270	33.7%	3,274	41.2%	-7.574	-0.157
Other ischemic heart disease	390	48.6%	4,052	51.0%	-2.411	-0.048
Hospitalized Thromboembolic Stroke (past 0-30 days)	72	9.0%	436	5.5%	3.486	0.135
Hospitalized Thromboembolic Stroke (past 31-183 days)	41	5.1%	259	3.3%	1.850	0.092
Transient ischemic attack	195	24.3%	919	11.6%	12.738	0.337
syncope)	113	14.1%	1,269	16.0%	-1.895	-0.053
Cardioversion	106	13.2%	1,271	16.0%	-2.793	-0.079
Cardioablation	27	3.4%	287	3.6%	-0.248	-0.014
Hospitalized for bleeding	9	1.1%	89	1.1%	0.001	0.000
Medical Product Use						
Estrogen replacement	31	3.9%	219	2.8%	1.107	0.062
H2-antagonist	34	4.2%	422	5.3%	-1.076	-0.050
NSAIDs	143	17.8%	1,523	19.2%	-1.353	-0.035

Table 1s. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 4

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	228	28.4%	2,483	31.3%	-2.847	-0.062
SSRI antidepressants	136	17.0%	1,610	20.3%	-3.322	-0.085
Insulin	210	26.2%	2,395	30.2%	-3.983	-0.089
Metformin (Biguanide)	296	36.9%	3,634	45.8%	-8.866	-0.181
Sulfonylureas	146	18.2%	1,259	15.9%	2.346	0.062
Other diabetes medications	152	19.0%	2,067	26.0%	-7.083	-0.170
ACEI/ARB	571	71.2%	5,663	71.3%	-0.134	-0.003
Antiarrhythmics	287	35.8%	2,388	30.1%	5.706	0.122
Anti-coagulant (injectable)	83	10.3%	1,128	14.2%	-3.859	-0.118
Anti-platelets	174	21.7%	2,112	26.6%	-4.907	-0.115
Beta-blockers	622	77.6%	6,447	81.2%	-3.651	-0.090
Calcium channel blockers	333	41.5%	3,271	41.2%	0.320	0.006
Digoxin	119	14.8%	643	8.1%	6.739	0.213
Diuretics (loop)	322	40.1%	3,672	46.3%	-6.103	-0.123
Diuretics (potassium sparing)	126	15.7%	1,464	18.4%	-2.730	-0.073
Diuretics (thiazide)	227	28.3%	2,169	27.3%	0.983	0.022
Nitrates	116	14.5%	1,125	14.2%	0.293	0.008
Statins	516	64.3%	5,770	72.7%	-8.340	-0.180
Fibrates	69	8.6%	521	6.6%	2.041	0.077
Amiodarone	134	16.7%	1,508	19.0%	-2.287	-0.060
Dronedarone	36	4.5%	102	1.3%	3.204	0.192
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	471	58.7%	4,252	53.6%	5.170	0.104
No ED encounters (past 31-183 days)	522	65.1%	5,015	63.2%	1.918	0.040
At least 1 ED encounter (past 0-30 days)	331	41.3%	3,687	46.4%	-5.170	-0.104

Table 1s. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 4

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 2 ED encounters (past 0-30 days)	95	11.8%	1,178	14.8%	-2.993	-0.088
At least 1 ED encounter (past 31-183 days)	280	34.9%	2,924	36.8%	-1.918	-0.040
At least 2 ED encounters (past 31-183 days)	103	12.8%	1,317	16.6%	-3.746	-0.106

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1t. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 4

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	661	N/A	7,121	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	58.4	5.2	58.4	5.7	-0.037	-0.007
Age						
21-49 years	57	8.6%	628	8.8%	-0.239	-0.009
50-64 years	605	91.4%	6,493	91.2%	0.239	0.009
Sex						
Female	346	52.4%	3,548	49.8%	2.557	0.051
Male	315	47.6%	3,573	50.2%	-2.557	-0.051
Race ³						
American Indian or Alaska Native	0	0.0%	7	0.1%	NaN	NaN
Asian	1	0.2%	13	0.2%	0.011	0.002
Black or African American	27	4.1%	482	6.8%	-2.712	-0.128
Native Hawaiian or Other Pacific Islander	3	0.4%	19	0.3%	0.130	0.023
Unknown	515	77.8%	4,874	68.4%	9.403	0.375
White	114	17.2%	1,707	24.0%	-6.718	-0.230
Hispanic origin						
Yes	3	0.5%	45	0.6%	-0.132	-0.018
No	125	18.9%	1,773	24.9%	-6.004	-0.331
Unknown	533	80.6%	5,304	74.5%	6.136	0.332
Year						
2010	9	1.3%	0	0.0%	NaN	NaN
2011	139	21.1%	0	0.0%	NaN	NaN
2012	116	17.6%	0	0.0%	NaN	NaN

Table 1t. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 4

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2013	76	11.5%	53	0.7%	10.722	0.461
2014	35	5.4%	145	2.0%	3.325	0.176
2015	38	5.7%	358	5.0%	0.672	0.030
2016	85	12.8%	738	10.4%	2.473	0.077
2017	61	9.2%	885	12.4%	-3.221	-0.104
2018	54	8.1%	986	13.8%	-5.712	-0.183
2019	23	3.5%	1,166	16.4%	-12.858	-0.440
2020	13	1.9%	1,162	16.3%	-14.378	-0.516
2021	9	1.4%	1,440	20.2%	-18.832	-0.638
2022	3	0.5%	189	2.6%	-2.192	-0.178
CHADVASC						
mean, std	4.0	0.0	4.0	0.0	0.000	NaN
0	0	0.0%	0	0.0%	NaN	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	0	0.0%	0	0.0%	NaN	NaN
3	0	0.0%	0	0.0%	NaN	NaN
4	661	100.0%	7,121	100.0%	0.000	NaN
>= 5	0	0.0%	0	0.0%	NaN	NaN
HASBLED						
mean, std	1.6	0.7	1.7	0.8	-0.050	-0.066
0	7	1.1%	61	0.9%	0.225	0.023
1	339	51.3%	3,532	49.6%	1.707	0.034
2	227	34.3%	2,475	34.8%	-0.408	-0.009
>= 3	88	13.3%	1,054	14.8%	-1.523	-0.044

Table 1t. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 4

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Characteristics						
Diabetes	505	76.4%	5,715	80.3%	-3.858	-0.094
Hypercholesterolemia	242	36.6%	2,737	38.4%	-1.830	-0.038
Hypertension	649	98.1%	7,012	98.5%	-0.346	-0.027
Kidney failure (chronic)	110	16.6%	1,427	20.0%	-3.460	-0.090
Kidney failure (acute)	102	15.4%	1,459	20.5%	-5.048	-0.132
Obesity	346	52.4%	3,959	55.6%	-3.217	-0.065
Peptic ulcer disease	3	0.5%	49	0.7%	-0.195	-0.025
Nicotine dependency	204	30.8%	2,497	35.1%	-4.224	-0.091
Hospitalized AMI (past 0-30 days)	55	8.3%	634	8.9%	-0.648	-0.023
Hospitalized AMI (past 31-183 days)	21	3.2%	335	4.7%	-1.525	-0.078
Coronary revascularization	136	20.6%	1,537	21.6%	-1.005	-0.025
Hospitalized heart failure	319	48.3%	3,661	51.4%	-3.148	-0.063
Outpatient heart failure	235	35.5%	2,788	39.2%	-3.638	-0.077
Other ischemic heart disease	317	48.0%	3,561	50.0%	-2.009	-0.040
Hospitalized Thromboembolic Stroke (past 0-30 days)	49	7.4%	426	6.0%	1.443	0.058
Hospitalized Thromboembolic Stroke (past 31-183 days)	32	4.8%	256	3.6%	1.221	0.061
Transient ischemic attack	113	17.0%	958	13.4%	3.569	0.100
syncope)	104	15.7%	1,083	15.2%	0.477	0.013
Cardioversion	100	15.1%	1,099	15.4%	-0.373	-0.010
Cardioablation	21	3.2%	257	3.6%	-0.386	-0.021
Hospitalized for bleeding	6	0.9%	73	1.0%	-0.173	-0.018
Medical Product Use						

Table 1t. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 4

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Estrogen replacement	23	3.4%	207	2.9%	0.501	0.029
H2-antagonist	28	4.2%	331	4.7%	-0.472	-0.023
NSAIDs	120	18.1%	1,305	18.3%	-0.248	-0.006
Proton pump inhibitors	202	30.6%	2,184	30.7%	-0.080	-0.002
SSRI antidepressants	114	17.3%	1,368	19.2%	-1.911	-0.050
Insulin	189	28.6%	2,100	29.5%	-0.847	-0.019
Metformin (Biguanide)	265	40.0%	3,130	44.0%	-3.950	-0.080
Sulfonylureas	113	17.1%	1,162	16.3%	0.829	0.022
Other diabetes medications	153	23.1%	1,741	24.5%	-1.389	-0.033
ACEI/ARB	473	71.6%	5,132	72.1%	-0.505	-0.011
Antiarrhythmics	216	32.7%	2,192	30.8%	1.871	0.040
Anti-coagulant (injectable)	78	11.9%	936	13.1%	-1.299	-0.040
Anti-platelets	157	23.7%	1,789	25.1%	-1.445	-0.034
Beta-blockers	521	78.8%	5,716	80.3%	-1.498	-0.037
Calcium channel blockers	272	41.1%	2,925	41.1%	0.007	0.000
Digoxin	68	10.3%	654	9.2%	1.136	0.038
Diuretics (loop)	266	40.3%	3,185	44.7%	-4.432	-0.091
Diuretics (potassium sparing)	103	15.6%	1,294	18.2%	-2.560	-0.068
Diuretics (thiazide)	177	26.7%	1,956	27.5%	-0.725	-0.016
Nitrates	84	12.7%	1,020	14.3%	-1.622	-0.048
Statins	450	68.0%	5,032	70.7%	-2.685	-0.058
Fibrates	43	6.4%	483	6.8%	-0.357	-0.014
Amiodarone	115	17.4%	1,314	18.5%	-1.063	-0.028
Dronedarone	15	2.3%	110	1.5%	0.744	0.054

Table 1t. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 4

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	379	57.3%	4,053	56.9%	0.373	0.009
No ED encounters (past 31-183 days)	429	64.9%	4,619	64.9%	-0.002	-0.000
At least 1 ED encounter (past 0-30 days)	282	42.7%	3,068	43.1%	-0.373	-0.009
At least 2 ED encounters (past 0-30 days)	74	11.1%	930	13.1%	-1.917	-0.061
At least 1 ED encounter (past 31-183 days)	232	35.1%	2,503	35.1%	0.002	0.000
At least 2 ED encounters (past 31-183 days)	88	13.3%	1,066	15.0%	-1.654	-0.049

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1u. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 5+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	252	100.0%	2,738	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	59.2	5.2	58.7	5.7	0.549	0.101
Age						
21-49 years	12	4.8%	238	8.7%	-3.931	-0.157
50-64 years	240	95.2%	2,500	91.3%	3.931	0.157
Sex						
Female	185	73.4%	2,025	74.0%	-0.546	-0.012
Male	67	26.6%	713	26.0%	0.546	0.012
Race ³						
American Indian or Alaska Native	0	0.0%	2	0.1%	NaN	NaN
Asian	0	0.0%	6	0.2%	NaN	NaN
Black or African American	12	4.8%	318	11.6%	-6.852	-0.252
Native Hawaiian or Other Pacific Islander	0	0.0%	5	0.2%	NaN	NaN
Unknown	190	75.4%	1,629	59.5%	15.901	0.344
White	49	19.4%	772	28.2%	-8.751	-0.207
Hispanic origin						
Yes	2	0.8%	31	1.1%	-0.339	-0.035
No	49	19.4%	860	31.4%	-11.965	-0.277
Unknown	201	79.8%	1,847	67.5%	12.304	0.282
Year						
2010	5	2.0%	0	0.0%	NaN	NaN
2011	66	26.2%	0	0.0%	NaN	NaN
2012	47	18.7%	0	0.0%	NaN	NaN
2013	26	10.3%	14	0.5%	9.806	0.444

Table 1u. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 5+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	9	3.6%	58	2.1%	1.453	0.087
2015	18	7.1%	125	4.6%	2.577	0.110
2016	26	10.3%	272	9.9%	0.383	0.013
2017	21	8.3%	275	10.0%	-1.710	-0.059
2018	18	7.1%	370	13.5%	-6.371	-0.210
2019	4	1.6%	410	15.0%	-13.387	-0.501
2020	7	2.8%	528	19.3%	-16.506	-0.546
2021	5	2.0%	604	22.1%	-20.076	-0.649
2022	0	0.0%	82	3.0%	NaN	NaN
CHADVASC						
mean, std	5.2	0.5	5.3	0.6	-0.114	-0.222
0	0	0.0%	0	0.0%	NaN	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	0	0.0%	0	0.0%	NaN	NaN
3	0	0.0%	0	0.0%	NaN	NaN
4	0	0.0%	0	0.0%	NaN	NaN
>= 5	252	100.0%	2,738	100.0%	0.000	NaN
HASBLED						
mean, std	1.8	0.8	2.0	0.9	-0.199	-0.232
0	3	1.2%	7	0.3%	0.935	0.111
1	104	41.3%	895	32.7%	8.582	0.178
2	97	38.5%	1,115	40.7%	-2.231	-0.046
>= 3	48	19.0%	721	26.3%	-7.285	-0.175
Health Characteristics						
Diabetes	211	83.7%	2,422	88.5%	-4.729	-0.137

Table 1u. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 5+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	103	40.9%	1,191	43.5%	-2.626	-0.053
Hypertension	249	98.8%	2,725	99.5%	-0.716	-0.079
Kidney failure (chronic)	41	16.3%	704	25.7%	-9.442	-0.233
Kidney failure (acute)	40	15.9%	801	29.3%	-13.382	-0.324
Obesity	108	42.9%	1,647	60.2%	-17.296	-0.351
Peptic ulcer disease	3	1.2%	36	1.3%	-0.124	-0.011
Nicotine dependency	65	25.8%	1,158	42.3%	-16.500	-0.354
Hospitalized AMI (past 0-30 days)	18	7.1%	243	8.9%	-1.732	-0.064
Hospitalized AMI (past 31-183 days)	16	6.3%	179	6.5%	-0.188	-0.008
Coronary revascularization	45	17.9%	681	24.9%	-7.015	-0.172
Hospitalized heart failure	110	43.7%	1,750	63.9%	-20.264	-0.415
Outpatient heart failure	80	31.7%	1,293	47.2%	-15.478	-0.321
Other ischemic heart disease	134	53.2%	1,486	54.3%	-1.099	-0.022
Hospitalized Thromboembolic Stroke (past 0-30 days)	53	21.0%	462	16.9%	4.158	0.106
Hospitalized Thromboembolic Stroke (past 31-183 days)	28	11.1%	330	12.1%	-0.941	-0.029
Transient ischemic attack (syncope)	131	52.0%	1,001	36.6%	15.425	0.314
Cardioversion	56	22.2%	594	21.7%	0.528	0.013
Cardioablation	21	8.3%	290	10.6%	-2.258	-0.077
Hospitalized for bleeding	9	3.6%	71	2.6%	0.978	0.057
	8	3.2%	45	1.6%	1.531	0.100
Medical Product Use						
Estrogen replacement	10	4.0%	76	2.8%	1.193	0.066
H2-antagonist	18	7.1%	177	6.5%	0.678	0.027
NSAIDs	49	19.4%	499	18.2%	1.219	0.031

Table 1u. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 5+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	70	27.8%	958	35.0%	-7.211	-0.156
SSRI antidepressants	48	19.0%	690	25.2%	-6.153	-0.149
Insulin	68	27.0%	1,077	39.3%	-12.351	-0.265
Metformin (Biguanide)	109	43.3%	1,182	43.2%	0.084	0.002
Sulfonylureas	53	21.0%	451	16.5%	4.560	0.117
Other diabetes medications	48	19.0%	694	25.3%	-6.299	-0.152
ACEI/ARB	164	65.1%	1,967	71.8%	-6.761	-0.146
Antiarrhythmics	79	31.3%	736	26.9%	4.468	0.098
Anti-coagulant (injectable)	28	11.1%	445	16.3%	-5.142	-0.150
Anti-platelets	78	31.0%	948	34.6%	-3.671	-0.078
Beta-blockers	184	73.0%	2,217	81.0%	-7.956	-0.190
Calcium channel blockers	104	41.3%	1,156	42.2%	-0.951	-0.019
Digoxin	41	16.3%	204	7.5%	8.819	0.275
Diuretics (loop)	98	38.9%	1,372	50.1%	-11.221	-0.227
Diuretics (potassium sparing)	41	16.3%	514	18.8%	-2.503	-0.066
Diuretics (thiazide)	75	29.8%	750	27.4%	2.370	0.052
Nitrates	24	9.5%	457	16.7%	-7.167	-0.214
Statins	163	64.7%	2,164	79.0%	-14.353	-0.323
Fibrates	24	9.5%	181	6.6%	2.913	0.107
Amiodarone	29	11.5%	476	17.4%	-5.877	-0.168
Dronedarone	12	4.8%	25	0.9%	3.849	0.233
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	134	53.2%	1,352	49.4%	3.795	0.076
No ED encounters (past 31-183 days)	148	58.7%	1,486	54.3%	4.457	0.090
At least 1 ED encounter (past 0-30 days)	118	46.8%	1,386	50.6%	-3.795	-0.076

Table 1u. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 5+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 2 ED encounters (past 0-30 days)	28	11.1%	470	17.2%	-6.055	-0.174
At least 1 ED encounter (past 31-183 days)	104	41.3%	1,252	45.7%	-4.457	-0.090
At least 2 ED encounters (past 31-183 days)	47	18.7%	649	23.7%	-5.053	-0.124

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1v. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 5+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	179	N/A	1,892	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	59.0	5.2	59.1	5.4	-0.043	-0.008
Age						
21-49 years	8	4.5%	131	6.9%	-2.476	-0.107
50-64 years	171	95.5%	1,761	93.1%	2.476	0.107
Sex						
Female	131	73.0%	1,396	73.8%	-0.811	-0.018
Male	48	27.0%	495	26.2%	0.811	0.018
Race ³						
American Indian or Alaska Native	0	0.0%	3	0.1%	NaN	NaN
Asian	0	0.0%	4	0.2%	NaN	NaN
Black or African American	5	2.9%	217	11.5%	-8.605	-0.366
Native Hawaiian or Other Pacific Islander	0	0.0%	4	0.2%	NaN	NaN
Unknown	140	78.3%	1,173	62.0%	16.250	0.720
White	32	17.8%	489	25.9%	-8.035	-0.280
Hispanic origin						
Yes	0	0.3%	17	0.9%	-0.630	-0.084
No	32	17.6%	634	33.5%	-15.895	-1.042
Unknown	147	82.1%	1,241	65.6%	16.525	1.153
Year						
2010	4	2.1%	0	0.0%	NaN	NaN
2011	37	20.6%	0	0.0%	NaN	NaN
2012	28	15.5%	0	0.0%	NaN	NaN

Table 1v. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 5+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2013	20	11.1%	13	0.7%	10.430	0.456
2014	9	4.8%	49	2.6%	2.268	0.120
2015	15	8.1%	94	5.0%	3.172	0.129
2016	23	13.0%	200	10.6%	2.395	0.074
2017	16	8.8%	192	10.2%	-1.370	-0.047
2018	17	9.7%	253	13.4%	-3.627	-0.115
2019	2	1.3%	296	15.6%	-14.296	-0.530
2020	5	2.9%	344	18.2%	-15.243	-0.512
2021	4	2.1%	394	20.8%	-18.764	-0.616
2022	0	0.0%	58	3.1%	NaN	NaN
CHADVASC						
mean, std	5.2	0.5	5.3	0.5	-0.080	-0.157
0	0	0.0%	0	0.0%	NaN	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	0	0.0%	0	0.0%	NaN	NaN
3	0	0.0%	0	0.0%	NaN	NaN
4	0	0.0%	0	0.0%	NaN	NaN
>= 5	179	100.0%	1,892	100.0%	0.000	NaN
HASBLED						
mean, std	1.8	0.8	1.9	0.8	-0.072	-0.089
0	0	0.2%	5	0.3%	-0.074	-0.015
1	71	39.5%	702	37.1%	2.370	0.049
2	78	43.6%	799	42.2%	1.343	0.027
>= 3	30	16.7%	385	20.4%	-3.638	-0.094

Table 1v. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 5+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Characteristics						
Diabetes	155	86.8%	1,642	86.8%	-0.057	-0.002
Hypercholesterolemia	74	41.1%	816	43.1%	-2.000	-0.040
Hypertension	179	99.8%	1,883	99.6%	0.230	0.041
Kidney failure (chronic)	31	17.1%	423	22.3%	-5.238	-0.134
Kidney failure (acute)	35	19.5%	447	23.6%	-4.071	-0.100
Obesity	94	52.7%	1,069	56.5%	-3.827	-0.077
Peptic ulcer disease	3	1.7%	12	0.6%	1.055	0.100
Nicotine dependency	51	28.3%	695	36.7%	-8.414	-0.184
Hospitalized AMI (past 0-30 days)	12	6.8%	156	8.2%	-1.407	-0.053
Hospitalized AMI (past 31-183 days)	9	5.2%	77	4.1%	1.096	0.053
Coronary revascularization	38	21.0%	414	21.9%	-0.943	-0.023
Hospitalized heart failure	94	52.4%	1,119	59.2%	-6.802	-0.138
Outpatient heart failure	63	35.3%	808	42.7%	-7.377	-0.157
Other ischemic heart disease	90	50.2%	1,003	53.0%	-2.838	-0.057
Hospitalized Thromboembolic Stroke (past 0-30 days)	37	20.7%	338	17.9%	2.817	0.072
Hospitalized Thromboembolic Stroke (past 31-183 days)	18	9.9%	197	10.4%	-0.576	-0.019
Transient ischemic attack	89	49.5%	784	41.5%	8.013	0.161
syncope)	36	20.1%	413	21.8%	-1.702	-0.042
Cardioversion	13	7.5%	187	9.9%	-2.364	-0.084
Cardioablation	7	3.9%	54	2.9%	1.029	0.057
Hospitalized for bleeding	4	2.0%	38	2.0%	-0.006	-0.000

Table 1v. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 5+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Medical Product Use						
Estrogen replacement	6	3.5%	56	3.0%	0.489	0.028
H2-antagonist	9	5.0%	127	6.7%	-1.701	-0.073
NSAIDs	28	15.5%	344	18.2%	-2.659	-0.071
Proton pump inhibitors	52	29.2%	631	33.3%	-4.107	-0.089
SSRI antidepressants	35	19.6%	448	23.7%	-4.061	-0.099
Insulin	59	32.9%	686	36.3%	-3.415	-0.072
Metformin (Biguanide)	81	45.4%	819	43.3%	2.134	0.043
Sulfonylureas	27	15.3%	297	15.7%	-0.379	-0.010
Other diabetes medications	48	26.7%	444	23.5%	3.248	0.075
ACEI/ARB	120	67.2%	1,325	70.1%	-2.905	-0.062
Antiarrhythmics	51	28.5%	514	27.2%	1.263	0.028
Anti-coagulant (injectable)	20	11.1%	275	14.6%	-3.431	-0.104
Anti-platelets	56	31.2%	622	32.9%	-1.726	-0.037
Beta-blockers	140	78.1%	1,501	79.3%	-1.270	-0.031
Calcium channel blockers	73	40.6%	782	41.3%	-0.708	-0.014
Digoxin	24	13.3%	178	9.4%	3.868	0.121
Diuretics (loop)	73	40.8%	889	47.0%	-6.226	-0.127
Diuretics (potassium sparing)	30	16.7%	342	18.1%	-1.408	-0.037
Diuretics (thiazide)	53	29.7%	541	28.6%	1.126	0.025
Nitrates	25	13.9%	268	14.2%	-0.248	-0.007
Statins	128	71.6%	1,437	76.0%	-4.348	-0.099
Fibrates	11	5.9%	124	6.5%	-0.638	-0.026
Amiodarone	24	13.4%	292	15.5%	-2.083	-0.059

Table 1v. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 5+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Dronedarone	3	1.8%	27	1.4%	0.340	0.027
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	95	52.8%	1,014	53.6%	-0.799	-0.019
No ED encounters (past 31-183 days)	105	58.5%	1,082	57.2%	1.260	0.027
At least 1 ED encounter (past 0-30 days)	85	47.2%	878	46.4%	0.799	0.019
At least 2 ED encounters (past 0-30 days)	23	13.0%	261	13.8%	-0.748	-0.023
At least 1 ED encounter (past 31-183 days)	74	41.5%	809	42.8%	-1.260	-0.027
At least 2 ED encounters (past 31-183 days)	37	20.7%	388	20.5%	0.183	0.005

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1w. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	5,809	100.0%	21,862	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	54.0	8.4	54.7	8.6	-0.672	-0.079
Age						
21-49 years	1,492	25.7%	5,227	23.9%	1.775	0.041
50-64 years	4,317	74.3%	16,635	76.1%	-1.775	-0.041
Sex						
Female	1,207	20.8%	6,375	29.2%	-8.382	-0.195
Male	4,602	79.2%	15,487	70.8%	8.382	0.195
Race ³						
American Indian or Alaska Native	1	0.0%	11	0.1%	-0.033	-0.018
Asian	11	0.2%	46	0.2%	-0.021	-0.005
Black or African American	10	0.2%	138	0.6%	-0.459	-0.073
Native Hawaiian or Other Pacific Islander	1	0.0%	5	0.0%	-0.006	-0.004
Unknown	5,377	92.6%	19,247	88.0%	4.525	0.153
White	398	6.9%	2,330	10.7%	-3.806	-0.135
Hispanic origin						
Yes	7	0.1%	104	0.5%	-0.355	-0.065
No	138	2.4%	843	3.9%	-1.480	-0.085
Unknown	5,664	97.5%	20,915	95.7%	1.836	0.101
Year						
2010	138	2.4%	0	0.0%	NaN	NaN
2011	2,116	36.4%	0	0.0%	NaN	NaN
2012	1,426	24.5%	0	0.0%	NaN	NaN
2013	756	13.0%	352	1.6%	11.404	0.449

Table 1w. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	373	6.4%	949	4.3%	2.080	0.092
2015	258	4.4%	1,744	8.0%	-3.536	-0.147
2016	293	5.0%	2,184	10.0%	-4.946	-0.188
2017	187	3.2%	2,563	11.7%	-8.504	-0.328
2018	126	2.2%	3,075	14.1%	-11.896	-0.446
2019	77	1.3%	3,258	14.9%	-13.577	-0.513
2020	37	0.6%	3,439	15.7%	-15.094	-0.573
2021	18	0.3%	3,800	17.4%	-17.072	-0.630
2022	4	0.1%	498	2.3%	-2.209	-0.206
CHADVASC						
mean, std	0.4	0.7	0.5	0.7	-0.118	-0.166
0	3,798	65.4%	12,603	57.6%	7.733	0.159
1	1,604	27.6%	7,111	32.5%	-4.914	-0.107
2	334	5.7%	1,623	7.4%	-1.674	-0.068
3	62	1.1%	458	2.1%	-1.028	-0.082
4	8	0.1%	60	0.3%	-0.137	-0.030
>= 5	3	0.1%	7	0.0%	0.020	0.010
HASBLED						
mean, std	0.0	NaN	0.0	NaN	NaN	NaN
0	5,809	100.0%	21,862	100.0%	0.000	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	0	0.0%	0	0.0%	NaN	NaN
>= 3	0	0.0%	0	0.0%	NaN	NaN
Health Characteristics						
Diabetes	474	8.2%	1,842	8.4%	-0.266	-0.010

Table 1w. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	814	14.0%	3,045	13.9%	0.084	0.002
Hypertension	101	1.7%	729	3.3%	-1.596	-0.102
Kidney failure (chronic)	2	0.0%	25	0.1%	-0.080	-0.029
Kidney failure (acute)	56	1.0%	447	2.0%	-1.081	-0.089
Obesity	617	10.6%	4,708	21.5%	-10.914	-0.300
Peptic ulcer disease	0	0.0%	3	0.0%	NaN	NaN
Nicotine dependency	719	12.4%	4,111	18.8%	-6.427	-0.178
Hospitalized AMI (past 0-30 days)	33	0.6%	222	1.0%	-0.447	-0.050
Hospitalized AMI (past 31-183 days)	6	0.1%	57	0.3%	-0.157	-0.037
Coronary revascularization	130	2.2%	576	2.6%	-0.397	-0.026
Hospitalized heart failure	365	6.3%	1,391	6.4%	-0.079	-0.003
Outpatient heart failure	404	7.0%	1,550	7.1%	-0.135	-0.005
Other ischemic heart disease	785	13.5%	3,043	13.9%	-0.406	-0.012
Hospitalized Thromboembolic Stroke (past 0-30 days)	0	0.0%	0	0.0%	NaN	NaN
Hospitalized Thromboembolic Stroke (past 31-183 days)	0	0.0%	0	0.0%	NaN	NaN
Transient ischemic attack	89	1.5%	430	2.0%	-0.435	-0.033
syncope)	361	6.2%	1,600	7.3%	-1.104	-0.044
Cardioversion	990	17.0%	3,471	15.9%	1.166	0.031
Cardioablation	524	9.0%	1,260	5.8%	3.257	0.125
Hospitalized for bleeding	0	0.0%	0	0.0%	NaN	NaN
Medical Product Use						
Estrogen replacement	178	3.1%	727	3.3%	-0.261	-0.015
H2-antagonist	46	0.8%	276	1.3%	-0.471	-0.047
NSAIDs	691	11.9%	2,568	11.7%	0.149	0.005

Table 1w. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	669	11.5%	2,898	13.3%	-1.739	-0.053
SSRI antidepressants	450	7.7%	1,865	8.5%	-0.784	-0.029
Insulin	83	1.4%	379	1.7%	-0.305	-0.024
Metformin (Biguanide)	303	5.2%	1,223	5.6%	-0.378	-0.017
Sulfonylureas	105	1.8%	272	1.2%	0.563	0.046
Other diabetes medications	117	2.0%	509	2.3%	-0.314	-0.022
ACEI/ARB	977	16.8%	2,927	13.4%	3.430	0.096
Antiarrhythmics	2,132	36.7%	6,189	28.3%	8.392	0.180
Anti-coagulant (injectable)	417	7.2%	2,302	10.5%	-3.351	-0.118
Anti-platelets	220	3.8%	1,376	6.3%	-2.507	-0.115
Beta-blockers	3,407	58.7%	13,214	60.4%	-1.792	-0.037
Calcium channel blockers	1,229	21.2%	4,698	21.5%	-0.333	-0.008
Digoxin	539	9.3%	921	4.2%	5.066	0.203
Diuretics (loop)	469	8.1%	1,768	8.1%	-0.013	-0.000
Diuretics (potassium sparing)	220	3.8%	733	3.4%	0.434	0.023
Diuretics (thiazide)	242	4.2%	671	3.1%	1.097	0.059
Nitrates	91	1.6%	353	1.6%	-0.048	-0.004
Statins	1,426	24.5%	5,210	23.8%	0.717	0.017
Fibrates	102	1.8%	282	1.3%	0.466	0.038
Amiodarone	400	6.9%	1,420	6.5%	0.391	0.016
Dronedarone	422	7.3%	595	2.7%	4.543	0.210
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	4,473	77.0%	14,941	68.3%	8.659	0.195
No ED encounters (past 31-183 days)	5,175	89.1%	18,879	86.4%	2.731	0.083
At least 1 ED encounter (past 0-30 days)	1,336	23.0%	6,921	31.7%	-8.659	-0.195

Table 1w. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 2 ED encounters (past 0-30 days)	198	3.4%	1,156	5.3%	-1.879	-0.092
At least 1 ED encounter (past 31-183 days)	634	10.9%	2,983	13.6%	-2.731	-0.083
At least 2 ED encounters (past 31-183 days)	128	2.2%	736	3.4%	-1.163	-0.071

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1x. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	5,408	N/A	21,541	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	54.3	8.2	54.6	8.7	-0.269	-0.032
Age						
21-49 years	1,319	24.4%	5,249	24.4%	0.016	0.000
50-64 years	4,089	75.6%	16,292	75.6%	-0.016	-0.000
Sex						
Female	1,357	25.1%	5,859	27.2%	-2.097	-0.048
Male	4,051	74.9%	15,682	72.8%	2.097	0.048
Race ³						
American Indian or Alaska Native	1	0.0%	9	0.0%	-0.032	-0.019
Asian	8	0.1%	47	0.2%	-0.071	-0.017
Black or African American	14	0.3%	119	0.6%	-0.302	-0.049
Native Hawaiian or Other Pacific Islander	2	0.0%	5	0.0%	0.014	0.008
Unknown	4,994	92.3%	19,104	88.7%	3.648	0.152
White	380	7.0%	2,175	10.1%	-3.068	-0.131
Hispanic origin						
Yes	8	0.1%	99	0.5%	-0.314	-0.058
No	134	2.5%	699	3.2%	-0.769	-0.061
Unknown	5,266	97.4%	20,743	96.3%	1.083	0.080
Year						
2010	114	2.1%	0	0.0%	NaN	NaN
2011	1,821	33.7%	0	0.0%	NaN	NaN
2012	1,286	23.8%	0	0.0%	NaN	NaN

Table 1x. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2013	729	13.5%	382	1.8%	11.710	0.453
2014	373	6.9%	1,002	4.7%	2.241	0.096
2015	265	4.9%	1,816	8.4%	-3.533	-0.142
2016	318	5.9%	2,200	10.2%	-4.336	-0.160
2017	212	3.9%	2,547	11.8%	-7.897	-0.296
2018	140	2.6%	3,003	13.9%	-11.348	-0.421
2019	87	1.6%	3,150	14.6%	-13.010	-0.491
2020	39	0.7%	3,317	15.4%	-14.677	-0.560
2021	18	0.3%	3,647	16.9%	-16.592	-0.619
2022	6	0.1%	476	2.2%	-2.110	-0.198
CHADVASC						
mean, std	0.5	0.7	0.5	0.7	-0.035	-0.049
0	3,345	61.9%	12,839	59.6%	2.251	0.046
1	1,627	30.1%	6,789	31.5%	-1.423	-0.031
2	354	6.5%	1,507	7.0%	-0.447	-0.018
3	69	1.3%	346	1.6%	-0.335	-0.028
4	11	0.2%	53	0.2%	-0.046	-0.010
>= 5	2	0.0%	7	0.0%	0.000	0.000
HASBLED						
mean, std	0.0	NaN	0.0	NaN	0.000	NaN
0	5,408	100.0%	21,541	100.0%	0.000	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	0	0.0%	0	0.0%	NaN	NaN
>= 3	0	0.0%	0	0.0%	NaN	NaN

Table 1x. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Characteristics						
Diabetes	415	7.7%	1,749	8.1%	-0.454	-0.017
Hypercholesterolemia	728	13.5%	2,993	13.9%	-0.429	-0.012
Hypertension	139	2.6%	618	2.9%	-0.305	-0.019
Kidney failure (chronic)	1	0.0%	13	0.1%	-0.033	-0.016
Kidney failure (acute)	77	1.4%	371	1.7%	-0.298	-0.024
Obesity	849	15.7%	4,106	19.1%	-3.357	-0.089
Peptic ulcer disease	0	0.0%	0	0.0%	NaN	NaN
Nicotine dependency	822	15.2%	3,705	17.2%	-2.012	-0.055
Hospitalized AMI (past 0-30 days)	36	0.7%	177	0.8%	-0.155	-0.018
Hospitalized AMI (past 31-183 days)	8	0.1%	36	0.2%	-0.023	-0.006
Coronary revascularization	131	2.4%	534	2.5%	-0.057	-0.004
Hospitalized heart failure	338	6.2%	1,339	6.2%	0.033	0.001
Outpatient heart failure	377	7.0%	1,491	6.9%	0.046	0.002
Other ischemic heart disease	740	13.7%	2,946	13.7%	0.012	0.000
Hospitalized Thromboembolic Stroke (past 0-30 days)	0	0.0%	0	0.0%	NaN	NaN
Hospitalized Thromboembolic Stroke (past 31-183 days)	0	0.0%	0	0.0%	NaN	NaN
Transient ischemic attack	95	1.8%	399	1.9%	-0.098	-0.007
syncope)	363	6.7%	1,516	7.0%	-0.319	-0.013
Cardioversion	894	16.5%	3,479	16.1%	0.387	0.010
Cardioablation	367	6.8%	1,348	6.3%	0.528	0.021
Hospitalized for bleeding	0	0.0%	0	0.0%	NaN	NaN

Table 1x. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 0

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Medical Product Use						
Estrogen replacement	169	3.1%	701	3.3%	-0.127	-0.007
H2-antagonist	52	1.0%	243	1.1%	-0.175	-0.017
NSAIDs	628	11.6%	2,514	11.7%	-0.056	-0.002
Proton pump inhibitors	680	12.6%	2,764	12.8%	-0.265	-0.008
SSRI antidepressants	419	7.7%	1,783	8.3%	-0.529	-0.019
Insulin	76	1.4%	344	1.6%	-0.198	-0.016
Metformin (Biguanide)	269	5.0%	1,160	5.4%	-0.402	-0.018
Sulfonylureas	73	1.4%	283	1.3%	0.041	0.004
Other diabetes medications	108	2.0%	472	2.2%	-0.191	-0.013
ACEI/ARB	795	14.7%	3,011	14.0%	0.717	0.020
Antiarrhythmics	1,705	31.5%	6,459	30.0%	1.536	0.033
Anti-coagulant (injectable)	470	8.7%	2,119	9.8%	-1.142	-0.040
Anti-platelets	252	4.7%	1,210	5.6%	-0.954	-0.043
Beta-blockers	3,207	59.3%	12,927	60.0%	-0.707	-0.014
Calcium channel blockers	1,121	20.7%	4,600	21.4%	-0.635	-0.016
Digoxin	325	6.0%	1,117	5.2%	0.830	0.036
Diuretics (loop)	420	7.8%	1,712	7.9%	-0.191	-0.007
Diuretics (potassium sparing)	183	3.4%	727	3.4%	0.008	0.000
Diuretics (thiazide)	178	3.3%	698	3.2%	0.045	0.003
Nitrates	84	1.6%	333	1.5%	0.014	0.001
Statins	1,254	23.2%	5,119	23.8%	-0.583	-0.014
Fibrates	77	1.4%	300	1.4%	0.024	0.002
Amiodarone	352	6.5%	1,402	6.5%	0.002	0.000

Table 1x. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 0

Patient Characteristics ¹	Medical Product		Covariate Balance			
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Dronedarone	234	4.3%	761	3.5%	0.789	0.041
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	3,896	72.0%	15,194	70.5%	1.509	0.034
No ED encounters (past 31-183 days)	4,749	87.8%	18,782	87.2%	0.610	0.018
At least 1 ED encounter (past 0-30 days)	1,512	28.0%	6,347	29.5%	-1.509	-0.034
At least 2 ED encounters (past 0-30 days)	245	4.5%	1,015	4.7%	-0.176	-0.009
At least 1 ED encounter (past 31-183 days)	660	12.2%	2,759	12.8%	-0.610	-0.018
At least 2 ED encounters (past 31-183 days)	148	2.7%	637	3.0%	-0.216	-0.013

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1y. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	11,451	100.0%	51,557	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	57.0	6.7	57.4	6.6	-0.343	-0.052
Age						
21-49 years	1,622	14.2%	6,705	13.0%	1.160	0.034
50-64 years	9,829	85.8%	44,852	87.0%	-1.160	-0.034
Sex						
Female	2,694	23.5%	14,983	29.1%	-5.535	-0.126
Male	8,757	76.5%	36,574	70.9%	5.535	0.126
Race ³						
American Indian or Alaska Native	3	0.0%	41	0.1%	-0.053	-0.023
Asian	14	0.1%	106	0.2%	-0.083	-0.021
Black or African American	134	1.2%	1,295	2.5%	-1.342	-0.100
Native Hawaiian or Other Pacific Islander	8	0.1%	42	0.1%	-0.012	-0.004
Unknown	10,198	89.1%	41,942	81.4%	7.707	0.218
White	1,079	9.4%	7,905	15.3%	-5.910	-0.180
Hispanic origin						
Yes	30	0.3%	258	0.5%	-0.238	-0.039
No	713	6.2%	5,549	10.8%	-4.536	-0.163
Unknown	10,708	93.5%	45,750	88.7%	4.775	0.168
Year						
2010	287	2.5%	0	0.0%	NaN	NaN
2011	3,871	33.8%	0	0.0%	NaN	NaN
2012	2,594	22.7%	0	0.0%	NaN	NaN
2013	1,307	11.4%	797	1.5%	9.868	0.409

Table 1y. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	926	8.1%	2,134	4.1%	3.948	0.165
2015	607	5.3%	3,799	7.4%	-2.068	-0.085
2016	756	6.6%	5,240	10.2%	-3.561	-0.129
2017	485	4.2%	6,286	12.2%	-7.957	-0.293
2018	304	2.7%	7,050	13.7%	-11.019	-0.411
2019	154	1.3%	7,921	15.4%	-14.019	-0.524
2020	86	0.8%	7,945	15.4%	-14.659	-0.558
2021	65	0.6%	9,203	17.9%	-17.283	-0.626
2022	9	0.1%	1,182	2.3%	-2.214	-0.206
CHADVASC						
mean, std	1.8	0.9	2.0	1.0	-0.209	-0.213
0	305	2.7%	1,302	2.5%	0.138	0.009
1	4,949	43.2%	18,957	36.8%	6.450	0.132
2	4,118	36.0%	17,487	33.9%	2.044	0.043
3	1,555	13.6%	9,148	17.7%	-4.164	-0.115
4	420	3.7%	3,768	7.3%	-3.641	-0.160
>= 5	104	0.9%	895	1.7%	-0.828	-0.073
HASBLED						
mean, std	1.0	0.0	1.0	0.0	0.000	NaN
0	0	0.0%	0	0.0%	NaN	NaN
1	11,451	100.0%	51,557	100.0%	0.000	NaN
2	0	0.0%	0	0.0%	NaN	NaN
>= 3	0	0.0%	0	0.0%	NaN	NaN
Health Characteristics						
Diabetes	3,374	29.5%	15,834	30.7%	-1.247	-0.027

Table 1y. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	3,548	31.0%	15,717	30.5%	0.499	0.011
Hypertension	10,777	94.1%	48,188	93.5%	0.649	0.027
Kidney failure (chronic)	61	0.5%	442	0.9%	-0.325	-0.039
Kidney failure (acute)	238	2.1%	2,866	5.6%	-3.480	-0.182
Obesity	2,914	25.4%	21,936	42.5%	-17.100	-0.367
Peptic ulcer disease	11	0.1%	43	0.1%	0.013	0.004
Nicotine dependency	1,838	16.1%	14,182	27.5%	-11.456	-0.280
Hospitalized AMI (past 0-30 days)	133	1.2%	1,306	2.5%	-1.372	-0.102
Hospitalized AMI (past 31-183 days)	47	0.4%	561	1.1%	-0.678	-0.079
Coronary revascularization	781	6.8%	4,866	9.4%	-2.618	-0.096
Hospitalized heart failure	1,211	10.6%	7,870	15.3%	-4.689	-0.140
Outpatient heart failure	1,364	11.9%	7,858	15.2%	-3.330	-0.097
Other ischemic heart disease	3,149	27.5%	15,116	29.3%	-1.819	-0.040
Hospitalized Thromboembolic Stroke (past 0-30 days)	40	0.3%	186	0.4%	-0.011	-0.002
Hospitalized Thromboembolic Stroke (past 31-183 days)	15	0.1%	84	0.2%	-0.032	-0.008
Transient ischemic attack	353	3.1%	1,441	2.8%	0.288	0.017
syncope)	724	6.3%	4,385	8.5%	-2.183	-0.083
Cardioversion	1,908	16.7%	8,141	15.8%	0.872	0.024
Cardioablation	609	5.3%	2,036	3.9%	1.369	0.065
Hospitalized for bleeding	13	0.1%	44	0.1%	0.028	0.009
Medical Product Use						
Estrogen replacement	265	2.3%	1,185	2.3%	0.016	0.001
H2-antagonist	214	1.9%	1,300	2.5%	-0.653	-0.045
NSAIDs	1,812	15.8%	9,128	17.7%	-1.881	-0.050

Table 1y. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	1,968	17.2%	10,364	20.1%	-2.916	-0.075
SSRI antidepressants	1,212	10.6%	6,378	12.4%	-1.787	-0.056
Insulin	740	6.5%	3,692	7.2%	-0.699	-0.028
Metformin (Biguanide)	2,019	17.6%	10,375	20.1%	-2.492	-0.064
Sulfonylureas	851	7.4%	2,947	5.7%	1.716	0.069
Other diabetes medications	927	8.1%	4,892	9.5%	-1.393	-0.049
ACEI/ARB	6,748	58.9%	31,211	60.5%	-1.608	-0.033
Antiarrhythmics	4,052	35.4%	14,084	27.3%	8.068	0.175
Anti-coagulant (injectable)	778	6.8%	6,139	11.9%	-5.113	-0.176
Anti-platelets	951	8.3%	6,752	13.1%	-4.791	-0.155
Beta-blockers	8,111	70.8%	38,354	74.4%	-3.559	-0.080
Calcium channel blockers	4,454	38.9%	19,828	38.5%	0.438	0.009
Digoxin	1,250	10.9%	2,649	5.1%	5.778	0.214
Diuretics (loop)	1,722	15.0%	9,411	18.3%	-3.216	-0.086
Diuretics (potassium sparing)	767	6.7%	4,442	8.6%	-1.918	-0.072
Diuretics (thiazide)	2,899	25.3%	13,088	25.4%	-0.069	-0.002
Nitrates	543	4.7%	3,027	5.9%	-1.129	-0.050
Statins	5,338	46.6%	25,336	49.1%	-2.526	-0.051
Fibrates	671	5.9%	2,152	4.2%	1.686	0.077
Amiodarone	992	8.7%	5,103	9.9%	-1.235	-0.043
Dronedarone	860	7.5%	1,179	2.3%	5.223	0.244
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	8,449	73.8%	34,386	66.7%	7.089	0.156
No ED encounters (past 31-183 days)	9,718	84.9%	41,525	80.5%	4.324	0.115
At least 1 ED encounter (past 0-30 days)	3,002	26.2%	17,171	33.3%	-7.089	-0.156

Table 1y. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 2 ED encounters (past 0-30 days)	515	4.5%	3,937	7.6%	-3.139	-0.132
At least 1 ED encounter (past 31-183 days)	1,733	15.1%	10,032	19.5%	-4.324	-0.115
At least 2 ED encounters (past 31-183 days)	428	3.7%	3,091	6.0%	-2.258	-0.105

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1z. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	10,380	N/A	51,099	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	57.2	6.6	57.3	6.6	-0.171	-0.026
Age						
21-49 years	1,436	13.8%	6,714	13.1%	0.700	0.021
50-64 years	8,943	86.2%	44,385	86.9%	-0.700	-0.021
Sex						
Female	2,747	26.5%	14,334	28.1%	-1.582	-0.036
Male	7,632	73.5%	36,765	71.9%	1.582	0.036
Race ³						
American Indian or Alaska Native	3	0.0%	38	0.1%	-0.049	-0.022
Asian	10	0.1%	111	0.2%	-0.122	-0.031
Black or African American	135	1.3%	1,215	2.4%	-1.077	-0.084
Native Hawaiian or Other Pacific Islander	9	0.1%	40	0.1%	0.012	0.004
Unknown	9,218	88.8%	41,855	81.9%	6.895	0.276
White	994	9.6%	7,617	14.9%	-5.333	-0.210
Hispanic origin						
Yes	27	0.3%	248	0.5%	-0.222	-0.037
No	685	6.6%	5,259	10.3%	-3.694	-0.235
Unknown	9,667	93.1%	45,592	89.2%	3.916	0.238
Year						
2010	225	2.2%	0	0.0%	NaN	NaN
2011	3,223	31.1%	0	0.0%	NaN	NaN
2012	2,254	21.7%	0	0.0%	NaN	NaN

Table 1z. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2013	1,153	11.1%	878	1.7%	9.394	0.391
2014	863	8.3%	2,301	4.5%	3.812	0.156
2015	598	5.8%	4,001	7.8%	-2.070	-0.082
2016	805	7.8%	5,299	10.4%	-2.613	-0.091
2017	523	5.0%	6,278	12.3%	-7.244	-0.260
2018	355	3.4%	6,939	13.6%	-10.159	-0.371
2019	182	1.8%	7,718	15.1%	-13.352	-0.495
2020	103	1.0%	7,704	15.1%	-14.086	-0.537
2021	83	0.8%	8,853	17.3%	-16.522	-0.602
2022	12	0.1%	1,129	2.2%	-2.094	-0.197
CHADVASC						
mean, std	1.8	1.0	1.9	1.0	-0.095	-0.095
0	276	2.7%	1,297	2.5%	0.119	0.007
1	4,240	40.9%	19,417	38.0%	2.853	0.059
2	3,649	35.2%	17,564	34.4%	0.778	0.016
3	1,582	15.2%	8,664	17.0%	-1.713	-0.047
4	513	4.9%	3,368	6.6%	-1.650	-0.071
>= 5	120	1.2%	790	1.5%	-0.387	-0.034
HASBLED						
mean, std	1.0	0.0	1.0	0.0	0.000	NaN
0	0	0.0%	0	0.0%	NaN	NaN
1	10,380	100.0%	51,099	100.0%	0.000	NaN
2	0	0.0%	0	0.0%	NaN	NaN
>= 3	0	0.0%	0	0.0%	NaN	NaN

Table 1z. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Characteristics						
Diabetes	2,980	28.7%	15,534	30.4%	-1.694	-0.037
Hypercholesterolemia	3,098	29.8%	15,576	30.5%	-0.635	-0.014
Hypertension	9,729	93.7%	47,827	93.6%	0.135	0.006
Kidney failure (chronic)	74	0.7%	405	0.8%	-0.081	-0.009
Kidney failure (acute)	327	3.2%	2,473	4.8%	-1.686	-0.086
Obesity	3,625	34.9%	20,135	39.4%	-4.482	-0.093
Peptic ulcer disease	9	0.1%	36	0.1%	0.016	0.006
Nicotine dependency	2,181	21.0%	12,900	25.2%	-4.229	-0.101
Hospitalized AMI (past 0-30 days)	164	1.6%	1,145	2.2%	-0.663	-0.048
Hospitalized AMI (past 31-183 days)	63	0.6%	467	0.9%	-0.306	-0.035
Coronary revascularization	787	7.6%	4,529	8.9%	-1.276	-0.047
Hospitalized heart failure	1,277	12.3%	7,322	14.3%	-2.021	-0.060
Outpatient heart failure	1,335	12.9%	7,452	14.6%	-1.721	-0.051
Other ischemic heart disease	2,879	27.7%	14,768	28.9%	-1.160	-0.026
Hospitalized Thromboembolic Stroke (past 0-30 days)	35	0.3%	183	0.4%	-0.017	-0.003
Hospitalized Thromboembolic Stroke (past 31-183 days)	18	0.2%	84	0.2%	0.007	0.002
Transient ischemic attack	304	2.9%	1,459	2.9%	0.076	0.005
syncope)	770	7.4%	4,136	8.1%	-0.670	-0.025
Cardioversion	1,664	16.0%	8,146	15.9%	0.092	0.003
Cardioablation	452	4.4%	2,136	4.2%	0.174	0.009
Hospitalized for bleeding	10	0.1%	43	0.1%	0.008	0.003

Table 1z. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Medical Product Use						
Estrogen replacement	244	2.3%	1,174	2.3%	0.048	0.003
H2-antagonist	205	2.0%	1,238	2.4%	-0.452	-0.031
NSAIDs	1,730	16.7%	8,875	17.4%	-0.704	-0.019
Proton pump inhibitors	1,911	18.4%	10,011	19.6%	-1.179	-0.030
SSRI antidepressants	1,205	11.6%	6,185	12.1%	-0.495	-0.015
Insulin	654	6.3%	3,574	7.0%	-0.690	-0.028
Metformin (Biguanide)	1,871	18.0%	10,013	19.6%	-1.570	-0.040
Sulfonylureas	640	6.2%	3,075	6.0%	0.149	0.006
Other diabetes medications	862	8.3%	4,685	9.2%	-0.862	-0.031
ACEI/ARB	6,191	59.6%	30,782	60.2%	-0.597	-0.012
Antiarrhythmics	3,169	30.5%	14,656	28.7%	1.850	0.041
Anti-coagulant (injectable)	873	8.4%	5,626	11.0%	-2.602	-0.090
Anti-platelets	1,067	10.3%	6,209	12.2%	-1.867	-0.059
Beta-blockers	7,515	72.4%	37,683	73.7%	-1.348	-0.030
Calcium channel blockers	4,011	38.6%	19,702	38.6%	0.091	0.002
Digoxin	743	7.2%	3,130	6.1%	1.033	0.042
Diuretics (loop)	1,675	16.1%	9,028	17.7%	-1.530	-0.041
Diuretics (potassium sparing)	745	7.2%	4,220	8.3%	-1.081	-0.041
Diuretics (thiazide)	2,622	25.3%	12,982	25.4%	-0.142	-0.003
Nitrates	522	5.0%	2,886	5.6%	-0.619	-0.028
Statins	4,858	46.8%	24,857	48.6%	-1.838	-0.037
Fibrates	490	4.7%	2,278	4.5%	0.267	0.013
Amiodarone	966	9.3%	4,940	9.7%	-0.364	-0.012

Table 1z. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 1

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Dronedarone	437	4.2%	1,578	3.1%	1.125	0.060
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	7,247	69.8%	35,004	68.5%	1.321	0.030
No ED encounters (past 31-183 days)	8,605	82.9%	41,639	81.5%	1.415	0.037
At least 1 ED encounter (past 0-30 days)	3,132	30.2%	16,096	31.5%	-1.321	-0.030
At least 2 ED encounters (past 0-30 days)	613	5.9%	3,474	6.8%	-0.891	-0.037
At least 1 ED encounter (past 31-183 days)	1,775	17.1%	9,460	18.5%	-1.415	-0.037
At least 2 ED encounters (past 31-183 days)	482	4.6%	2,772	5.4%	-0.782	-0.036

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1aa. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	2,424	100.0%	17,216	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	57.3	6.5	57.7	6.3	-0.401	-0.063
Age						
21-49 years	322	13.3%	2,021	11.7%	1.545	0.047
50-64 years	2,102	86.7%	15,195	88.3%	-1.545	-0.047
Sex						
Female	670	27.6%	5,250	30.5%	-2.855	-0.063
Male	1,754	72.4%	11,966	69.5%	2.855	0.063
Race ³						
American Indian or Alaska Native	0	0.0%	20	0.1%	NaN	NaN
Asian	4	0.2%	36	0.2%	-0.044	-0.010
Black or African American	63	2.6%	870	5.1%	-2.454	-0.128
Native Hawaiian or Other Pacific Islander	4	0.2%	27	0.2%	0.008	0.002
Unknown	2,046	84.4%	12,704	73.8%	10.614	0.263
White	300	12.4%	3,498	20.3%	-7.942	-0.216
Hispanic origin						
Yes	12	0.5%	122	0.7%	-0.214	-0.028
No	280	11.6%	3,169	18.4%	-6.856	-0.193
Unknown	2,132	88.0%	13,925	80.9%	7.070	0.196
Year						
2010	48	2.0%	0	0.0%	NaN	NaN
2011	698	28.8%	0	0.0%	NaN	NaN
2012	541	22.3%	0	0.0%	NaN	NaN
2013	277	11.4%	177	1.0%	10.399	0.441

Table 1aa. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	186	7.7%	544	3.2%	4.513	0.200
2015	147	6.1%	1,025	6.0%	0.111	0.005
2016	188	7.8%	1,626	9.4%	-1.689	-0.060
2017	145	6.0%	2,051	11.9%	-5.931	-0.209
2018	90	3.7%	2,305	13.4%	-9.676	-0.351
2019	55	2.3%	2,883	16.7%	-14.477	-0.509
2020	29	1.2%	2,931	17.0%	-15.828	-0.572
2021	16	0.7%	3,266	19.0%	-18.311	-0.647
2022	4	0.2%	408	2.4%	-2.205	-0.198
CHADVASC						
mean, std	2.3	1.1	2.6	1.2	-0.275	-0.232
0	22	0.9%	119	0.7%	0.216	0.024
1	653	26.9%	3,538	20.6%	6.388	0.151
2	830	34.2%	5,283	30.7%	3.554	0.076
3	539	22.2%	4,354	25.3%	-3.054	-0.072
4	283	11.7%	2,807	16.3%	-4.630	-0.134
>= 5	97	4.0%	1,115	6.5%	-2.475	-0.111
HASBLED						
mean, std	2.0	0.0	2.0	0.0	0.000	NaN
0	0	0.0%	0	0.0%	NaN	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	2,424	100.0%	17,216	100.0%	0.000	NaN
>= 3	0	0.0%	0	0.0%	NaN	NaN
Health Characteristics						
Diabetes	985	40.6%	7,508	43.6%	-2.975	-0.060

Table 1aa. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	842	34.7%	5,935	34.5%	0.262	0.006
Hypertension	2,364	97.5%	16,800	97.6%	-0.059	-0.004
Kidney failure (chronic)	461	19.0%	4,238	24.6%	-5.598	-0.136
Kidney failure (acute)	241	9.9%	3,278	19.0%	-9.098	-0.261
Obesity	841	34.7%	8,630	50.1%	-15.433	-0.316
Peptic ulcer disease	27	1.1%	194	1.1%	-0.013	-0.001
Nicotine dependency	584	24.1%	6,428	37.3%	-13.245	-0.290
Hospitalized AMI (past 0-30 days)	49	2.0%	740	4.3%	-2.277	-0.130
Hospitalized AMI (past 31-183 days)	32	1.3%	419	2.4%	-1.114	-0.082
Coronary revascularization	289	11.9%	2,740	15.9%	-3.993	-0.116
Hospitalized heart failure	501	20.7%	5,108	29.7%	-9.002	-0.209
Outpatient heart failure	470	19.4%	4,260	24.7%	-5.355	-0.129
Other ischemic heart disease	911	37.6%	6,834	39.7%	-2.113	-0.043
Hospitalized Thromboembolic Stroke (past 0-30 days)	139	5.7%	843	4.9%	0.838	0.037
Hospitalized Thromboembolic Stroke (past 31-183 days)	64	2.6%	468	2.7%	-0.078	-0.005
Transient ischemic attack (syncope)	173	7.1%	932	5.4%	1.723	0.071
Cardioversion	250	10.3%	2,280	13.2%	-2.930	-0.091
Cardioablation	435	17.9%	2,752	16.0%	1.960	0.052
Hospitalized for bleeding	138	5.7%	692	4.0%	1.674	0.078
	41	1.7%	238	1.4%	0.309	0.025
Medical Product Use						
Estrogen replacement	42	1.7%	370	2.1%	-0.416	-0.030
H2-antagonist	79	3.3%	785	4.6%	-1.301	-0.067
NSAIDs	432	17.8%	3,189	18.5%	-0.702	-0.018

Table 1aa. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	688	28.4%	5,298	30.8%	-2.391	-0.052
SSRI antidepressants	346	14.3%	2,875	16.7%	-2.426	-0.067
Insulin	276	11.4%	2,362	13.7%	-2.334	-0.070
Metformin (Biguanide)	463	19.1%	4,184	24.3%	-5.202	-0.126
Sulfonylureas	224	9.2%	1,389	8.1%	1.173	0.042
Other diabetes medications	243	10.0%	2,253	13.1%	-3.062	-0.096
ACEI/ARB	1,571	64.8%	11,250	65.3%	-0.536	-0.011
Antiarrhythmics	865	35.7%	5,074	29.5%	6.212	0.133
Anti-coagulant (injectable)	229	9.4%	2,391	13.9%	-4.441	-0.139
Anti-platelets	349	14.4%	3,325	19.3%	-4.916	-0.132
Beta-blockers	1,764	72.8%	13,449	78.1%	-5.347	-0.124
Calcium channel blockers	1,049	43.3%	7,314	42.5%	0.792	0.016
Digoxin	319	13.2%	1,143	6.6%	6.521	0.220
Diuretics (loop)	608	25.1%	5,404	31.4%	-6.307	-0.140
Diuretics (potassium sparing)	270	11.1%	2,236	13.0%	-1.849	-0.057
Diuretics (thiazide)	692	28.5%	4,558	26.5%	2.072	0.046
Nitrates	201	8.3%	1,620	9.4%	-1.118	-0.039
Statins	1,194	49.3%	9,886	57.4%	-8.166	-0.164
Fibrates	186	7.7%	974	5.7%	2.016	0.081
Amiodarone	319	13.2%	2,764	16.1%	-2.895	-0.082
Dronedarone	169	7.0%	304	1.8%	5.206	0.257
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	1,597	65.9%	10,321	60.0%	5.933	0.123
No ED encounters (past 31-183 days)	1,825	75.3%	12,053	70.0%	5.278	0.119
At least 1 ED encounter (past 0-30 days)	827	34.1%	6,895	40.0%	-5.933	-0.123

Table 1aa. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 2 ED encounters (past 0-30 days)	207	8.5%	1,970	11.4%	-2.903	-0.097
At least 1 ED encounter (past 31-183 days)	599	24.7%	5,163	30.0%	-5.278	-0.119
At least 2 ED encounters (past 31-183 days)	221	9.1%	2,070	12.0%	-2.907	-0.095

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1ab. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	2,100	N/A	16,963	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	57.4	6.4	57.7	6.3	-0.303	-0.047
Age						
21-49 years	274	13.0%	2,001	11.8%	1.236	0.038
50-64 years	1,826	87.0%	14,961	88.2%	-1.236	-0.038
Sex						
Female	610	29.0%	5,104	30.1%	-1.046	-0.023
Male	1,490	71.0%	11,858	69.9%	1.046	0.023
Race ³						
American Indian or Alaska Native	0	0.0%	20	0.1%	NaN	NaN
Asian	3	0.1%	36	0.2%	-0.088	-0.022
Black or African American	57	2.7%	834	4.9%	-2.198	-0.122
Native Hawaiian or Other Pacific Islander	3	0.1%	27	0.2%	-0.033	-0.009
Unknown	1,772	84.4%	12,604	74.3%	10.075	0.399
White	258	12.3%	3,379	19.9%	-7.619	-0.279
Hispanic origin						
Yes	11	0.5%	121	0.7%	-0.212	-0.027
No	237	11.3%	3,048	18.0%	-6.693	-0.405
Unknown	1,852	88.2%	13,793	81.3%	6.905	0.399
Year						
2010	35	1.7%	0	0.0%	NaN	NaN
2011	541	25.8%	0	0.0%	NaN	NaN
2012	439	20.9%	0	0.0%	NaN	NaN

Table 1ab. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2013	230	10.9%	191	1.1%	9.820	0.421
2014	162	7.7%	581	3.4%	4.305	0.189
2015	133	6.3%	1,055	6.2%	0.126	0.005
2016	198	9.4%	1,627	9.6%	-0.179	-0.006
2017	148	7.1%	2,031	12.0%	-4.912	-0.168
2018	98	4.7%	2,272	13.4%	-8.723	-0.308
2019	59	2.8%	2,804	16.5%	-13.737	-0.478
2020	35	1.7%	2,830	16.7%	-14.997	-0.538
2021	20	0.9%	3,175	18.7%	-17.787	-0.627
2022	2	0.1%	397	2.3%	-2.235	-0.204
CHADVASC						
mean, std	2.4	1.2	2.5	1.2	-0.150	-0.126
0	17	0.8%	121	0.7%	0.075	0.009
1	522	24.8%	3,619	21.3%	3.507	0.084
2	696	33.1%	5,270	31.1%	2.073	0.044
3	486	23.2%	4,247	25.0%	-1.868	-0.044
4	276	13.1%	2,677	15.8%	-2.635	-0.075
>= 5	103	4.9%	1,029	6.1%	-1.153	-0.051
HASBLED						
mean, std	2.0	0.0	2.0	0.0	0.000	NaN
0	0	0.0%	0	0.0%	NaN	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	2,100	100.0%	16,963	100.0%	0.000	NaN
>= 3	0	0.0%	0	0.0%	NaN	NaN

Table 1ab. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Characteristics						
Diabetes	820	39.1%	7,342	43.3%	-4.221	-0.087
Hypercholesterolemia	694	33.0%	5,858	34.5%	-1.486	-0.031
Hypertension	2,046	97.5%	16,559	97.6%	-0.149	-0.010
Kidney failure (chronic)	452	21.5%	4,065	24.0%	-2.424	-0.058
Kidney failure (acute)	282	13.4%	3,013	17.8%	-4.350	-0.121
Obesity	916	43.6%	8,193	48.3%	-4.662	-0.094
Peptic ulcer disease	22	1.0%	190	1.1%	-0.084	-0.008
Nicotine dependency	646	30.8%	6,033	35.6%	-4.801	-0.103
Hospitalized AMI (past 0-30 days)	61	2.9%	674	4.0%	-1.058	-0.058
Hospitalized AMI (past 31-183 days)	33	1.6%	386	2.3%	-0.682	-0.050
Coronary revascularization	270	12.8%	2,612	15.4%	-2.551	-0.074
Hospitalized heart failure	496	23.6%	4,815	28.4%	-4.768	-0.109
Outpatient heart failure	439	20.9%	4,098	24.2%	-3.240	-0.079
Other ischemic heart disease	769	36.6%	6,695	39.5%	-2.828	-0.059
Hospitalized Thromboembolic Stroke (past 0-30 days)	118	5.6%	849	5.0%	0.634	0.028
Hospitalized Thromboembolic Stroke (past 31-183 days)	62	3.0%	461	2.7%	0.246	0.015
Transient ischemic attack (syncope)	132	6.3%	956	5.6%	0.655	0.028
Cardioversion	363	17.3%	2,758	16.3%	1.021	0.027
Cardioablation	93	4.4%	717	4.2%	0.200	0.010
Hospitalized for bleeding	30	1.4%	237	1.4%	0.050	0.004

Table 1ab. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Medical Product Use						
Estrogen replacement	39	1.8%	356	2.1%	-0.256	-0.018
H2-antagonist	74	3.5%	749	4.4%	-0.898	-0.047
NSAIDs	376	17.9%	3,132	18.5%	-0.536	-0.014
Proton pump inhibitors	605	28.8%	5,177	30.5%	-1.702	-0.037
SSRI antidepressants	317	15.1%	2,783	16.4%	-1.323	-0.037
Insulin	238	11.4%	2,273	13.4%	-2.046	-0.063
Metformin (Biguanide)	425	20.2%	4,015	23.7%	-3.437	-0.083
Sulfonylureas	164	7.8%	1,396	8.2%	-0.429	-0.016
Other diabetes medications	225	10.7%	2,146	12.7%	-1.920	-0.060
ACEI/ARB	1,360	64.8%	11,079	65.3%	-0.535	-0.011
Antiarrhythmics	664	31.6%	5,123	30.2%	1.441	0.031
Anti-coagulant (injectable)	233	11.1%	2,278	13.4%	-2.309	-0.072
Anti-platelets	345	16.4%	3,174	18.7%	-2.273	-0.060
Beta-blockers	1,595	76.0%	13,164	77.6%	-1.623	-0.038
Calcium channel blockers	892	42.5%	7,224	42.6%	-0.108	-0.002
Digoxin	185	8.8%	1,251	7.4%	1.432	0.053
Diuretics (loop)	562	26.8%	5,185	30.6%	-3.784	-0.085
Diuretics (potassium sparing)	240	11.4%	2,162	12.7%	-1.310	-0.040
Diuretics (thiazide)	573	27.3%	4,519	26.6%	0.634	0.014
Nitrates	171	8.2%	1,566	9.2%	-1.074	-0.038
Statins	1,088	51.8%	9,574	56.4%	-4.622	-0.093
Fibrates	125	6.0%	998	5.9%	0.086	0.004
Amiodarone	306	14.6%	2,663	15.7%	-1.136	-0.032

Table 1ab. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 2

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Dronedarone	74	3.5%	382	2.2%	1.296	0.077
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	1,329	63.3%	10,358	61.1%	2.257	0.051
No ED encounters (past 31-183 days)	1,536	73.2%	12,015	70.8%	2.328	0.053
At least 1 ED encounter (past 0-30 days)	770	36.7%	6,605	38.9%	-2.257	-0.051
At least 2 ED encounters (past 0-30 days)	205	9.8%	1,866	11.0%	-1.248	-0.042
At least 1 ED encounter (past 31-183 days)	564	26.8%	4,947	29.2%	-2.328	-0.053
At least 2 ED encounters (past 31-183 days)	203	9.7%	1,968	11.6%	-1.945	-0.064

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1ac. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 3+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Unique patients	475	100.0%	5,565	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	58.0	5.7	58.3	6.0	-0.311	-0.053
Age						
21-49 years	48	10.1%	532	9.6%	0.546	0.018
50-64 years	427	89.9%	5,033	90.4%	-0.546	-0.018
Sex						
Female	135	28.4%	1,603	28.8%	-0.384	-0.008
Male	340	71.6%	3,962	71.2%	0.384	0.008
Race ³						
American Indian or Alaska Native	0	0.0%	7	0.1%	NaN	NaN
Asian	0	0.0%	12	0.2%	NaN	NaN
Black or African American	19	4.0%	464	8.3%	-4.338	-0.181
Native Hawaiian or Other Pacific Islander	0	0.0%	11	0.2%	NaN	NaN
Unknown	364	76.6%	3,616	65.0%	11.654	0.258
White	92	19.4%	1,437	25.8%	-6.454	-0.155
Hispanic origin						
Yes	2	0.4%	44	0.8%	-0.370	-0.048
No	92	19.4%	1,496	26.9%	-7.514	-0.179
Unknown	381	80.2%	4,025	72.3%	7.883	0.186
Year						
2010	9	1.9%	0	0.0%	NaN	NaN
2011	122	25.7%	0	0.0%	NaN	NaN
2012	73	15.4%	0	0.0%	NaN	NaN
2013	46	9.7%	37	0.7%	9.019	0.416

Table 1ac. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 3+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	22	4.6%	112	2.0%	2.619	0.147
2015	29	6.1%	278	5.0%	1.110	0.048
2016	48	10.1%	448	8.1%	2.055	0.072
2017	48	10.1%	574	10.3%	-0.209	-0.007
2018	37	7.8%	734	13.2%	-5.400	-0.177
2019	16	3.4%	977	17.6%	-14.188	-0.477
2020	16	3.4%	1,078	19.4%	-16.003	-0.521
2021	6	1.3%	1,165	20.9%	-19.671	-0.659
2022	3	0.6%	162	2.9%	-2.279	-0.173
CHADVASC						
mean, std	2.8	1.3	3.0	1.3	-0.283	-0.216
0	0	0.0%	13	0.2%	NaN	NaN
1	87	18.3%	704	12.7%	5.665	0.157
2	135	28.4%	1,350	24.3%	4.162	0.095
3	114	24.0%	1,473	26.5%	-2.469	-0.057
4	91	19.2%	1,304	23.4%	-4.274	-0.105
>= 5	48	10.1%	721	13.0%	-2.851	-0.089
HASBLED						
mean, std	3.1	0.3	3.1	0.3	-0.043	-0.141
0	0	0.0%	0	0.0%	NaN	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	0	0.0%	0	0.0%	NaN	NaN
>= 3	475	100.0%	5,565	100.0%	0.000	NaN
Health Characteristics						
Diabetes	232	48.8%	2,981	53.6%	-4.725	-0.095

Table 1ac. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 3+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Hypercholesterolemia	166	34.9%	2,069	37.2%	-2.231	-0.046
Hypertension	472	99.4%	5,525	99.3%	0.087	0.011
Kidney failure (chronic)	225	47.4%	2,978	53.5%	-6.145	-0.123
Kidney failure (acute)	128	26.9%	2,248	40.4%	-13.448	-0.287
Obesity	192	40.4%	2,941	52.8%	-12.427	-0.251
Peptic ulcer disease	12	2.5%	157	2.8%	-0.295	-0.018
Nicotine dependency	162	34.1%	2,496	44.9%	-10.746	-0.221
Hospitalized AMI (past 0-30 days)	10	2.1%	301	5.4%	-3.304	-0.174
Hospitalized AMI (past 31-183 days)	12	2.5%	249	4.5%	-1.948	-0.106
Coronary revascularization	76	16.0%	1,081	19.4%	-3.425	-0.090
Hospitalized heart failure	152	32.0%	2,401	43.1%	-11.145	-0.232
Outpatient heart failure	149	31.4%	2,013	36.2%	-4.804	-0.102
Other ischemic heart disease	224	47.2%	2,670	48.0%	-0.821	-0.016
Hospitalized Thromboembolic Stroke (past 0-30 days)	52	10.9%	414	7.4%	3.508	0.122
Hospitalized Thromboembolic Stroke (past 31-183 days)	29	6.1%	310	5.6%	0.535	0.023
Transient ischemic attack	42	8.8%	418	7.5%	1.331	0.049
syncope)	102	21.5%	1,144	20.6%	0.917	0.022
Cardioversion	67	14.1%	834	15.0%	-0.881	-0.025
Cardioablation	29	6.1%	229	4.1%	1.990	0.090
Hospitalized for bleeding	21	4.4%	215	3.9%	0.558	0.028
Medical Product Use						
Estrogen replacement	7	1.5%	78	1.4%	0.072	0.006
H2-antagonist	28	5.9%	384	6.9%	-1.006	-0.041
NSAIDs	75	15.8%	913	16.4%	-0.617	-0.017

Table 1ac. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 3+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Proton pump inhibitors	191	40.2%	2,248	40.4%	-0.185	-0.004
SSRI antidepressants	86	18.1%	1,093	19.6%	-1.535	-0.039
Insulin	72	15.2%	1,193	21.4%	-6.280	-0.163
Metformin (Biguanide)	95	20.0%	1,280	23.0%	-3.001	-0.073
Sulfonylureas	47	9.9%	566	10.2%	-0.276	-0.009
Other diabetes medications	52	10.9%	843	15.1%	-4.201	-0.125
ACEI/ARB	308	64.8%	3,653	65.6%	-0.800	-0.017
Antiarrhythmics	152	32.0%	1,626	29.2%	2.782	0.060
Anti-coagulant (injectable)	51	10.7%	761	13.7%	-2.938	-0.090
Anti-platelets	83	17.5%	1,207	21.7%	-4.215	-0.106
Beta-blockers	368	77.5%	4,521	81.2%	-3.766	-0.093
Calcium channel blockers	231	48.6%	2,593	46.6%	2.037	0.041
Digoxin	67	14.1%	456	8.2%	5.911	0.189
Diuretics (loop)	186	39.2%	2,504	45.0%	-5.838	-0.118
Diuretics (potassium sparing)	89	18.7%	995	17.9%	0.857	0.022
Diuretics (thiazide)	136	28.6%	1,443	25.9%	2.702	0.061
Nitrates	46	9.7%	732	13.2%	-3.469	-0.109
Statins	254	53.5%	3,422	61.5%	-8.018	-0.163
Fibrates	48	10.1%	369	6.6%	3.475	0.126
Amiodarone	77	16.2%	1,059	19.0%	-2.819	-0.074
Dronedarone	17	3.6%	65	1.2%	2.411	0.159
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	279	58.7%	3,072	55.2%	3.535	0.071
No ED encounters (past 31-183 days)	284	59.8%	3,204	57.6%	2.215	0.045
At least 1 ED encounter (past 0-30 days)	196	41.3%	2,493	44.8%	-3.535	-0.071

Table 1ac. Aggregated Unadjusted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 3+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
At least 2 ED encounters (past 0-30 days)	52	10.9%	850	15.3%	-4.327	-0.128
At least 1 ED encounter (past 31-183 days)	191	40.2%	2,361	42.4%	-2.215	-0.045
At least 2 ED encounters (past 31-183 days)	94	19.8%	1,170	21.0%	-1.235	-0.031

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 1ad. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 3+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Weighted patients	365	N/A	5,026	N/A	N/A	N/A
Demographic Characteristics						
Age (years)	58.0	5.7	58.2	5.9	-0.285	-0.049
Age						
21-49 years	36	9.8%	480	9.5%	0.299	0.010
50-64 years	329	90.2%	4,546	90.5%	-0.299	-0.010
Sex						
Female	100	27.3%	1,400	27.9%	-0.607	-0.014
Male	266	72.7%	3,626	72.1%	0.607	0.014
Race ³						
American Indian or Alaska Native	0	0.0%	5	0.1%	NaN	NaN
Asian	0	0.0%	12	0.2%	NaN	NaN
Black or African American	15	4.0%	386	7.7%	-3.666	-0.166
Native Hawaiian or Other Pacific Islander	0	0.0%	10	0.2%	NaN	NaN
Unknown	284	77.7%	3,371	67.1%	10.613	0.407
White	67	18.3%	1,225	24.4%	-6.088	-0.204
Hispanic origin						
Yes	3	0.8%	41	0.8%	-0.054	-0.006
No	65	17.7%	1,261	25.1%	-7.411	-0.417
Unknown	298	81.6%	3,724	74.1%	7.465	0.434
Year						
2010	7	1.8%	0	0.0%	NaN	NaN
2011	79	21.7%	0	0.0%	NaN	NaN
2012	50	13.8%	0	0.0%	NaN	NaN
2013	35	9.6%	39	0.8%	8.866	0.408

Table 1ad. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 3+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
2014	19	5.2%	102	2.0%	3.142	0.169
2015	22	6.0%	264	5.2%	0.762	0.033
2016	39	10.8%	410	8.2%	2.595	0.089
2017	39	10.7%	535	10.6%	0.049	0.002
2018	35	9.6%	653	13.0%	-3.371	-0.106
2019	16	4.5%	868	17.3%	-12.764	-0.418
2020	14	3.8%	953	19.0%	-15.160	-0.492
2021	6	1.7%	1,055	21.0%	-19.278	-0.638
2022	3	0.8%	148	2.9%	-2.119	-0.156
CHADVASC						
mean, std	2.8	1.2	3.0	1.3	-0.203	-0.159
0	0	0.0%	0	0.0%	NaN	NaN
1	62	16.9%	690	13.7%	3.202	0.089
2	108	29.6%	1,306	26.0%	3.665	0.082
3	92	25.2%	1,336	26.6%	-1.359	-0.031
4	72	19.6%	1,158	23.0%	-3.446	-0.085
>= 5	32	8.6%	537	10.7%	-2.063	-0.070
HASBLED						
mean, std	3.1	0.3	3.1	0.3	-0.054	-0.181
0	0	0.0%	0	0.0%	NaN	NaN
1	0	0.0%	0	0.0%	NaN	NaN
2	0	0.0%	0	0.0%	NaN	NaN
>= 3	365	100.0%	5,026	100.0%	0.000	NaN
Health Characteristics						

Table 1ad. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 3+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Diabetes	177	48.6%	2,606	51.8%	-3.284	-0.066
Hypercholesterolemia	127	34.7%	1,850	36.8%	-2.148	-0.045
Hypertension	364	99.6%	5,014	99.8%	-0.137	-0.025
Kidney failure (chronic)	184	50.4%	2,645	52.6%	-2.263	-0.046
Kidney failure (acute)	114	31.1%	1,917	38.1%	-7.000	-0.147
Obesity	172	47.2%	2,578	51.3%	-4.101	-0.082
Peptic ulcer disease	7	2.0%	133	2.7%	-0.688	-0.046
Nicotine dependency	136	37.3%	2,147	42.7%	-5.430	-0.112
Hospitalized AMI (past 0-30 days)	10	2.8%	206	4.1%	-1.266	-0.069
Hospitalized AMI (past 31-183 days)	9	2.5%	204	4.1%	-1.564	-0.088
Coronary revascularization	58	15.8%	938	18.7%	-2.829	-0.075
Hospitalized heart failure	121	33.3%	2,035	40.5%	-7.227	-0.151
Outpatient heart failure	119	32.5%	1,764	35.1%	-2.643	-0.057
Other ischemic heart disease	167	45.9%	2,367	47.1%	-1.236	-0.025
Hospitalized Thromboembolic Stroke (past 0-30 days)	33	9.2%	398	7.9%	1.242	0.044
Hospitalized Thromboembolic Stroke (past 31-183 days)	18	4.9%	272	5.4%	-0.512	-0.023
Transient ischemic attack	28	7.7%	354	7.0%	0.648	0.025
Other medical conditions (falls, fractures, syncope)	78	21.2%	1,033	20.6%	0.685	0.017
Cardioversion	50	13.7%	751	15.0%	-1.300	-0.037
Cardioablation	17	4.7%	226	4.5%	0.223	0.011
Hospitalized for bleeding	11	3.0%	195	3.9%	-0.851	-0.047
Medical Product Use						

Table 1ad. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 3+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Estrogen replacement	4	1.2%	55	1.1%	0.099	0.009
H2-antagonist	23	6.2%	318	6.3%	-0.151	-0.006
NSAIDs	59	16.2%	814	16.2%	0.059	0.002
Proton pump inhibitors	149	40.8%	2,022	40.2%	0.598	0.012
SSRI antidepressants	62	17.0%	947	18.8%	-1.803	-0.047
Insulin	59	16.1%	1,007	20.0%	-3.974	-0.104
Metformin (Biguanide)	70	19.2%	1,130	22.5%	-3.307	-0.081
Sulfonylureas	32	8.7%	478	9.5%	-0.860	-0.030
Other diabetes medications	47	12.8%	716	14.2%	-1.430	-0.042
ACEI/ARB	236	64.6%	3,305	65.8%	-1.145	-0.024
Antiarrhythmics	111	30.5%	1,459	29.0%	1.435	0.031
Anti-coagulant (injectable)	45	12.3%	656	13.0%	-0.720	-0.022
Anti-platelets	71	19.4%	1,044	20.8%	-1.335	-0.033
Beta-blockers	283	77.4%	4,059	80.8%	-3.319	-0.081
Calcium channel blockers	167	45.8%	2,326	46.3%	-0.461	-0.009
Digoxin	40	10.9%	451	9.0%	1.927	0.064
Diuretics (loop)	141	38.6%	2,185	43.5%	-4.896	-0.100
Diuretics (potassium sparing)	61	16.8%	903	18.0%	-1.186	-0.031
Diuretics (thiazide)	100	27.5%	1,346	26.8%	0.724	0.016
Nitrates	36	9.8%	599	11.9%	-2.139	-0.069
Statins	204	55.9%	3,014	60.0%	-4.073	-0.083
Fibrates	28	7.7%	362	7.2%	0.553	0.021
Amiodarone	61	16.7%	919	18.3%	-1.633	-0.043
Dronedarone	7	2.0%	69	1.4%	0.669	0.052

Table 1ad. Aggregated Weighted Characteristics of Dabigatran and Apixaban Users, Truncation Weight = 2.5%, ATEs Weights (Inverse Probability of Treatment Weighted, Trimmed, Weight: Average Treatment Effect, Stabilized (ATES), Truncation: 2.5%) in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 3+

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Dabigatran Users		Apixaban Users		Absolute Difference	Standardized Difference
	Number/Mean	Percent/Standard Deviation ²	Number/Mean	Percent/Standard Deviation ²		
Health Service Utilization Intensity Metrics						
No ED encounters (past 0-30 days)	215	59.0%	2,865	57.0%	1.942	0.045
No ED encounters (past 31-183 days)	219	59.9%	2,963	58.9%	0.943	0.020
At least 1 ED encounter (past 0-30 days)	150	41.0%	2,161	43.0%	-1.942	-0.045
At least 2 ED encounters (past 0-30 days)	46	12.5%	700	13.9%	-1.451	-0.044
At least 1 ED encounter (past 31-183 days)	146	40.1%	2,063	41.1%	-0.943	-0.020
At least 2 ED encounters (past 31-183 days)	70	19.1%	997	19.8%	-0.740	-0.019

¹Weighted patient characteristics tables facilitate the assessment of covariate balance after inverse probability weighting and should not be interpreted as a description of the unweighted population. Treated patients are weighted by the proportion of treated patients in the trimmed population divided by the inverse of their propensity score (PS). Reference patients are weighted by 1 minus the proportion of treated patients in the trimmed population divided by 1 minus their PS.

²Value represents standard deviation where no % follows the value.

³Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

*Data represented by NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**AMI - Acute myocardial infarction; NSAIDs - non-steroidal anti-inflammatory drugs; ACEI - angiotensin converting enzyme inhibitor; ARB - angiotensin receptor blocker; ED - emergency department; SSRI - selective serotonin reuptake inhibitor

Table 2a. Effect Estimates for Thromboembolic Stroke, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Site-Adjusted Analysis, Unweighted										
Dabigatran Users	20,163	5,271.54	95.49	0.26	32	6.07	1.59	1.97	1.32 (0.89, 1.94)	0.165
Apixaban Users	96,668	32,203.97	121.68	0.33	132	4.10	1.37			
Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed										
Dabigatran Users	20,159	5,271.11	95.50	0.26	32	6.07	1.59	2.02	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	130	4.05	1.35			
Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²										
Dabigatran Users	18,882	5,071.94	98.11	0.27	38	7.52	2.02	3.65	1.74 (1.13, 2.68)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	124	3.86	1.29			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

Table 2b. Effect Estimates for Thromboembolic Stroke, Truncation Weight = 1%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Age Group

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Thromboembolic Stroke, Truncation Weight = 1, ATES Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	32	6.07	1.59	1.97	1.32 (0.89, 1.94)	0.165
Apixaban Users	96,668	32,203.97	121.68	0.33	132	4.10	1.37			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	32	6.07	1.59	2.02	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	130	4.05	1.35			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	38	7.52	2.02	3.65	1.74 (1.13, 2.68)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	124	3.86	1.29			
Thromboembolic Stroke, Truncation Weight = 1, ATES Weights, Age Group: 21-49 years										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	3,484	668.62	70.10	0.19	4	5.98	1.15	2.72	1.75 (0.56, 5.48)	0.339
Apixaban Users	14,485	3,674.75	92.66	0.25	12	3.27	0.83			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	3,454	663.72	70.19	0.19	4	6.03	1.16	2.96	N/A	N/A
Apixaban Users	14,105	3,583.54	92.80	0.25	11	3.07	0.78			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	3,285	647.43	71.99	0.20	5	7.55	1.49	4.53	2.51 (0.64, 9.91)	N/A
Apixaban Users	14,098	3,571.57	92.53	0.25	11	3.02	0.77			
Thromboembolic Stroke, Truncation Weight = 1, ATES Weights, Age Group: 50-64 years										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	16,675	4,602.49	100.81	0.28	28	6.08	1.68	1.93	1.29 (0.85, 1.95)	0.234
Apixaban Users	81,715	28,407.01	126.97	0.35	118	4.15	1.44			

Table 2b. Effect Estimates for Thromboembolic Stroke, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Age Group

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	16,674	4,602.32	100.82	0.28	28	6.08	1.68	1.93	N/A	N/A
Apixaban Users	81,643	28,388.32	127.00	0.35	118	4.16	1.45			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	15,562	4,396.32	103.19	0.28	33	7.50	2.12	3.52	1.66 (1.05, 2.62)	N/A
Apixaban Users	81,592	28,344.92	126.89	0.35	113	3.98	1.38			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

Table 2c. Effect Estimates for Thromboembolic Stroke, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Sex

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Thromboembolic Stroke, Truncation Weight = 1, ATEs Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	32	6.07	1.59	1.97	1.32 (0.89, 1.94)	0.165
Apixaban Users	96,668	32,203.97	121.68	0.33	132	4.10	1.37			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	32	6.07	1.59	2.02	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	130	4.05	1.35			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	38	7.52	2.02	3.65	1.74 (1.13, 2.68)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	124	3.86	1.29			
Thromboembolic Stroke, Truncation Weight = 1, ATEs Weights, Sex: Female										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	4,706	1,318.26	102.32	0.28	11	8.34	2.34	4.40	1.90 (0.97, 3.71)	0.062
Apixaban Users	28,211	10,128.41	131.13	0.36	40	3.95	1.42			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	4,701	1,317.93	102.40	0.28	11	8.35	2.34	4.38	N/A	N/A
Apixaban Users	27,987	10,073.77	131.47	0.36	40	3.97	1.43			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	4,394	1,261.57	104.87	0.29	12	9.22	2.65	5.25	2.13 (1.00, 4.55)	N/A
Apixaban Users	27,965	10,091.59	131.81	0.36	40	3.97	1.43			
Thromboembolic Stroke, Truncation Weight = 1, ATEs Weights, Sex: Male										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	15,453	3,952.85	93.43	0.26	21	5.31	1.36	1.21	1.15 (0.72, 1.86)	0.555
Apixaban Users	67,989	21,953.35	117.94	0.32	90	4.10	1.32			

Table 2c. Effect Estimates for Thromboembolic Stroke, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Sex

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	15,444	3,951.52	93.45	0.26	21	5.31	1.36	1.20	N/A	N/A
Apixaban Users	67,640	21,873.93	118.12	0.32	90	4.11	1.33			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	14,465	3,772.56	95.26	0.26	25	6.76	1.76	2.92	1.56 (0.92, 2.65)	N/A
Apixaban Users	67,595	21,812.71	117.86	0.32	84	3.84	1.24			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

Table 2d. Effect Estimates for Thromboembolic Stroke, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and CHADVASC

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Thromboembolic Stroke, Truncation Weight = 1, ATEs Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	32	6.07	1.59	1.97	1.32 (0.89, 1.94)	0.165
Apixaban Users	96,668	32,203.97	121.68	0.33	132	4.10	1.37			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	32	6.07	1.59	2.02	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	130	4.05	1.35			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	38	7.52	2.02	3.65	1.74 (1.13, 2.68)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	124	3.86	1.29			
Thromboembolic Stroke, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 0										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	4,125	888.16	78.64	0.22	4	4.50	0.97	2.83	2.78 (0.78, 9.89)	0.114
Apixaban Users	14,037	3,592.64	93.48	0.26	6	1.67	0.43			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	4,087	879.45	78.60	0.22	4	4.55	0.98	2.85	N/A	N/A
Apixaban Users	13,766	3,528.55	93.62	0.26	6	1.70	0.44			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	3,881	823.66	77.51	0.21	4	5.30	1.12	3.60	3.23 (0.84, 12.46)	N/A
Apixaban Users	13,719	3,518.08	93.66	0.26	6	1.69	0.43			
Thromboembolic Stroke, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 1										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	7,293	1,849.50	92.63	0.25	6	3.24	0.82	1.23	1.38 (0.55, 3.45)	0.494
Apixaban Users	30,310	9,944.66	119.84	0.33	20	2.01	0.66			

Table 2d. Effect Estimates for Thromboembolic Stroke, Truncation Weight = 2.5%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and CHADVASC

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	7,275	1,846.11	92.69	0.25	6	3.25	0.82	1.23	N/A	N/A
Apixaban Users	30,065	9,895.34	120.22	0.33	20	2.02	0.67			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	6,746	1,733.14	93.84	0.26	5	2.73	0.70	0.76	1.20 (0.47, 3.07)	N/A
Apixaban Users	30,000	9,864.18	120.09	0.33	19	1.96	0.65			
Thromboembolic Stroke, Truncation Weight = 2.5, ATES Weights, CHADVASC: 2										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	5,417	1,552.77	104.70	0.29	5	3.22	0.92	-0.12	0.82 (0.32, 2.11)	0.674
Apixaban Users	25,743	9,587.10	136.02	0.37	32	3.34	1.24			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	5,405	1,549.87	104.73	0.29	5	3.23	0.93	-0.02	N/A	N/A
Apixaban Users	25,596	9,548.66	136.26	0.37	31	3.25	1.21			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	4,886	1,406.11	105.11	0.29	5	3.62	1.04	0.45	0.96 (0.36, 2.54)	N/A
Apixaban Users	25,510	9,519.60	136.30	0.37	30	3.17	1.18			
Thromboembolic Stroke, Truncation Weight = 2.5, ATES Weights, CHADVASC: 3										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	2,270	666.19	107.19	0.29	6	9.01	2.64	3.93	1.56 (0.65, 3.79)	0.322
Apixaban Users	15,433	5,512.90	130.47	0.36	28	5.08	1.81			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	2,246	660.55	107.42	0.29	6	9.08	2.67	4.13	N/A	N/A
Apixaban Users	15,182	5,447.03	131.05	0.36	27	4.96	1.78			

Table 2d. Effect Estimates for Thromboembolic Stroke, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and CHADVASC

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	1,913	568.87	108.62	0.30	6	10.31	3.07	5.58	1.91 (0.72, 5.04)	N/A
Apixaban Users	15,147	5,455.73	131.56	0.36	26	4.74	1.71			
Thromboembolic Stroke, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 4										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	802	228.57	104.10	0.28	6	26.25	7.48	18.20	3.02 (1.21, 7.55)	0.018
Apixaban Users	7,939	2,609.57	120.06	0.33	21	8.05	2.65			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	779	221.74	103.97	0.28	5	22.55	6.42	13.70	N/A	N/A
Apixaban Users	7,137	2,372.41	121.41	0.33	21	8.85	2.94			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	661	195.54	108.00	0.30	5	24.38	7.21	15.19	2.56 (0.86, 7.56)	N/A
Apixaban Users	7,121	2,380.20	122.08	0.33	22	9.18	3.07			
Thromboembolic Stroke, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 5+										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	252	85.92	124.53	0.34	5	58.19	19.84	30.65	2.20 (0.83, 5.80)	0.113
Apixaban Users	2,738	834.89	111.38	0.30	23	27.55	8.40			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	224	75.24	122.69	0.34	4	53.16	17.86	21.76	N/A	N/A
Apixaban Users	1,894	605.05	116.68	0.32	19	31.40	10.03			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	179	62.44	127.28	0.35	4	59.24	20.64	27.89	1.91 (0.53, 6.91)	N/A
Apixaban Users	1,892	609.88	117.75	0.32	19	31.35	10.11			

¹All values in this section are weighted.

²ATES = Average Treatment Effect, Stabilized.

Table 2e. Effect Estimates for Thromboembolic Stroke, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and HASBLED

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Thromboembolic Stroke, Truncation Weight = 1, ATEs Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	32	6.07	1.59	1.97	1.32 (0.89, 1.94)	0.165
Apixaban Users	96,668	32,203.97	121.68	0.33	132	4.10	1.37			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	32	6.07	1.59	2.02	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	130	4.05	1.35			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	38	7.52	2.02	3.65	1.74 (1.13, 2.68)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	124	3.86	1.29			
Thromboembolic Stroke, Truncation Weight = 2.5, ATEs Weights, HASBLED: 0										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	5,809	1,349.29	84.84	0.23	5	3.71	0.86	1.81	1.86 (0.65, 5.30)	0.247
Apixaban Users	21,862	6,325.65	105.68	0.29	12	1.90	0.55			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	5,791	1,345.43	84.86	0.23	5	3.72	0.86	1.80	N/A	N/A
Apixaban Users	21,615	6,265.29	105.87	0.29	12	1.92	0.56			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	5,408	1,263.65	85.34	0.23	5	3.72	0.87	1.82	1.90 (0.61, 5.86)	N/A
Apixaban Users	21,541	6,218.74	105.45	0.29	12	1.90	0.55			
Thromboembolic Stroke, Truncation Weight = 2.5, ATEs Weights, HASBLED: 1										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	11,451	3,152.68	100.56	0.28	18	5.71	1.57	2.78	1.72 (1.01, 2.95)	0.047
Apixaban Users	51,557	18,442.73	130.66	0.36	54	2.93	1.05			

Table 2e. Effect Estimates for Thromboembolic Stroke, Truncation Weight = 2.5%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and HASBLED

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	11,435	3,149.56	100.60	0.28	18	5.72	1.57	2.78	N/A	N/A
Apixaban Users	51,235	18,381.35	131.04	0.36	54	2.94	1.05			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	10,380	2,900.27	102.06	0.28	18	6.04	1.69	3.24	1.91 (1.09, 3.35)	N/A
Apixaban Users	51,099	18,307.48	130.86	0.36	51	2.80	1.00			
Thromboembolic Stroke, Truncation Weight = 2.5, ATES Weights, HASBLED: 2										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	2,424	647.66	97.59	0.27	5	7.72	2.06	-0.62	0.78 (0.31, 1.97)	0.599
Apixaban Users	17,216	5,756.82	122.14	0.33	48	8.34	2.79			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	2,417	646.51	97.70	0.27	5	7.73	2.07	-0.48	N/A	N/A
Apixaban Users	17,003	5,722.03	122.92	0.34	47	8.21	2.76			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	2,100	580.23	100.94	0.28	7	12.42	3.43	4.25	1.30 (0.50, 3.38)	N/A
Apixaban Users	16,963	5,716.61	123.09	0.34	47	8.16	2.75			
Thromboembolic Stroke, Truncation Weight = 2.5, ATES Weights, HASBLED: 3+										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	475	121.49	93.42	0.26	4	32.92	8.42	22.65	2.85 (0.95, 8.57)	0.063
Apixaban Users	5,565	1,556.56	102.16	0.28	16	10.28	2.88			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	458	119.35	95.18	0.26	4	33.51	8.73	23.09	N/A	N/A
Apixaban Users	5,036	1,439.16	104.38	0.29	15	10.42	2.98			

Table 2e. Effect Estimates for Thromboembolic Stroke, Truncation Weight = 2.5%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and HASBLED

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	365	96.74	96.76	0.26	3	26.90	7.13	16.13	2.18 (0.58, 8.13)	N/A
Apixaban Users	5,026	1,440.13	104.66	0.29	16	10.77	3.09			

¹All values in this section are weighted.

²ATES = Average Treatment Effect, Stabilized.

Table 3a. Effect Estimates for Major Extracranial Bleeding, Truncation Weight = 1%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Site-Adjusted Analysis, Unweighted										
Dabigatran Users	20,163	5,271.54	95.49	0.26	36	6.83	1.79	-0.10	0.98 (0.69, 1.40)	0.914
Apixaban Users	96,668	32,203.97	121.68	0.33	223	6.92	2.31			
Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed										
Dabigatran Users	20,159	5,271.11	95.50	0.26	36	6.83	1.79	0.13	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	215	6.70	2.23			
Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²										
Dabigatran Users	18,882	5,071.94	98.11	0.27	39	7.78	2.09	1.34	1.22 (0.82, 1.81)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	206	6.44	2.14			

¹All values in this section are weighted.

²ATES = Average Treatment Effect, Stabilized.

Table 3b. Effect Estimates for Major Extracranial Bleeding, Truncation Weight = 1%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Age Group

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Major Extracranial Bleeding, Truncation Weight = 1, ATES Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	36	6.83	1.79	-0.10	0.98 (0.69, 1.40)	0.914
Apixaban Users	96,668	32,203.97	121.68	0.33	223	6.92	2.31			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	36	6.83	1.79	0.13	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	215	6.70	2.23			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	39	7.78	2.09	1.34	1.22 (0.82, 1.81)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	206	6.44	2.14			
Major Extracranial Bleeding, Truncation Weight = 1, ATES Weights, Age Group: 21-49 years										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	3,484	668.62	70.10	0.19	6	8.97	1.72	5.16	2.43 (0.92, 6.43)	0.074
Apixaban Users	14,485	3,674.75	92.66	0.25	14	3.81	0.97			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	3,454	663.72	70.19	0.19	6	9.04	1.74	5.13	N/A	N/A
Apixaban Users	14,105	3,583.54	92.80	0.25	14	3.91	0.99			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	3,285	647.43	71.99	0.20	3	4.85	0.96	1.01	1.30 (0.47, 3.61)	N/A
Apixaban Users	14,098	3,571.57	92.53	0.25	14	3.83	0.97			
Major Extracranial Bleeding, Truncation Weight = 1, ATES Weights, Age Group: 50-64 years										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	16,675	4,602.49	100.81	0.28	30	6.52	1.80	-0.56	0.91 (0.62, 1.34)	0.637
Apixaban Users	81,715	28,407.01	126.97	0.35	201	7.08	2.46			

Table 3b. Effect Estimates for Major Extracranial Bleeding, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Age Group

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	16,674	4,602.32	100.82	0.28	30	6.52	1.80	-0.56	N/A	N/A
Apixaban Users	81,643	28,388.32	127.00	0.35	201	7.08	2.46			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	15,562	4,396.32	103.19	0.28	35	7.97	2.25	1.15	1.18 (0.77, 1.80)	N/A
Apixaban Users	81,592	28,344.92	126.89	0.35	193	6.82	2.37			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

Table 3c. Effect Estimates for Major Extracranial Bleeding, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Sex

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Major Extracranial Bleeding, Truncation Weight = 1, ATEs Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	36	6.83	1.79	-0.10	0.98 (0.69, 1.40)	0.914
Apixaban Users	96,668	32,203.97	121.68	0.33	223	6.92	2.31			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	36	6.83	1.79	0.13	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	215	6.70	2.23			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	39	7.78	2.09	1.34	1.22 (0.82, 1.81)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	206	6.44	2.14			
Major Extracranial Bleeding, Truncation Weight = 1, ATEs Weights, Sex: Female										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	4,706	1,318.26	102.32	0.28	13	9.86	2.76	1.86	1.21 (0.67, 2.17)	0.532
Apixaban Users	28,211	10,128.41	131.13	0.36	81	8.00	2.87			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	4,701	1,317.93	102.40	0.28	13	9.86	2.77	1.92	N/A	N/A
Apixaban Users	27,987	10,073.77	131.47	0.36	80	7.94	2.86			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	4,394	1,261.57	104.87	0.29	12	9.74	2.80	2.05	1.25 (0.64, 2.43)	N/A
Apixaban Users	27,965	10,091.59	131.81	0.36	78	7.68	2.77			
Major Extracranial Bleeding, Truncation Weight = 1, ATEs Weights, Sex: Male										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	15,453	3,952.85	93.43	0.26	23	5.82	1.49	-0.29	0.95 (0.61, 1.48)	0.813
Apixaban Users	67,989	21,953.35	117.94	0.32	134	6.10	1.97			

Table 3c. Effect Estimates for Major Extracranial Bleeding, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Sex

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	15,444	3,951.52	93.45	0.26	23	5.82	1.49	-0.26	N/A	N/A
Apixaban Users	67,640	21,873.93	118.12	0.32	133	6.08	1.97			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	14,465	3,772.56	95.26	0.26	25	6.50	1.69	0.63	1.11 (0.68, 1.80)	N/A
Apixaban Users	67,595	21,812.71	117.86	0.32	128	5.87	1.89			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

Table 3d. Effect Estimates for Major Extracranial Bleeding, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and CHADVASC

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Major Extracranial Bleeding, Truncation Weight = 1, ATEs Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	36	6.83	1.79	-0.10	0.98 (0.69, 1.40)	0.914
Apixaban Users	96,668	32,203.97	121.68	0.33	223	6.92	2.31			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	36	6.83	1.79	0.13	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	215	6.70	2.23			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	39	7.78	2.09	1.34	1.22 (0.82, 1.81)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	206	6.44	2.14			
Major Extracranial Bleeding, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 0										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	4,125	888.16	78.64	0.22	8	9.01	1.94	6.22	3.53 (1.39, 9.01)	0.008
Apixaban Users	14,037	3,592.64	93.48	0.26	10	2.78	0.71			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	4,087	879.45	78.60	0.22	8	9.10	1.96	6.26	N/A	N/A
Apixaban Users	13,766	3,528.55	93.62	0.26	10	2.83	0.73			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	3,881	823.66	77.51	0.21	7	8.40	1.78	5.25	2.93 (1.08, 7.90)	N/A
Apixaban Users	13,719	3,518.08	93.66	0.26	11	3.15	0.81			
Major Extracranial Bleeding, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 1										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	7,293	1,849.50	92.63	0.25	6	3.24	0.82	-1.08	0.75 (0.32, 1.76)	0.503
Apixaban Users	30,310	9,944.66	119.84	0.33	43	4.32	1.42			

Table 3d. Effect Estimates for Major Extracranial Bleeding, Truncation Weight = 2.5%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and CHADVASC

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	7,275	1,846.11	92.69	0.25	6	3.25	0.82	-1.10	N/A	N/A
Apixaban Users	30,065	9,895.34	120.22	0.33	43	4.35	1.43			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	6,746	1,733.14	93.84	0.26	5	2.81	0.72	-1.37	0.66 (0.27, 1.62)	N/A
Apixaban Users	30,000	9,864.18	120.09	0.33	41	4.18	1.37			
Major Extracranial Bleeding, Truncation Weight = 2.5, ATES Weights, CHADVASC: 2										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	5,417	1,552.77	104.70	0.29	7	4.51	1.29	-3.31	0.55 (0.25, 1.19)	0.128
Apixaban Users	25,743	9,587.10	136.02	0.37	75	7.82	2.91			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	5,405	1,549.87	104.73	0.29	7	4.52	1.30	-3.23	N/A	N/A
Apixaban Users	25,596	9,548.66	136.26	0.37	74	7.75	2.89			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	4,886	1,406.11	105.11	0.29	9	6.34	1.83	-1.06	0.81 (0.36, 1.82)	N/A
Apixaban Users	25,510	9,519.60	136.30	0.37	70	7.40	2.76			
Major Extracranial Bleeding, Truncation Weight = 2.5, ATES Weights, CHADVASC: 3										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	2,270	666.19	107.19	0.29	12	18.01	5.29	11.30	2.60 (1.35, 5.02)	0.004
Apixaban Users	15,433	5,512.90	130.47	0.36	37	6.71	2.40			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	2,246	660.55	107.42	0.29	12	18.17	5.34	11.37	N/A	N/A
Apixaban Users	15,182	5,447.03	131.05	0.36	37	6.79	2.44			

Table 3d. Effect Estimates for Major Extracranial Bleeding, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and CHADVASC

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	1,913	568.87	108.62	0.30	9	16.13	4.80	9.50	2.30 (1.10, 4.82)	N/A
Apixaban Users	15,147	5,455.73	131.56	0.36	36	6.63	2.39			
Major Extracranial Bleeding, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 4										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	802	228.57	104.10	0.28	3	13.13	3.74	-1.05	0.90 (0.28, 2.91)	0.854
Apixaban Users	7,939	2,609.57	120.06	0.33	37	14.18	4.66			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	779	221.74	103.97	0.28	3	13.53	3.85	-0.38	N/A	N/A
Apixaban Users	7,137	2,372.41	121.41	0.33	33	13.91	4.62			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	661	195.54	108.00	0.30	3	13.56	4.01	-0.08	1.00 (0.28, 3.52)	N/A
Apixaban Users	7,121	2,380.20	122.08	0.33	32	13.64	4.56			
Major Extracranial Bleeding, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 5+										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	252	85.92	124.53	0.34	0	0.00	0.00	-15.57	NaN	N/A
Apixaban Users	2,738	834.89	111.38	0.30	13	15.57	4.75			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	224	75.24	122.69	0.34	0	0.00	0.00	-13.22	N/A	N/A
Apixaban Users	1,894	605.05	116.68	0.32	8	13.22	4.22			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	179	62.44	127.28	0.35	0	0.00	0.00	-12.41	NaN	N/A
Apixaban Users	1,892	609.88	117.75	0.32	8	12.41	4.00			

¹All values in this section are weighted.

²ATES = Average Treatment Effect, Stabilized.

*NaN: Not a Number

Table 3e. Effect Estimates for Major Extracranial Bleeding, Truncation Weight = 2.5%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and HASBLED

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Major Extracranial Bleeding, Truncation Weight = 1, ATES Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	36	6.83	1.79	-0.10	0.98 (0.69, 1.40)	0.914
Apixaban Users	96,668	32,203.97	121.68	0.33	223	6.92	2.31			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	36	6.83	1.79	0.13	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	215	6.70	2.23			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	39	7.78	2.09	1.34	1.22 (0.82, 1.81)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	206	6.44	2.14			
Major Extracranial Bleeding, Truncation Weight = 2.5, ATES Weights, HASBLED: 0										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	5,809	1,349.29	84.84	0.23	10	7.41	1.72	4.57	2.86 (1.31, 6.24)	0.008
Apixaban Users	21,862	6,325.65	105.68	0.29	18	2.85	0.82			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	5,791	1,345.43	84.86	0.23	10	7.43	1.73	4.56	N/A	N/A
Apixaban Users	21,615	6,265.29	105.87	0.29	18	2.87	0.83			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	5,408	1,263.65	85.34	0.23	8	6.67	1.56	3.65	2.35 (1.06, 5.21)	N/A
Apixaban Users	21,541	6,218.74	105.45	0.29	19	3.02	0.87			
Major Extracranial Bleeding, Truncation Weight = 2.5, ATES Weights, HASBLED: 1										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	11,451	3,152.68	100.56	0.28	16	5.08	1.40	0.20	1.00 (0.58, 1.70)	0.996
Apixaban Users	51,557	18,442.73	130.66	0.36	90	4.88	1.75			

Table 3e. Effect Estimates for Major Extracranial Bleeding, Truncation Weight = 2.5%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and HASBLED

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	11,435	3,149.56	100.60	0.28	16	5.08	1.40	0.24	N/A	N/A
Apixaban Users	51,235	18,381.35	131.04	0.36	89	4.84	1.74			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	10,380	2,900.27	102.06	0.28	17	5.76	1.61	1.07	1.18 (0.66, 2.11)	N/A
Apixaban Users	51,099	18,307.48	130.86	0.36	86	4.69	1.68			
Major Extracranial Bleeding, Truncation Weight = 2.5, ATES Weights, HASBLED: 2										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	2,424	647.66	97.59	0.27	8	12.35	3.30	0.71	1.03 (0.49, 2.15)	0.934
Apixaban Users	17,216	5,756.82	122.14	0.33	67	11.64	3.89			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	2,417	646.51	97.70	0.27	8	12.37	3.31	0.84	N/A	N/A
Apixaban Users	17,003	5,722.03	122.92	0.34	66	11.53	3.88			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	2,100	580.23	100.94	0.28	7	12.58	3.48	1.34	1.13 (0.50, 2.54)	N/A
Apixaban Users	16,963	5,716.61	123.09	0.34	64	11.24	3.79			
Major Extracranial Bleeding, Truncation Weight = 2.5, ATES Weights, HASBLED: 3+										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	475	121.49	93.42	0.26	2	16.46	4.21	-9.24	0.61 (0.15, 2.55)	0.5
Apixaban Users	5,565	1,556.56	102.16	0.28	40	25.70	7.19			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	458	119.35	95.18	0.26	2	16.76	4.37	-8.26	N/A	N/A
Apixaban Users	5,036	1,439.16	104.38	0.29	36	25.01	7.15			

Table 3e. Effect Estimates for Major Extracranial Bleeding, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and HASBLED

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	365	96.74	96.76	0.26	1	13.20	3.50	-12.06	0.51 (0.12, 2.22)	N/A
Apixaban Users	5,026	1,440.13	104.66	0.29	36	25.26	7.24			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

Table 4a. Effect Estimates for Gastrointestinal Hemorrhage, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Site-Adjusted Analysis, Unweighted										
Dabigatran Users	20,163	5,271.54	95.49	0.26	32	6.07	1.59	0.20	1.04 (0.71, 1.51)	0.858
Apixaban Users	96,668	32,203.97	121.68	0.33	189	5.87	1.96			
Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed										
Dabigatran Users	20,159	5,271.11	95.50	0.26	32	6.07	1.59	0.43	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	181	5.64	1.88			
Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²										
Dabigatran Users	18,882	5,071.94	98.11	0.27	37	7.20	1.93	1.77	1.34 (0.88, 2.05)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	174	5.43	1.81			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

Table 4b. Effect Estimates for Gastrointestinal Hemorrhage, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Age Group

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Gastrointestinal Hemorrhage, Truncation Weight = 1, ATEs Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	32	6.07	1.59	0.20	1.04 (0.71, 1.51)	0.858
Apixaban Users	96,668	32,203.97	121.68	0.33	189	5.87	1.96			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	32	6.07	1.59	0.43	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	181	5.64	1.88			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	37	7.20	1.93	1.77	1.34 (0.88, 2.05)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	174	5.43	1.81			
Gastrointestinal Hemorrhage, Truncation Weight = 1, ATEs Weights, Age Group: 21-49 years										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	3,484	668.62	70.10	0.19	4	5.98	1.15	4.35	3.99 (1.10, 14.50)	0.036
Apixaban Users	14,485	3,674.75	92.66	0.25	6	1.63	0.41			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	3,454	663.72	70.19	0.19	4	6.03	1.16	4.35	N/A	N/A
Apixaban Users	14,105	3,583.54	92.80	0.25	6	1.67	0.43			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	3,285	647.43	71.99	0.20	2	3.37	0.66	1.77	2.34 (0.63, 8.69)	N/A
Apixaban Users	14,098	3,571.57	92.53	0.25	6	1.60	0.41			
Gastrointestinal Hemorrhage, Truncation Weight = 1, ATEs Weights, Age Group: 50-64 years										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	16,675	4,602.49	100.81	0.28	28	6.08	1.68	-0.08	0.98 (0.65, 1.46)	0.911
Apixaban Users	81,715	28,407.01	126.97	0.35	175	6.16	2.14			

Table 4b. Effect Estimates for Gastrointestinal Hemorrhage, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Age Group

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	16,674	4,602.32	100.82	0.28	28	6.08	1.68	-0.08	N/A	N/A
Apixaban Users	81,643	28,388.32	127.00	0.35	175	6.16	2.14			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	15,562	4,396.32	103.19	0.28	33	7.54	2.13	1.58	1.27 (0.82, 1.98)	N/A
Apixaban Users	81,592	28,344.92	126.89	0.35	169	5.96	2.07			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

Table 4c. Effect Estimates for Gastrointestinal Hemorrhage, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Sex

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Gastrointestinal Hemorrhage, Truncation Weight = 1, ATEs Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	32	6.07	1.59	0.20	1.04 (0.71, 1.51)	0.858
Apixaban Users	96,668	32,203.97	121.68	0.33	189	5.87	1.96			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	32	6.07	1.59	0.43	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	181	5.64	1.88			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	37	7.20	1.93	1.77	1.34 (0.88, 2.05)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	174	5.43	1.81			
Gastrointestinal Hemorrhage, Truncation Weight = 1, ATEs Weights, Sex: Female										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	4,706	1,318.26	102.32	0.28	11	8.34	2.34	2.12	1.34 (0.70, 2.55)	0.375
Apixaban Users	28,211	10,128.41	131.13	0.36	63	6.22	2.23			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	4,701	1,317.93	102.40	0.28	11	8.35	2.34	2.19	N/A	N/A
Apixaban Users	27,987	10,073.77	131.47	0.36	62	6.15	2.22			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	4,394	1,261.57	104.87	0.29	11	8.88	2.55	2.95	1.49 (0.73, 3.07)	N/A
Apixaban Users	27,965	10,091.59	131.81	0.36	60	5.94	2.14			
Gastrointestinal Hemorrhage, Truncation Weight = 1, ATEs Weights, Sex: Male										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	15,453	3,952.85	93.43	0.26	21	5.31	1.36	-0.06	0.98 (0.62, 1.56)	0.936
Apixaban Users	67,989	21,953.35	117.94	0.32	118	5.38	1.74			

Table 4c. Effect Estimates for Gastrointestinal Hemorrhage, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Sex

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	15,444	3,951.52	93.45	0.26	21	5.31	1.36	-0.03	N/A	N/A
Apixaban Users	67,640	21,873.93	118.12	0.32	117	5.35	1.73			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	14,465	3,772.56	95.26	0.26	23	6.02	1.57	0.84	1.16 (0.70, 1.94)	N/A
Apixaban Users	67,595	21,812.71	117.86	0.32	113	5.18	1.67			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

Table 4d. Effect Estimates for Gastrointestinal Hemorrhage, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and CHADVASC

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Gastrointestinal Hemorrhage, Truncation Weight = 1, ATEs Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	32	6.07	1.59	0.20	1.04 (0.71, 1.51)	0.858
Apixaban Users	96,668	32,203.97	121.68	0.33	189	5.87	1.96			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	32	6.07	1.59	0.43	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	181	5.64	1.88			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	37	7.20	1.93	1.77	1.34 (0.88, 2.05)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	174	5.43	1.81			
Gastrointestinal Hemorrhage, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 0										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	4,125	888.16	78.64	0.22	7	7.88	1.70	5.38	3.52 (1.30, 9.52)	0.013
Apixaban Users	14,037	3,592.64	93.48	0.26	9	2.51	0.64			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	4,087	879.45	78.60	0.22	7	7.96	1.71	5.41	N/A	N/A
Apixaban Users	13,766	3,528.55	93.62	0.26	9	2.55	0.65			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	3,881	823.66	77.51	0.21	6	7.72	1.64	4.89	3.07 (1.07, 8.77)	N/A
Apixaban Users	13,719	3,518.08	93.66	0.26	10	2.82	0.72			
Gastrointestinal Hemorrhage, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 1										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	7,293	1,849.50	92.63	0.25	5	2.70	0.69	-1.02	0.73 (0.29, 1.88)	0.519
Apixaban Users	30,310	9,944.66	119.84	0.33	37	3.72	1.22			

Table 4d. Effect Estimates for Gastrointestinal Hemorrhage, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and CHADVASC

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	7,275	1,846.11	92.69	0.25	5	2.71	0.69	-1.03	N/A	N/A
Apixaban Users	30,065	9,895.34	120.22	0.33	37	3.74	1.23			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	6,746	1,733.14	93.84	0.26	4	2.42	0.62	-1.18	0.67 (0.25, 1.79)	N/A
Apixaban Users	30,000	9,864.18	120.09	0.33	36	3.60	1.18			
Gastrointestinal Hemorrhage, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 2										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	5,417	1,552.77	104.70	0.29	6	3.86	1.11	-2.60	0.57 (0.24, 1.31)	0.185
Apixaban Users	25,743	9,587.10	136.02	0.37	62	6.47	2.41			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	5,405	1,549.87	104.73	0.29	6	3.87	1.11	-2.52	N/A	N/A
Apixaban Users	25,596	9,548.66	136.26	0.37	61	6.39	2.38			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	4,886	1,406.11	105.11	0.29	8	5.81	1.67	-0.31	0.90 (0.38, 2.12)	N/A
Apixaban Users	25,510	9,519.60	136.30	0.37	58	6.12	2.28			
Gastrointestinal Hemorrhage, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 3										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	2,270	666.19	107.19	0.29	11	16.51	4.85	11.07	2.99 (1.49, 6.01)	0.002
Apixaban Users	15,433	5,512.90	130.47	0.36	30	5.44	1.94			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	2,246	660.55	107.42	0.29	11	16.65	4.90	11.15	N/A	N/A
Apixaban Users	15,182	5,447.03	131.05	0.36	30	5.51	1.98			

Table 4d. Effect Estimates for Gastrointestinal Hemorrhage, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and CHADVASC

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	1,913	568.87	108.62	0.30	8	14.12	4.20	8.79	2.52 (1.13, 5.64)	N/A
Apixaban Users	15,147	5,455.73	131.56	0.36	29	5.33	1.92			
Gastrointestinal Hemorrhage, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 4										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	802	228.57	104.10	0.28	3	13.13	3.74	0.86	1.02 (0.31, 3.34)	0.974
Apixaban Users	7,939	2,609.57	120.06	0.33	32	12.26	4.03			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	779	221.74	103.97	0.28	3	13.53	3.85	1.73	N/A	N/A
Apixaban Users	7,137	2,372.41	121.41	0.33	28	11.80	3.92			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	661	195.54	108.00	0.30	3	13.56	4.01	1.94	1.15 (0.32, 4.09)	N/A
Apixaban Users	7,121	2,380.20	122.08	0.33	28	11.62	3.88			
Gastrointestinal Hemorrhage, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 5+										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	252	85.92	124.53	0.34	0	0.00	0.00	-13.18	NaN	N/A
Apixaban Users	2,738	834.89	111.38	0.30	11	13.18	4.02			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	224	75.24	122.69	0.34	0	0.00	0.00	-11.57	N/A	N/A
Apixaban Users	1,894	605.05	116.68	0.32	7	11.57	3.70			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	179	62.44	127.28	0.35	0	0.00	0.00	-10.78	NaN	N/A
Apixaban Users	1,892	609.88	117.75	0.32	7	10.78	3.47			

¹All values in this section are weighted.

²ATES = Average Treatment Effect, Stabilized.

*NaN: Not a Number

Table 4e. Effect Estimates for Gastrointestinal Hemorrhage, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and HASBLED

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Gastrointestinal Hemorrhage, Truncation Weight = 1, ATEs Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	32	6.07	1.59	0.20	1.04 (0.71, 1.51)	0.858
Apixaban Users	96,668	32,203.97	121.68	0.33	189	5.87	1.96			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	32	6.07	1.59	0.43	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	181	5.64	1.88			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	37	7.20	1.93	1.77	1.34 (0.88, 2.05)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	174	5.43	1.81			
Gastrointestinal Hemorrhage, Truncation Weight = 2.5, ATEs Weights, HASBLED: 0										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	5,809	1,349.29	84.84	0.23	9	6.67	1.55	3.98	2.76 (1.22, 6.23)	0.015
Apixaban Users	21,862	6,325.65	105.68	0.29	17	2.69	0.78			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	5,791	1,345.43	84.86	0.23	9	6.69	1.55	3.98	N/A	N/A
Apixaban Users	21,615	6,265.29	105.87	0.29	17	2.71	0.79			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	5,408	1,263.65	85.34	0.23	8	6.24	1.46	3.37	2.34 (1.02, 5.34)	N/A
Apixaban Users	21,541	6,218.74	105.45	0.29	18	2.87	0.83			
Gastrointestinal Hemorrhage, Truncation Weight = 2.5, ATEs Weights, HASBLED: 1										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	11,451	3,152.68	100.56	0.28	14	4.44	1.22	0.27	1.03 (0.58, 1.83)	0.917
Apixaban Users	51,557	18,442.73	130.66	0.36	77	4.18	1.49			

Table 4e. Effect Estimates for Gastrointestinal Hemorrhage, Truncation Weight = 2.5%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and HASBLED

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	11,435	3,149.56	100.60	0.28	14	4.45	1.22	0.31	N/A	N/A
Apixaban Users	51,235	18,381.35	131.04	0.36	76	4.13	1.48			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	10,380	2,900.27	102.06	0.28	15	5.21	1.46	1.18	1.26 (0.67, 2.35)	N/A
Apixaban Users	51,099	18,307.48	130.86	0.36	74	4.02	1.44			
Gastrointestinal Hemorrhage, Truncation Weight = 2.5, ATES Weights, HASBLED: 2										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	2,424	647.66	97.59	0.27	7	10.81	2.89	1.08	1.08 (0.49, 2.38)	0.845
Apixaban Users	17,216	5,756.82	122.14	0.33	56	9.73	3.25			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	2,417	646.51	97.70	0.27	7	10.83	2.90	1.04	N/A	N/A
Apixaban Users	17,003	5,722.03	122.92	0.34	56	9.79	3.29			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	2,100	580.23	100.94	0.28	7	11.70	3.23	2.24	1.25 (0.53, 2.96)	N/A
Apixaban Users	16,963	5,716.61	123.09	0.34	54	9.46	3.19			
Gastrointestinal Hemorrhage, Truncation Weight = 2.5, ATES Weights, HASBLED: 3+										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	475	121.49	93.42	0.26	2	16.46	4.21	-3.45	0.74 (0.17, 3.11)	0.679
Apixaban Users	5,565	1,556.56	102.16	0.28	31	19.92	5.57			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	458	119.35	95.18	0.26	2	16.76	4.37	-2.70	N/A	N/A
Apixaban Users	5,036	1,439.16	104.38	0.29	28	19.46	5.56			

Table 4e. Effect Estimates for Gastrointestinal Hemorrhage, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and HASBLED

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	365	96.74	96.76	0.26	1	13.20	3.50	-6.44	0.63 (0.14, 2.81)	N/A
Apixaban Users	5,026	1,440.13	104.66	0.29	28	19.64	5.63			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

Table 5a. Effect Estimates for Intracranial Hemorrhage, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Site-Adjusted Analysis, Unweighted										
Dabigatran Users	20,163	5,271.54	95.49	0.26	8	1.52	0.40	0.31	1.25 (0.58, 2.69)	0.562
Apixaban Users	96,668	32,203.97	121.68	0.33	39	1.21	0.40			
Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed										
Dabigatran Users	20,159	5,271.11	95.50	0.26	8	1.52	0.40	0.33	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	38	1.18	0.40			
Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²										
Dabigatran Users	18,882	5,071.94	98.11	0.27	8	1.65	0.44	0.49	1.43 (0.58, 3.52)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	37	1.16	0.39			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

Table 5b. Effect Estimates for Intracranial Hemorrhage, Truncation Weight = 1%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Age Group

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Intracranial Hemorrhage, Truncation Weight = 1, ATES Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	8	1.52	0.40	0.31	1.25 (0.58, 2.69)	0.562
Apixaban Users	96,668	32,203.97	121.68	0.33	39	1.21	0.40			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	8	1.52	0.40	0.33	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	38	1.18	0.40			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	8	1.65	0.44	0.49	1.43 (0.58, 3.52)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	37	1.16	0.39			
Intracranial Hemorrhage, Truncation Weight = 1, ATES Weights, Age Group: 21-49 years										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	3,484	668.62	70.10	0.19	0	0.00	0.00	-0.27	NaN	N/A
Apixaban Users	14,485	3,674.75	92.66	0.25	1	0.27	0.07			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	3,454	663.72	70.19	0.19	0	0.00	0.00	-0.28	N/A	N/A
Apixaban Users	14,105	3,583.54	92.80	0.25	1	0.28	0.07			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	3,285	647.43	71.99	0.20	0	0.00	0.00	-0.32	NaN	N/A
Apixaban Users	14,098	3,571.57	92.53	0.25	1	0.32	0.08			
Intracranial Hemorrhage, Truncation Weight = 1, ATES Weights, Age Group: 50-64 years										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	16,675	4,602.49	100.81	0.28	8	1.74	0.48	0.44	1.33 (0.62, 2.86)	0.468
Apixaban Users	81,715	28,407.01	126.97	0.35	37	1.30	0.45			

Table 5b. Effect Estimates for Intracranial Hemorrhage, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Age Group

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	16,674	4,602.32	100.82	0.28	8	1.74	0.48	0.43	N/A	N/A
Apixaban Users	81,643	28,388.32	127.00	0.35	37	1.30	0.45			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	15,562	4,396.32	103.19	0.28	8	1.86	0.53	0.59	1.46 (0.59, 3.57)	N/A
Apixaban Users	81,592	28,344.92	126.89	0.35	36	1.27	0.44			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

*NaN: Not a Number

Table 5c. Effect Estimates for Intracranial Hemorrhage, Truncation Weight = 1%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Sex

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Intracranial Hemorrhage, Truncation Weight = 1, ATES Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	8	1.52	0.40	0.31	1.25 (0.58, 2.69)	0.562
Apixaban Users	96,668	32,203.97	121.68	0.33	39	1.21	0.40			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	8	1.52	0.40	0.33	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	38	1.18	0.40			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	8	1.65	0.44	0.49	1.43 (0.58, 3.52)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	37	1.16	0.39			
Intracranial Hemorrhage, Truncation Weight = 1, ATES Weights, Sex: Female										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	4,706	1,318.26	102.32	0.28	1	0.76	0.21	0.17	1.14 (0.14, 9.56)	0.904
Apixaban Users	28,211	10,128.41	131.13	0.36	6	0.59	0.21			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	4,701	1,317.93	102.40	0.28	0	0.00	0.00	-0.60	N/A	N/A
Apixaban Users	27,987	10,073.77	131.47	0.36	6	0.60	0.21			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATES, Trimmed²</i>										
Dabigatran Users	4,394	1,261.57	104.87	0.29	0	0.00	0.00	-0.58	NaN	N/A
Apixaban Users	27,965	10,091.59	131.81	0.36	6	0.58	0.21			
Intracranial Hemorrhage, Truncation Weight = 1, ATES Weights, Sex: Male										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	15,453	3,952.85	93.43	0.26	7	1.77	0.45	0.31	1.26 (0.55, 2.86)	0.583
Apixaban Users	67,989	21,953.35	117.94	0.32	32	1.46	0.47			

Table 5c. Effect Estimates for Intracranial Hemorrhage, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and Sex

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	15,444	3,951.52	93.45	0.26	7	1.77	0.45	0.35	N/A	N/A
Apixaban Users	67,640	21,873.93	118.12	0.32	31	1.42	0.46			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	14,465	3,772.56	95.26	0.26	8	2.23	0.58	0.84	1.63 (0.64, 4.15)	N/A
Apixaban Users	67,595	21,812.71	117.86	0.32	30	1.39	0.45			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

*NaN: Not a Number

Table 5d. Effect Estimates for Intracranial Hemorrhage, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and CHADVASC

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Intracranial Hemorrhage, Truncation Weight = 1, ATEs Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	8	1.52	0.40	0.31	1.25 (0.58, 2.69)	0.562
Apixaban Users	96,668	32,203.97	121.68	0.33	39	1.21	0.40			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	8	1.52	0.40	0.33	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	38	1.18	0.40			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	8	1.65	0.44	0.49	1.43 (0.58, 3.52)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	37	1.16	0.39			
Intracranial Hemorrhage, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 0										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	4,125	888.16	78.64	0.22	2	2.25	0.48	1.70	4.53 (0.63, 32.52)	0.133
Apixaban Users	14,037	3,592.64	93.48	0.26	2	0.56	0.14			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	4,087	879.45	78.60	0.22	2	2.27	0.49	1.99	N/A	N/A
Apixaban Users	13,766	3,528.55	93.62	0.26	1	0.28	0.07			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	3,881	823.66	77.51	0.21	1	1.55	0.33	1.20	5.10 (0.60, 43.17)	N/A
Apixaban Users	13,719	3,518.08	93.66	0.26	1	0.35	0.09			
Intracranial Hemorrhage, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 1										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	7,293	1,849.50	92.63	0.25	1	0.54	0.14	-0.46	0.50 (0.06, 3.91)	0.508
Apixaban Users	30,310	9,944.66	119.84	0.33	10	1.01	0.33			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										

Table 5d. Effect Estimates for Intracranial Hemorrhage, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and CHADVASC

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Dabigatran Users	7,275	1,846.11	92.69	0.25	1	0.54	0.14			
Apixaban Users	30,065	9,895.34	120.22	0.33	10	1.01	0.33	-0.47	N/A	N/A
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	6,746	1,733.14	93.84	0.26	1	0.41	0.10			
Apixaban Users	30,000	9,864.18	120.09	0.33	10	1.04	0.34	-0.64	0.37 (0.05, 2.74)	N/A
Intracranial Hemorrhage, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 2										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	5,417	1,552.77	104.70	0.29	0	0.00	0.00			
Apixaban Users	25,743	9,587.10	136.02	0.37	8	0.83	0.31	-0.83	NaN	N/A
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	5,405	1,549.87	104.73	0.29	0	0.00	0.00			
Apixaban Users	25,596	9,548.66	136.26	0.37	8	0.84	0.31	-0.84	N/A	N/A
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	4,886	1,406.11	105.11	0.29	0	0.00	0.00			
Apixaban Users	25,510	9,519.60	136.30	0.37	8	0.83	0.31	-0.83	NaN	N/A
Intracranial Hemorrhage, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 3										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	2,270	666.19	107.19	0.29	2	3.00	0.88			
Apixaban Users	15,433	5,512.90	130.47	0.36	10	1.81	0.65	1.19	1.82 (0.39, 8.40)	0.443
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	2,246	660.55	107.42	0.29	2	3.03	0.89			
Apixaban Users	15,182	5,447.03	131.05	0.36	10	1.84	0.66	1.19	N/A	N/A
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	1,913	568.87	108.62	0.30	1	2.40	0.71			
Apixaban Users	15,147	5,455.73	131.56	0.36	9	1.73	0.62	0.66	1.58 (0.32, 7.78)	N/A

Table 5d. Effect Estimates for Intracranial Hemorrhage, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and CHADVASC

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Intracranial Hemorrhage, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 4										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	802	228.57	104.10	0.28	3	13.13	3.74	11.59	8.50 (1.88, 38.37)	0.005
Apixaban Users	7,939	2,609.57	120.06	0.33	4	1.53	0.50			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	779	221.74	103.97	0.28	3	13.53	3.85	12.26	N/A	N/A
Apixaban Users	7,137	2,372.41	121.41	0.33	3	1.26	0.42			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	661	195.54	108.00	0.30	4	22.13	6.54	20.90	16.28 (3.51, 75.44)	N/A
Apixaban Users	7,121	2,380.20	122.08	0.33	3	1.23	0.41			
Intracranial Hemorrhage, Truncation Weight = 2.5, ATEs Weights, CHADVASC: 5+										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	252	85.92	124.53	0.34	0	0.00	0.00	-4.79	NaN	N/A
Apixaban Users	2,738	834.89	111.38	0.30	4	4.79	1.46			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	224	75.24	122.69	0.34	0	0.00	0.00	-3.31	N/A	N/A
Apixaban Users	1,894	605.05	116.68	0.32	2	3.31	1.06			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	179	62.44	127.28	0.35	0	0.00	0.00	-3.27	NaN	N/A
Apixaban Users	1,892	609.88	117.75	0.32	2	3.27	1.05			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

*NaN: Not a Number

Table 5e. Effect Estimates for Intracranial Hemorrhage, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and HASBLED

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Intracranial Hemorrhage, Truncation Weight = 1, ATEs Weights										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	20,163	5,271.54	95.49	0.26	8	1.52	0.40	0.31	1.25 (0.58, 2.69)	0.562
Apixaban Users	96,668	32,203.97	121.68	0.33	39	1.21	0.40			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	20,159	5,271.11	95.50	0.26	8	1.52	0.40	0.33	N/A	N/A
Apixaban Users	96,200	32,081.76	121.81	0.33	38	1.18	0.40			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	18,882	5,071.94	98.11	0.27	8	1.65	0.44	0.49	1.43 (0.58, 3.52)	N/A
Apixaban Users	96,132	31,999.87	121.58	0.33	37	1.16	0.39			
Intracranial Hemorrhage, Truncation Weight = 2.5, ATEs Weights, HASBLED: 0										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	5,809	1,349.29	84.84	0.23	3	2.22	0.52	1.59	3.32 (0.74, 14.97)	0.119
Apixaban Users	21,862	6,325.65	105.68	0.29	4	0.63	0.18			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	5,791	1,345.43	84.86	0.23	3	2.23	0.52	1.59	N/A	N/A
Apixaban Users	21,615	6,265.29	105.87	0.29	4	0.64	0.19			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	5,408	1,263.65	85.34	0.23	2	1.44	0.34	0.77	2.14 (0.51, 8.94)	N/A
Apixaban Users	21,541	6,218.74	105.45	0.29	4	0.66	0.19			
Intracranial Hemorrhage, Truncation Weight = 2.5, ATEs Weights, HASBLED: 1										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	11,451	3,152.68	100.56	0.28	3	0.95	0.26	0.08	1.10 (0.32, 3.80)	0.878
Apixaban Users	51,557	18,442.73	130.66	0.36	16	0.87	0.31			

Table 5e. Effect Estimates for Intracranial Hemorrhage, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and HASBLED

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	11,435	3,149.56	100.60	0.28	3	0.95	0.26	0.08	N/A	N/A
Apixaban Users	51,235	18,381.35	131.04	0.36	16	0.87	0.31			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	10,380	2,900.27	102.06	0.28	3	1.14	0.32	0.23	1.27 (0.33, 4.83)	N/A
Apixaban Users	51,099	18,307.48	130.86	0.36	17	0.91	0.32			
Intracranial Hemorrhage, Truncation Weight = 2.5, ATEs Weights, HASBLED: 2										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	2,424	647.66	97.59	0.27	1	1.54	0.41	-0.19	0.91 (0.12, 7.12)	0.925
Apixaban Users	17,216	5,756.82	122.14	0.33	10	1.74	0.58			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	2,417	646.51	97.70	0.27	1	1.55	0.41	-0.20	N/A	N/A
Apixaban Users	17,003	5,722.03	122.92	0.34	10	1.75	0.59			
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	2,100	580.23	100.94	0.28	0	0.84	0.23	-0.85	0.53 (0.07, 4.21)	N/A
Apixaban Users	16,963	5,716.61	123.09	0.34	10	1.68	0.57			
Intracranial Hemorrhage, Truncation Weight = 2.5, ATEs Weights, HASBLED: 3+										
<i>Site-Adjusted Analysis, Unweighted</i>										
Dabigatran Users	475	121.49	93.42	0.26	1	8.23	2.11	3.09	1.49 (0.19, 11.96)	0.709
Apixaban Users	5,565	1,556.56	102.16	0.28	8	5.14	1.44			
<i>Inverse Probability of Treatment Weighted Analysis; Unweighted, Trimmed</i>										
Dabigatran Users	458	119.35	95.18	0.26	1	8.38	2.18	4.90	N/A	N/A
Apixaban Users	5,036	1,439.16	104.38	0.29	5	3.47	0.99			

Table 5e. Effect Estimates for Intracranial Hemorrhage, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, by Analysis Type and HASBLED

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Hazard Ratio (95% Confidence Interval)	Wald P-Value
<i>Inverse Probability of Treatment Weighted Analysis¹; Weight = ATEs, Trimmed²</i>										
Dabigatran Users	365	96.74	96.76	0.26	2	16.28	4.31	13.01	4.33 (0.52, 36.04)	N/A
Apixaban Users	5,026	1,440.13	104.66	0.29	5	3.27	0.94			

¹All values in this section are weighted.

²ATEs = Average Treatment Effect, Stabilized.

Table 6. Summary of Patient Level Cohort Attrition in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

	Thromboembolic Stroke, Truncation Weight = 1%, ATEs Weights				Major Extracranial Bleeding, Truncation Weight = 1%, ATEs Weights			
	Dabigatran Users		Apixaban Users		Dabigatran Users		Apixaban Users	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	246,834,749	N/A	246,834,749	N/A	246,834,749	N/A	246,834,749	N/A
Had required coverage type (medical and/or drug coverage)	157,517,945	89,316,804	157,517,945	89,316,804	157,517,945	89,316,804	157,517,945	89,316,804
Enrolled during specified age range	121,561,278	35,956,667	121,561,278	35,956,667	121,561,278	35,956,667	121,561,278	35,956,667
Had requestable medical charts	121,561,278	0	121,561,278	0	121,561,278	0	121,561,278	0
Met demographic requirements (sex, race, and Hispanic origin)	121,398,944	162,334	121,398,944	162,334	121,398,944	162,334	121,398,944	162,334
Members with a valid index event								
Had any cohort-defining claim during the query period	75,760	121,323,184	720,035	120,678,909	75,760	121,323,184	720,035	120,678,909
Claim recorded during specified age range	58,371	16,927	398,705	310,625	58,371	16,927	398,705	310,625
Episode defining index claim recorded during the query period	58,355	16	398,500	205	58,355	16	398,500	205
Members with required pre-index history								
Had sufficient pre-index continuous enrollment	39,161	19,194	277,487	121,013	39,161	19,194	277,487	121,013
Met inclusion and exclusion criteria ¹	20,240	18,921	97,700	179,787	20,240	18,921	97,700	179,787
<i>Evidence of dialysis</i>	N/A	32	N/A	3,213	N/A	32	N/A	3,213
<i>Evidence of kidney replacement, deep vein thrombosis, pulmonary embolism, joint replacement, mitral valve disease, valve replacement, or valve repair</i>	N/A	6,978	N/A	117,693	N/A	6,978	N/A	117,693

Table 6. Summary of Patient Level Cohort Attrition in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

	Thromboembolic Stroke, Truncation Weight = 1%, ATEs Weights				Major Extracranial Bleeding, Truncation Weight = 1%, ATEs Weights			
	Dabigatran Users		Apixaban Users		Dabigatran Users		Apixaban Users	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<i>Evidence of low-dose rivaroxaban or dabigatran, any dose of apixaban, edoxaban, or warfarin</i>	N/A	12,758	N/A	39,846	N/A	12,758	N/A	39,846
<i>Evidence of index exposure</i>	N/A	179	N/A	13,469	N/A	179	N/A	13,469
<i>Evidence of institutional stay encounter</i>	N/A	123	N/A	3,300	N/A	123	N/A	3,300
<i>No evidence of atrial fibrillation or flutter</i>	N/A	8,273	N/A	144,917	N/A	8,273	N/A	144,917
Met event incidence criteria	20,240	0	97,700	0	20,240	0	97,700	0
Members with required post-index follow-up								
Had sufficient post-index continuous enrollment	20,237	3	97,573	127	20,237	3	97,573	127
Had minimum days' supply on index date	20,237	0	97,573	0	20,237	0	97,573	0
Had index episode of at least required length	20,237	0	97,573	0	20,237	0	97,573	0
Had index episode longer than blackout period	20,223	14	97,453	120	20,221	16	97,440	133
Did not have an event during blackout period	20,221	2	97,440	13	20,221	0	97,440	0
Final cohort								
Number of members	20,221	N/A	97,440	N/A	20,221	N/A	97,440	N/A
Number of episodes	20,221	N/A	97,440	N/A	20,221	N/A	97,440	N/A
Members meeting comparative cohort eligibility requirements								
Excluded due to same-day initiation of both exposure groups	20,224	0	97,566	0	20,224	0	97,566	0
Excluded due to prior initiation of other exposure group	20,163	61	96,668	898	20,163	61	96,668	898

Table 6. Summary of Patient Level Cohort Attrition in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

	Thromboembolic Stroke, Truncation Weight = 1%, ATEs Weights				Major Extracranial Bleeding, Truncation Weight = 1%, ATEs Weights			
	Dabigatran Users		Apixaban Users		Dabigatran Users		Apixaban Users	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Excluded due to propensity score trimming	20,159	4	96,200	468	20,159	4	96,200	468
Included in comparative analysis	20,159	0	96,200	0	20,159	0	96,200	0
Additional information								
Number of events in comparative analysis	32	N/A	130	N/A	36	N/A	215	N/A
Number of patients with a truncated inverse probability of treatment weight	1,590	N/A	70	N/A	329	N/A	18	N/A

¹Patients can meet multiple inclusion and/or exclusion criteria; therefore, the total number of patients excluded overall may not equal the sum of all patients in each criterion.

Table 6. Summary of Patient Level Cohort Attrition in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

	Gastrointestinal Hemorrhage, Truncation Weight = 1%, ATEs Weights				Intracranial Hemorrhage, Truncation Weight = 1%, ATEs Weights			
	Dabigatran Users		Apixaban Users		Dabigatran Users		Apixaban Users	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	246,834,749	N/A	246,834,749	N/A	246,834,749	N/A	246,834,749	N/A
Had required coverage type (medical and/or drug coverage)	157,517,945	89,316,804	157,517,945	89,316,804	157,517,945	89,316,804	157,517,945	89,316,804
Enrolled during specified age range	121,561,278	35,956,667	121,561,278	35,956,667	121,561,278	35,956,667	121,561,278	35,956,667
Had requestable medical charts	121,561,278	0	121,561,278	0	121,561,278	0	121,561,278	0
Met demographic requirements (sex, race, and Hispanic origin)	121,398,944	162,334	121,398,944	162,334	121,398,944	162,334	121,398,944	162,334
Members with a valid index event								
Had any cohort-defining claim during the query period	75,760	121,323,184	720,035	120,678,909	75,760	121,323,184	720,035	120,678,909
Claim recorded during specified age range	58,371	16,927	398,705	310,625	58,371	16,927	398,705	310,625
Episode defining index claim recorded during the query period	58,355	16	398,500	205	58,355	16	398,500	205
Members with required pre-index history								
Had sufficient pre-index continuous enrollment	39,161	19,194	277,487	121,013	39,161	19,194	277,487	121,013
Met inclusion and exclusion criteria ¹	20,240	18,921	97,700	179,787	20,240	18,921	97,700	179,787
<i>Evidence of dialysis</i>	N/A	32	N/A	3,213	N/A	32	N/A	3,213
<i>Evidence of kidney replacement, deep vein thrombosis, pulmonary embolism, joint replacement, mitral valve disease, valve replacement, or valve repair</i>	N/A	6,978	N/A	117,693	N/A	6,978	N/A	117,693

Table 6. Summary of Patient Level Cohort Attrition in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

	Gastrointestinal Hemorrhage, Truncation Weight = 1%, ATEs Weights				Intracranial Hemorrhage, Truncation Weight = 1%, ATEs Weights			
	Dabigatran Users		Apixaban Users		Dabigatran Users		Apixaban Users	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<i>Evidence of low-dose rivaroxaban or dabigatran, any dose of apixaban, edoxaban, or warfarin</i>	N/A	12,758	N/A	39,846	N/A	12,758	N/A	39,846
<i>Evidence of index exposure</i>	N/A	179	N/A	13,469	N/A	179	N/A	13,469
<i>Evidence of institutional stay encounter</i>	N/A	123	N/A	3,300	N/A	123	N/A	3,300
<i>No evidence of atrial fibrillation or flutter</i>	N/A	8,273	N/A	144,917	N/A	8,273	N/A	144,917
Met event incidence criteria	20,240	0	97,700	0	20,240	0	97,700	0
Members with required post-index follow-up								
Had sufficient post-index continuous enrollment	20,237	3	97,573	127	20,237	3	97,573	127
Had minimum days' supply on index date	20,237	0	97,573	0	20,237	0	97,573	0
Had index episode of at least required length	20,237	0	97,573	0	20,237	0	97,573	0
Had index episode longer than blackout period	20,221	16	97,440	133	20,221	16	97,440	133
Did not have an event during blackout period	20,221	0	97,440	0	20,221	0	97,440	0
Final cohort								
Number of members	20,221	N/A	97,440	N/A	20,221	N/A	97,440	N/A
Number of episodes	20,221	N/A	97,440	N/A	20,221	N/A	97,440	N/A
Members meeting comparative cohort eligibility requirements								
Excluded due to same-day initiation of both exposure groups	20,224	0	97,566	0	20,224	0	97,566	0
Excluded due to prior initiation of other exposure group	20,163	61	96,668	898	20,163	61	96,668	898

Table 6. Summary of Patient Level Cohort Attrition in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

	Gastrointestinal Hemorrhage, Truncation Weight = 1%, ATEs Weights				Intracranial Hemorrhage, Truncation Weight = 1%, ATEs Weights			
	Dabigatran Users		Apixaban Users		Dabigatran Users		Apixaban Users	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Excluded due to propensity score trimming	20,159	4	96,200	468	20,159	4	96,200	468
Included in comparative analysis	20,159	0	96,200	0	20,159	0	96,200	0
Additional information								
Number of events in comparative analysis	32	N/A	181	N/A	8	N/A	38	N/A
Number of patients with a truncated inverse probability of treatment weight	48	N/A	1	N/A	370	N/A	16	N/A

¹Patients can meet multiple inclusion and/or exclusion criteria; therefore, the total number of patients excluded overall may not equal the sum of all patients in each criterion.

Figure 1a. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

Unweighted Propensity Score Distribution Before Trimming

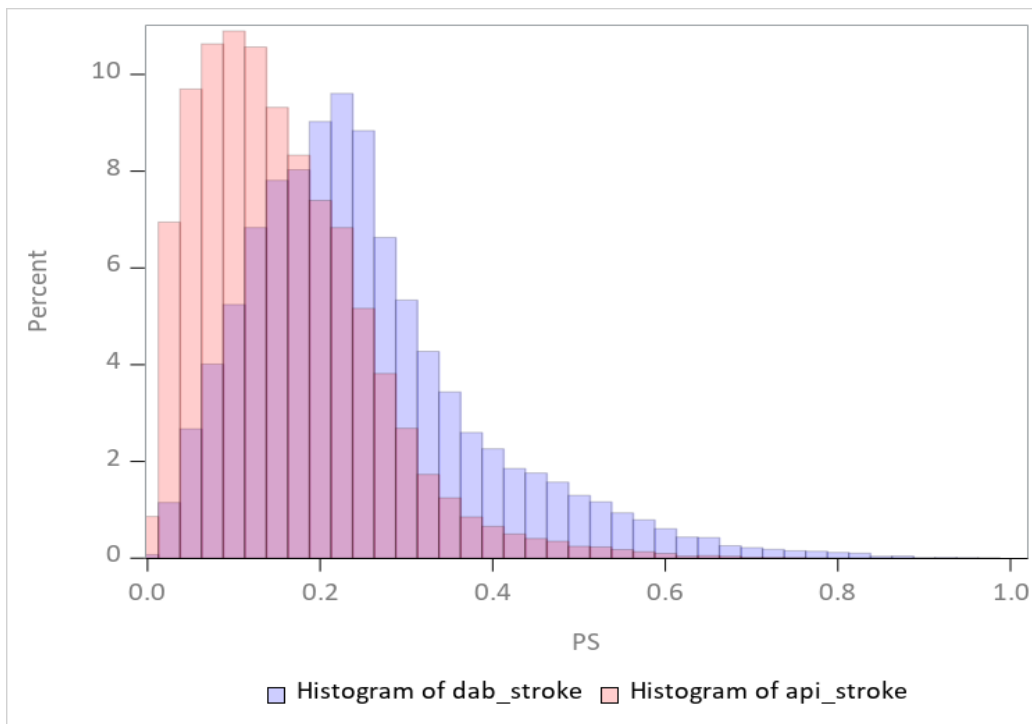


Figure 1a. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

Unweighted Propensity Score Distribution After Trimming

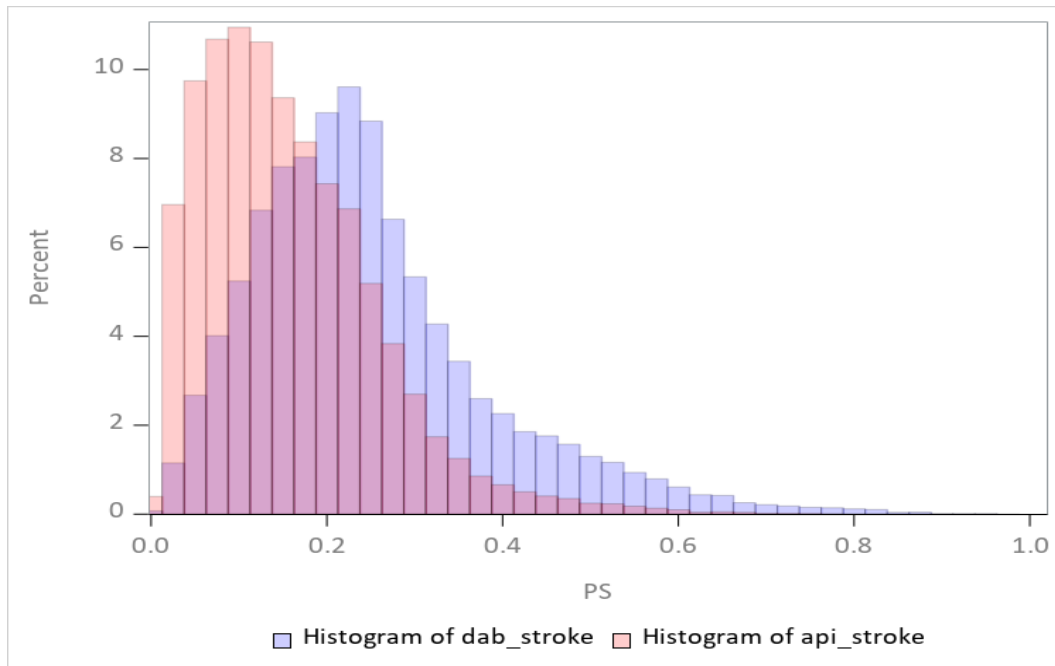


Figure 1a. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

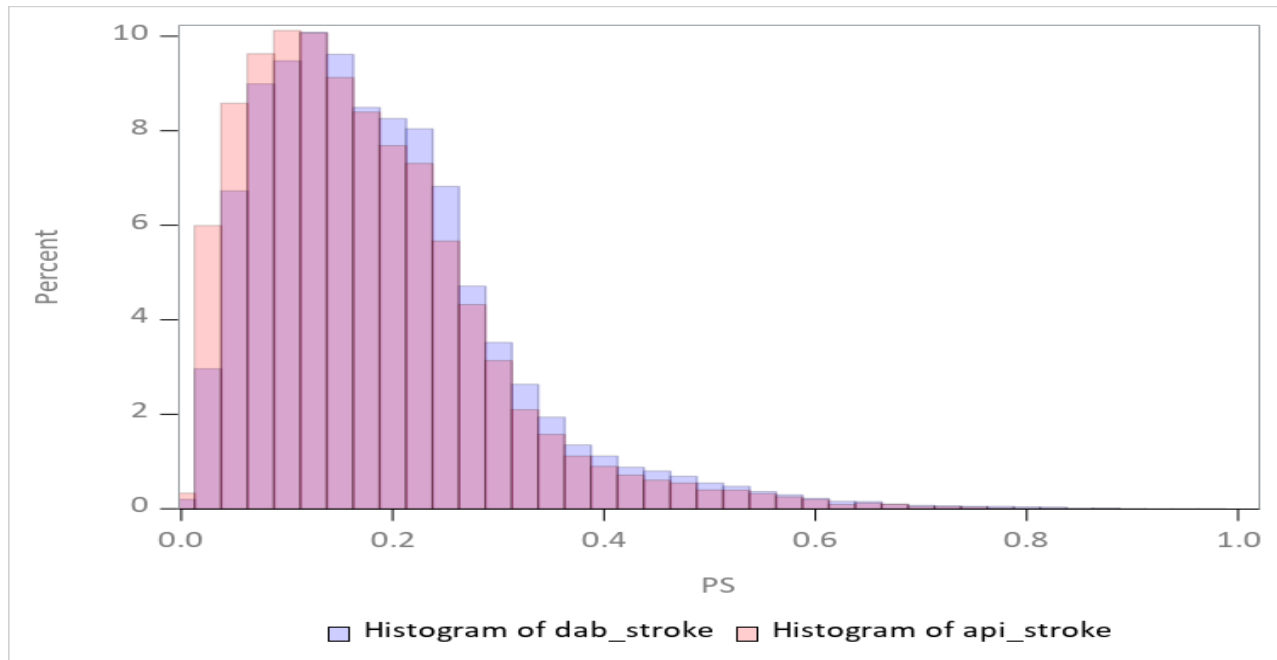


Figure 1b. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Female

Unweighted Propensity Score Distribution Before Trimming

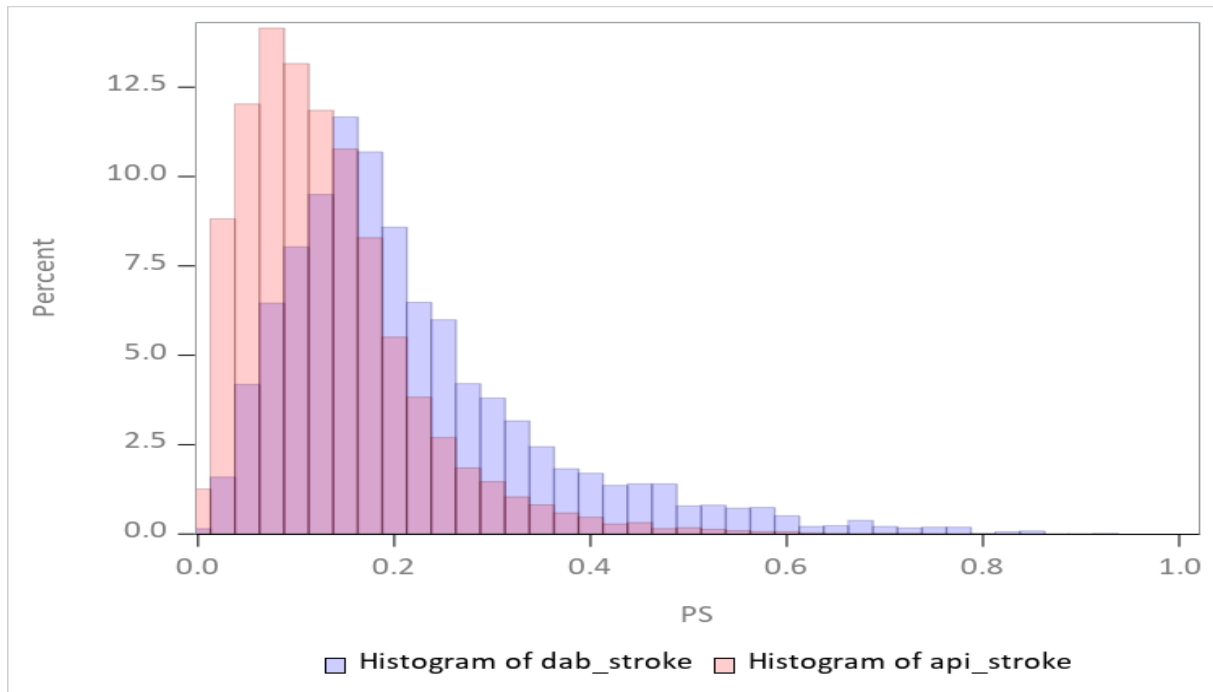


Figure 1b. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Female

Unweighted Propensity Score Distribution After Trimming

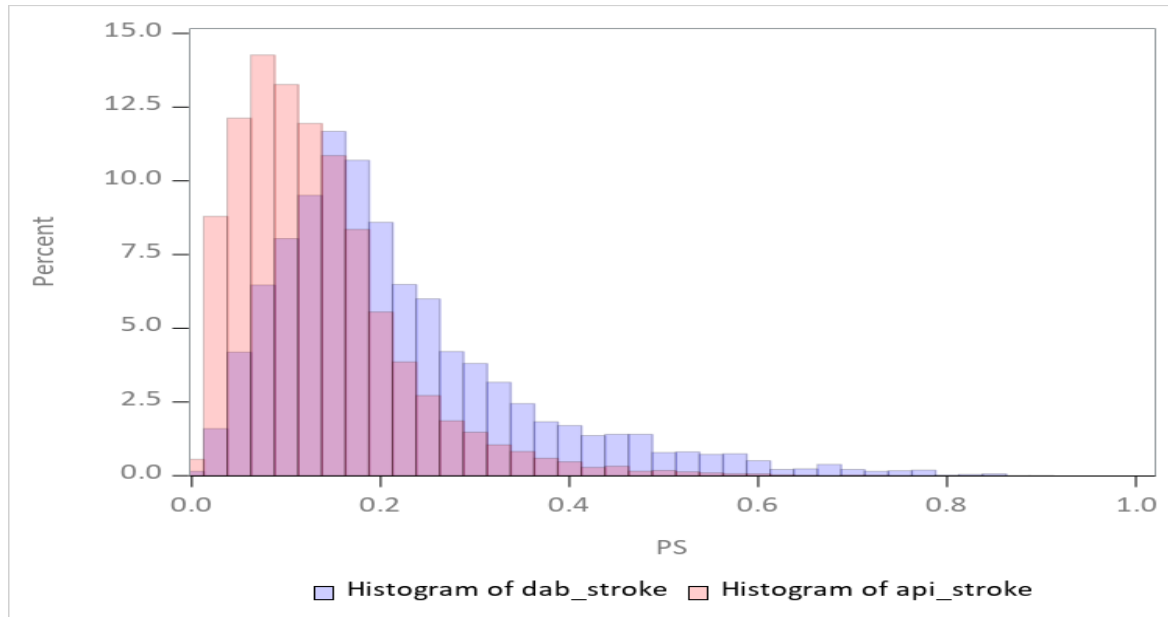


Figure 1b. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Female

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

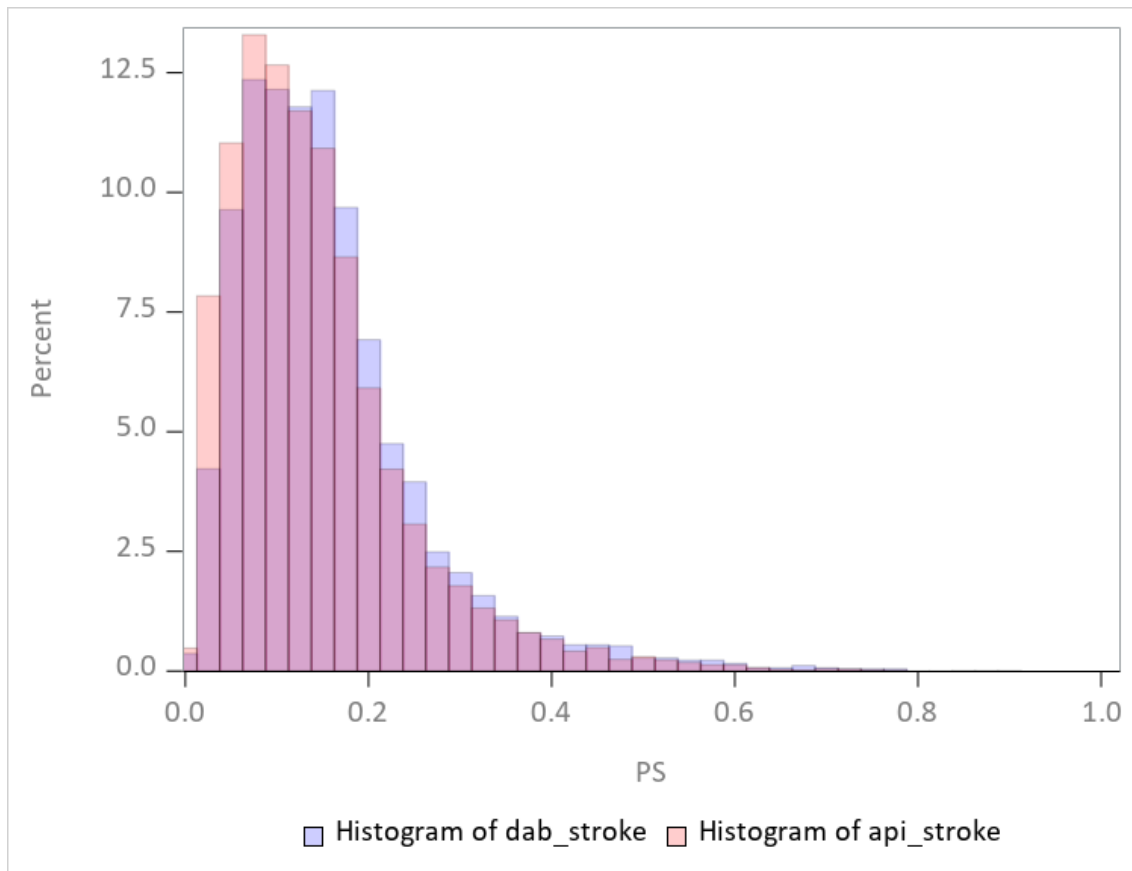


Figure 1c. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Male

Unweighted Propensity Score Distribution Before Trimming

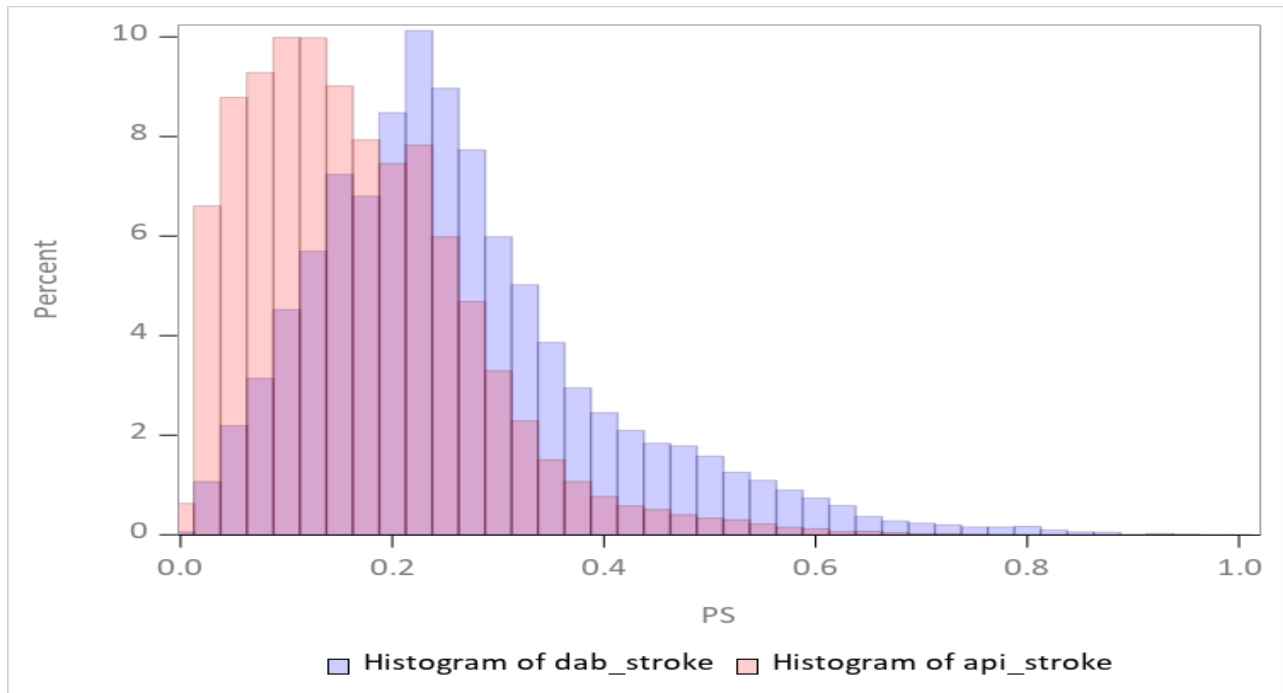


Figure 1c. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Male

Unweighted Propensity Score Distribution After Trimming

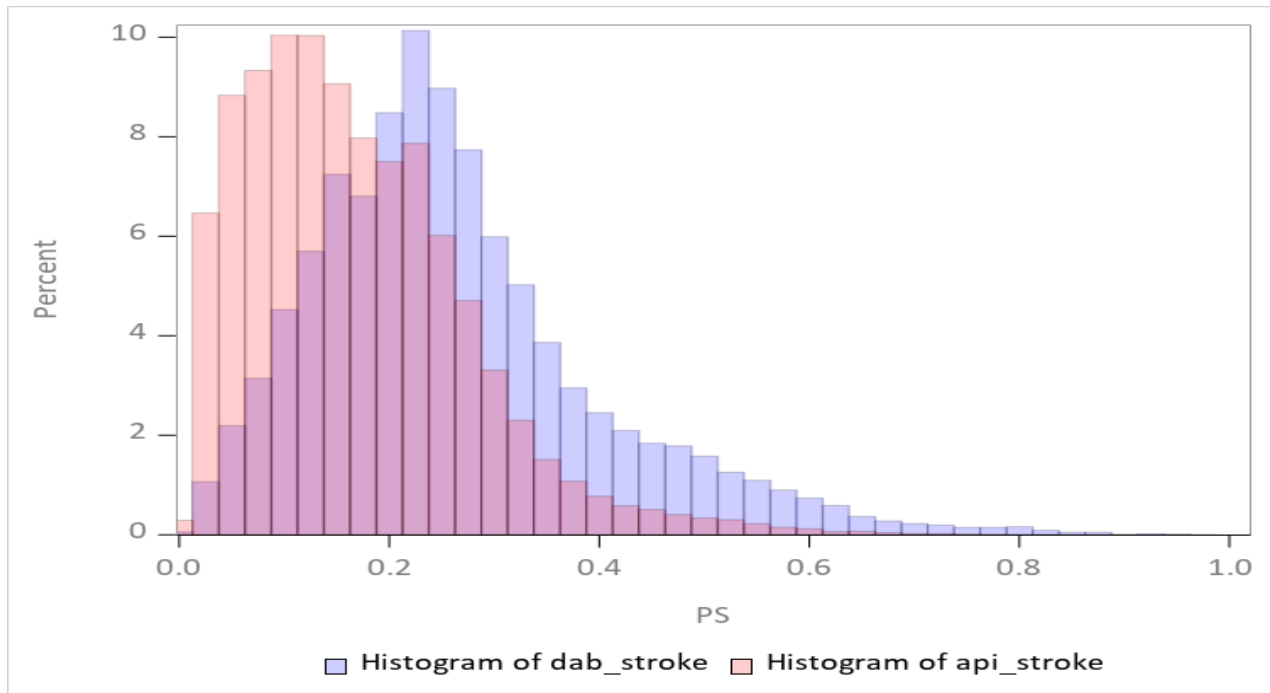


Figure 1c. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Sex: Male

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

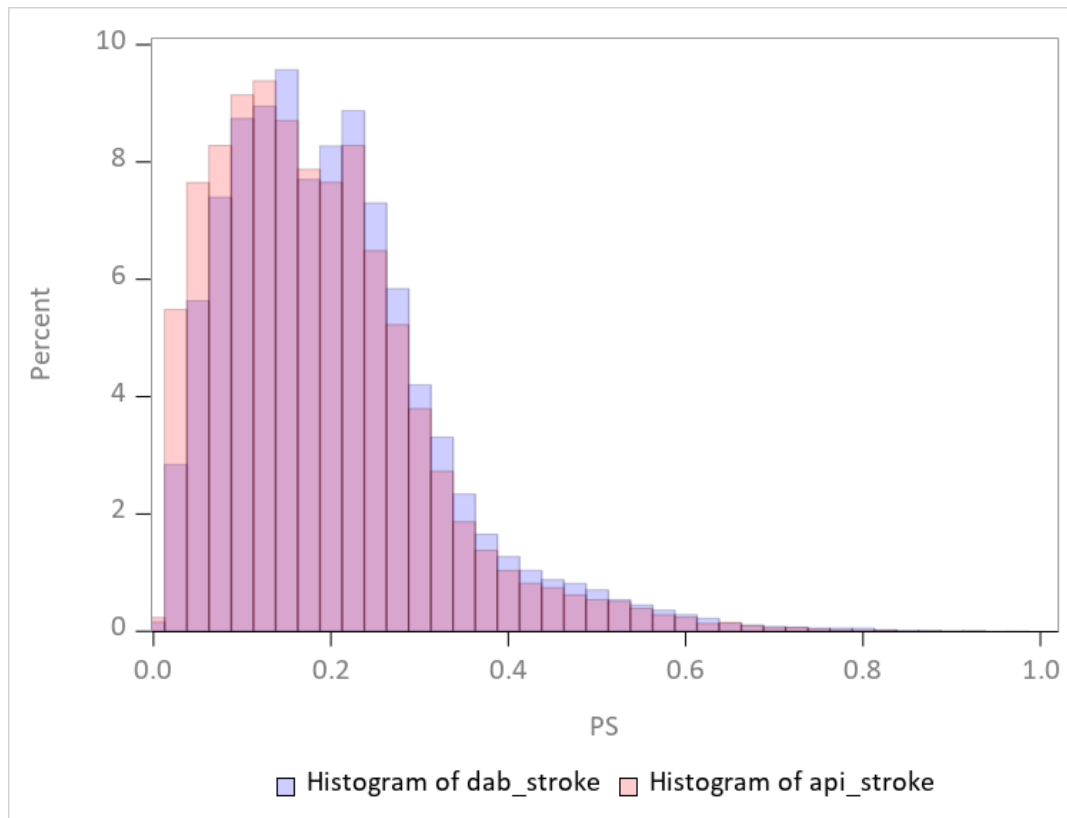


Figure 1d. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 21-49 years

Unweighted Propensity Score Distribution Before Trimming

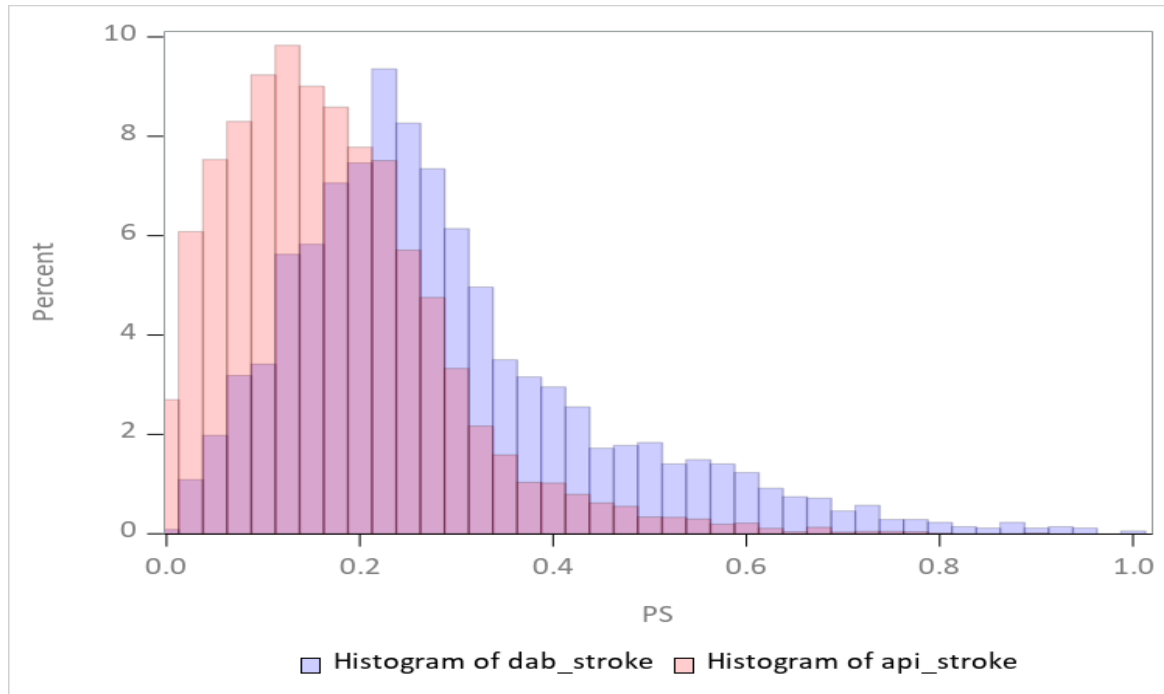


Figure 1d. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 21-49 years

Unweighted Propensity Score Distribution After Trimming

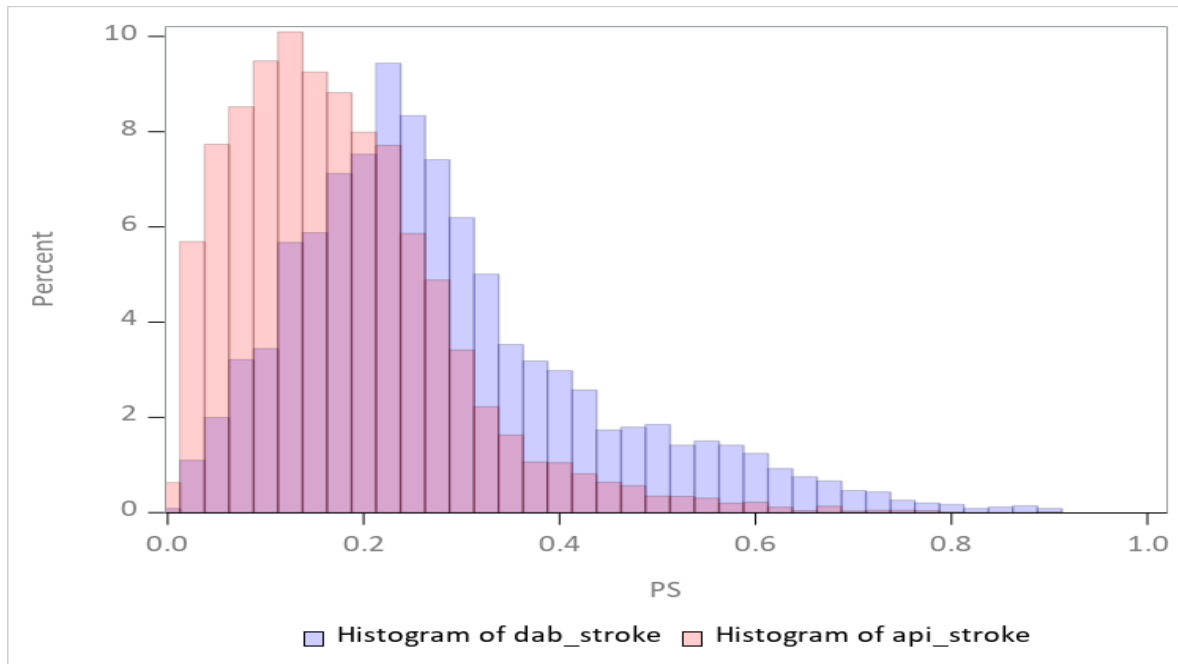


Figure 1d. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 21-49 years

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

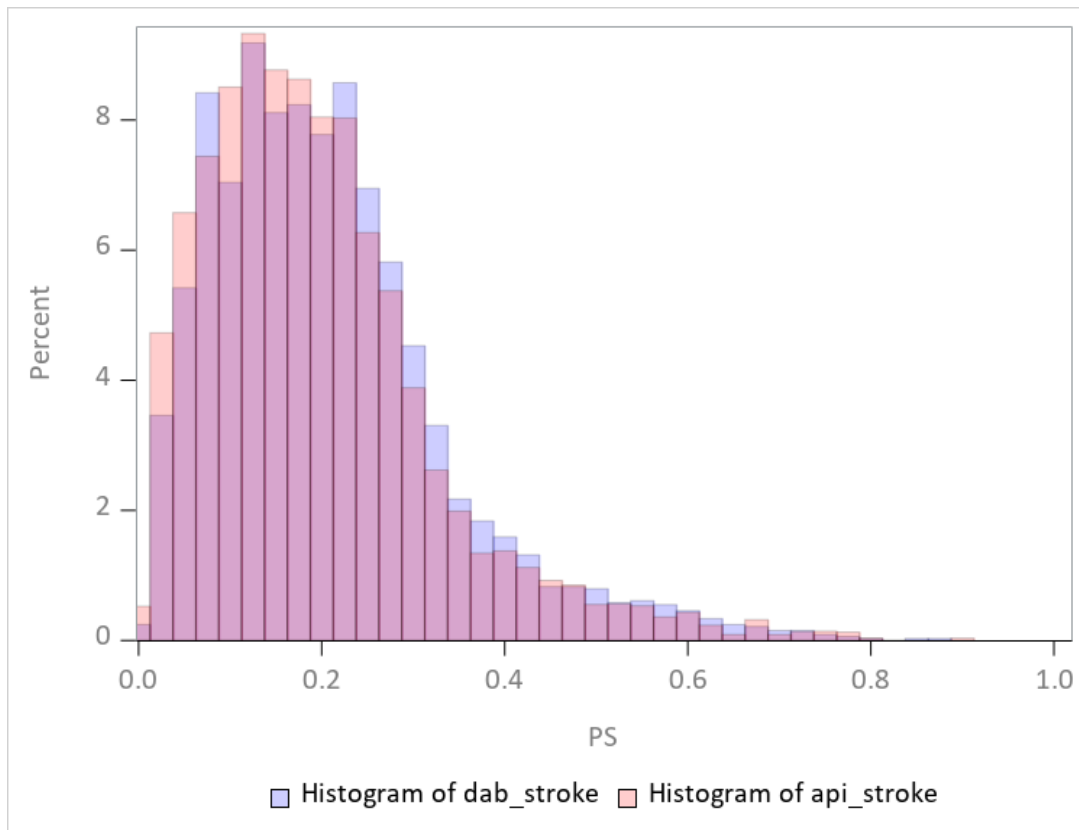


Figure 1e. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 50-64 years

Unweighted Propensity Score Distribution Before Trimming

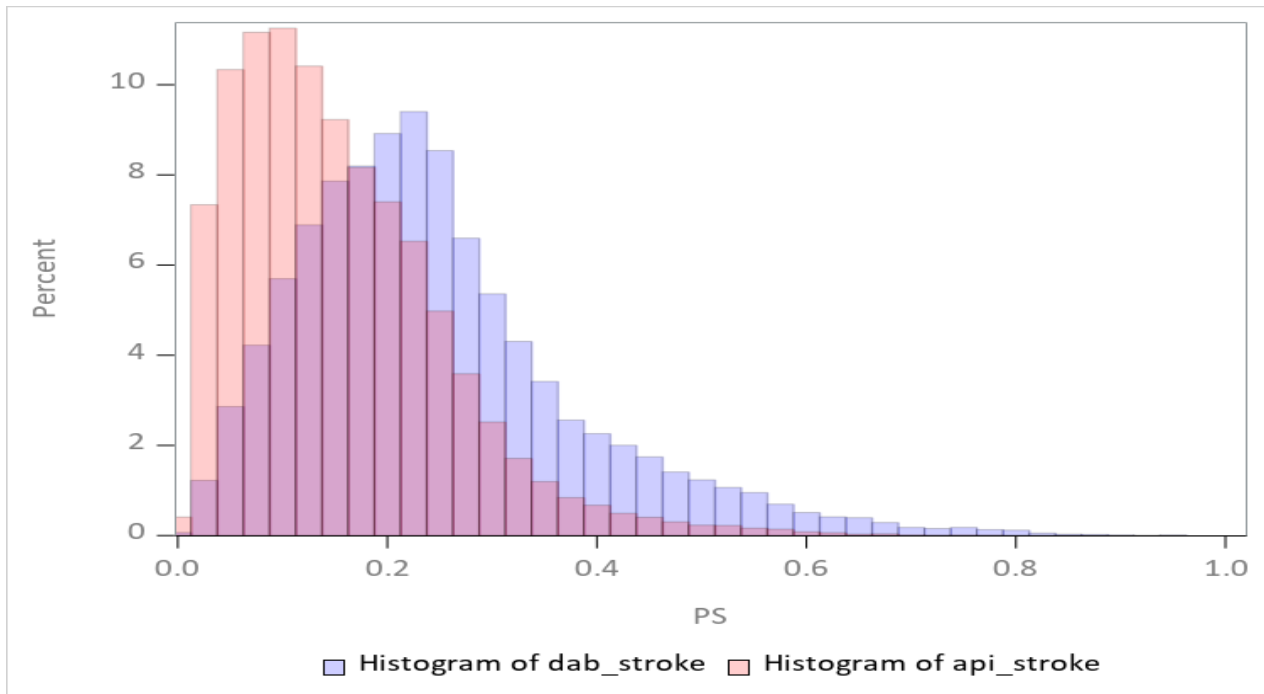


Figure 1e. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 50-64 years

Unweighted Propensity Score Distribution After Trimming

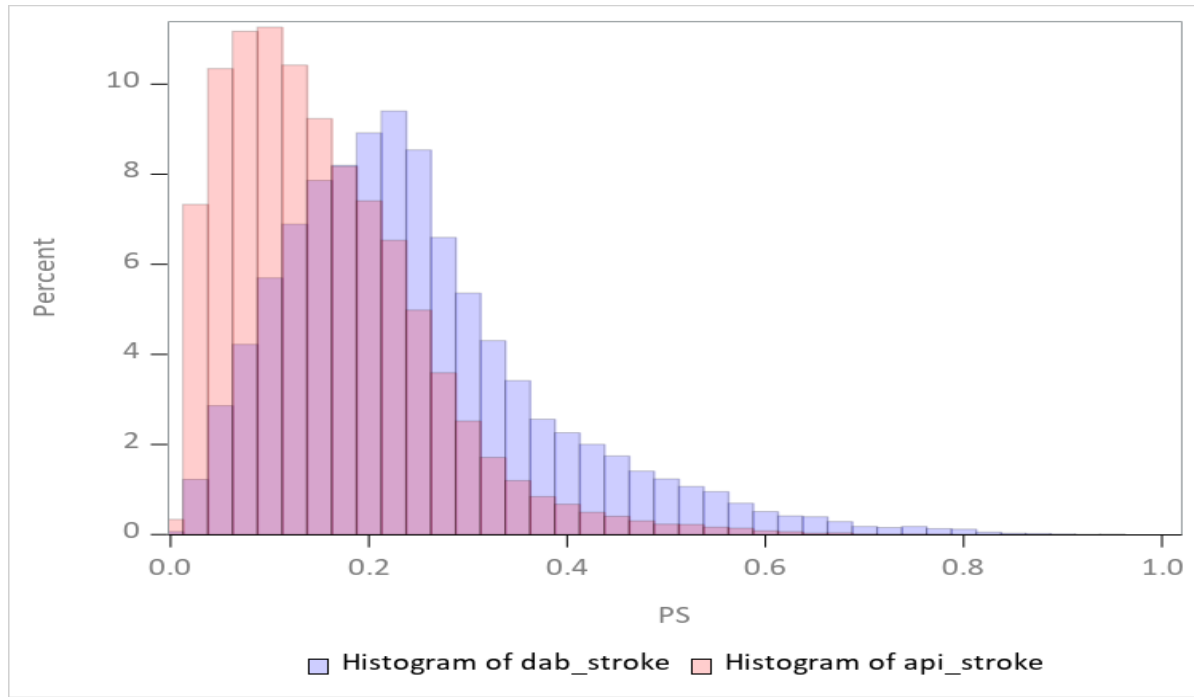


Figure 1e. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 1%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, Age Group: 50-64 years

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

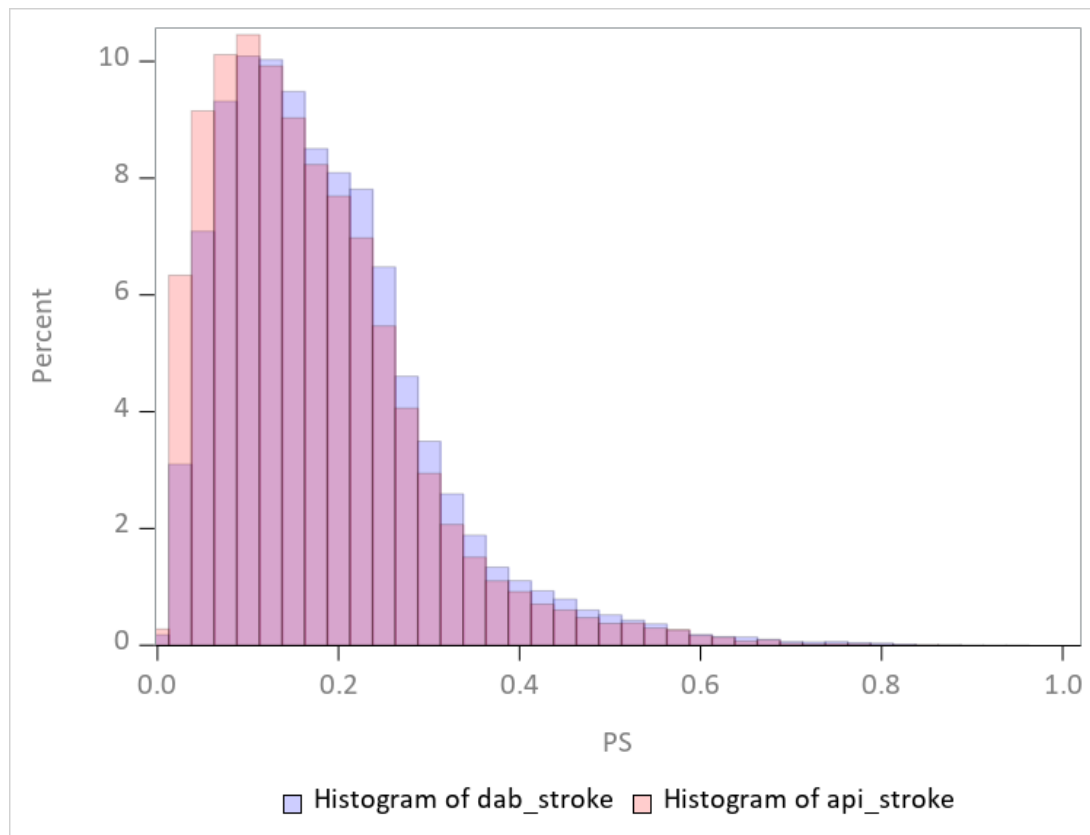


Figure 1f. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 0

Unweighted Propensity Score Distribution Before Trimming

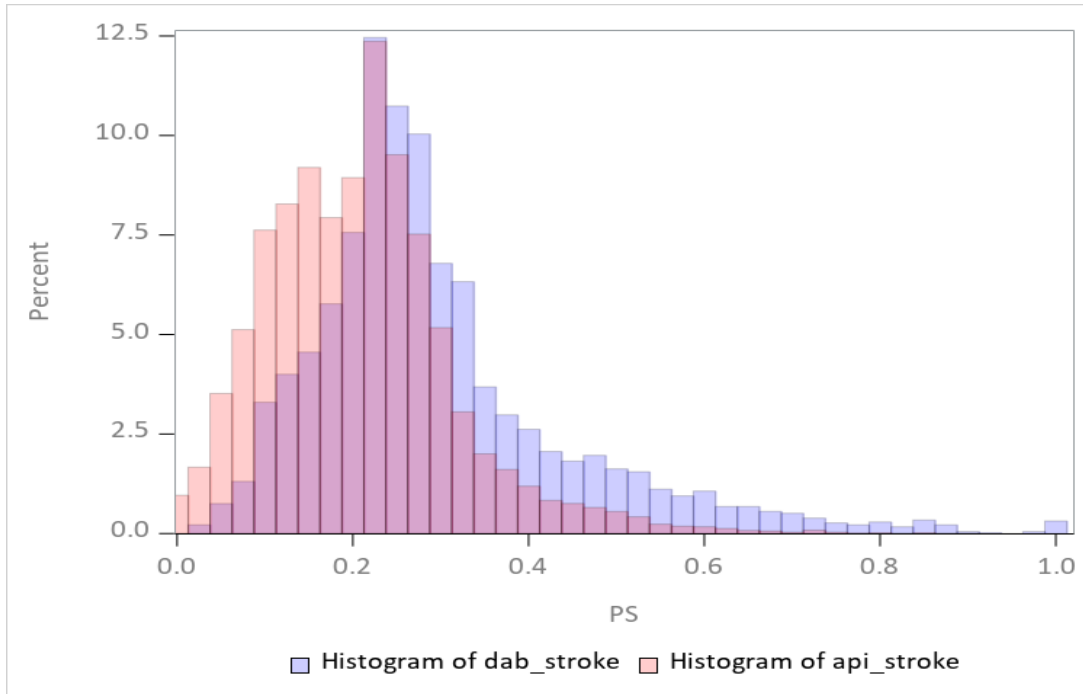


Figure 1f. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 0

Unweighted Propensity Score Distribution After Trimming

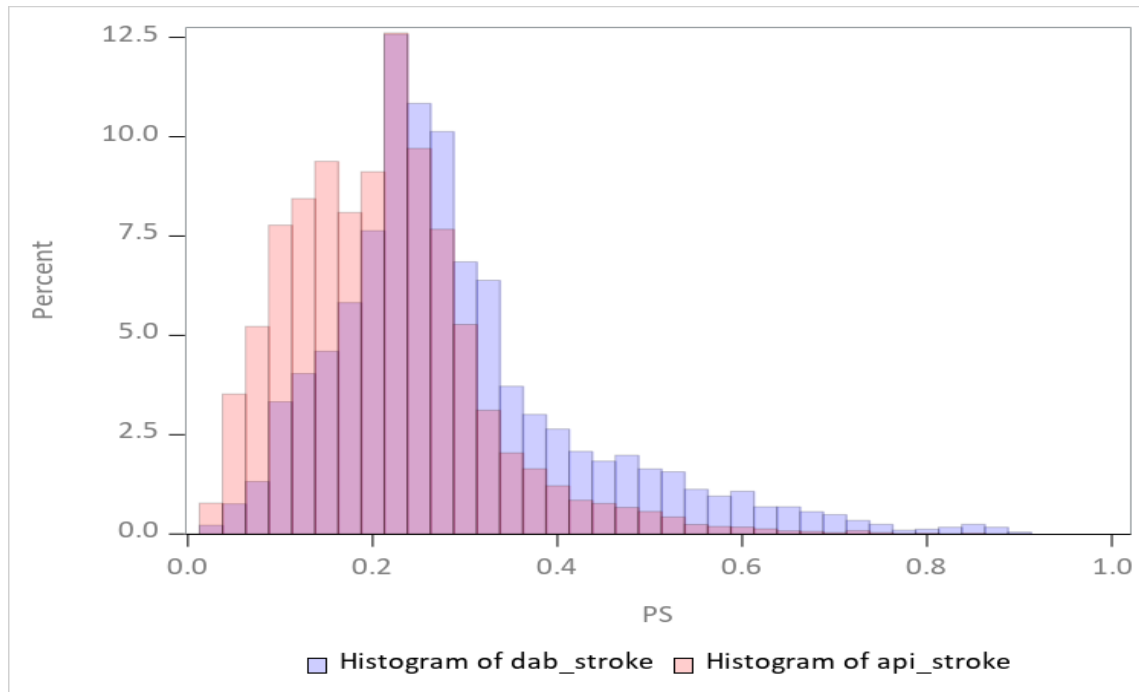


Figure 1f. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 0

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

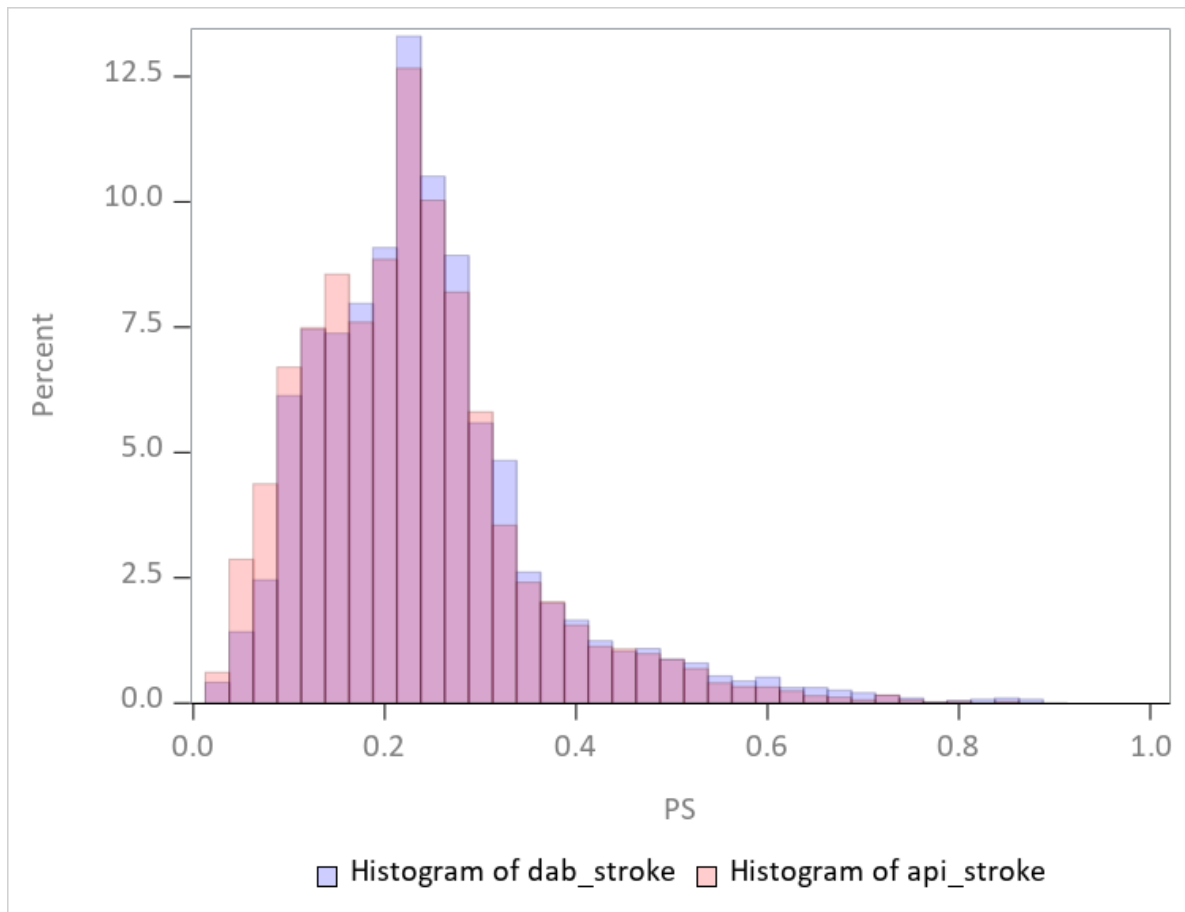


Figure 1g. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 1

Unweighted Propensity Score Distribution Before Trimming

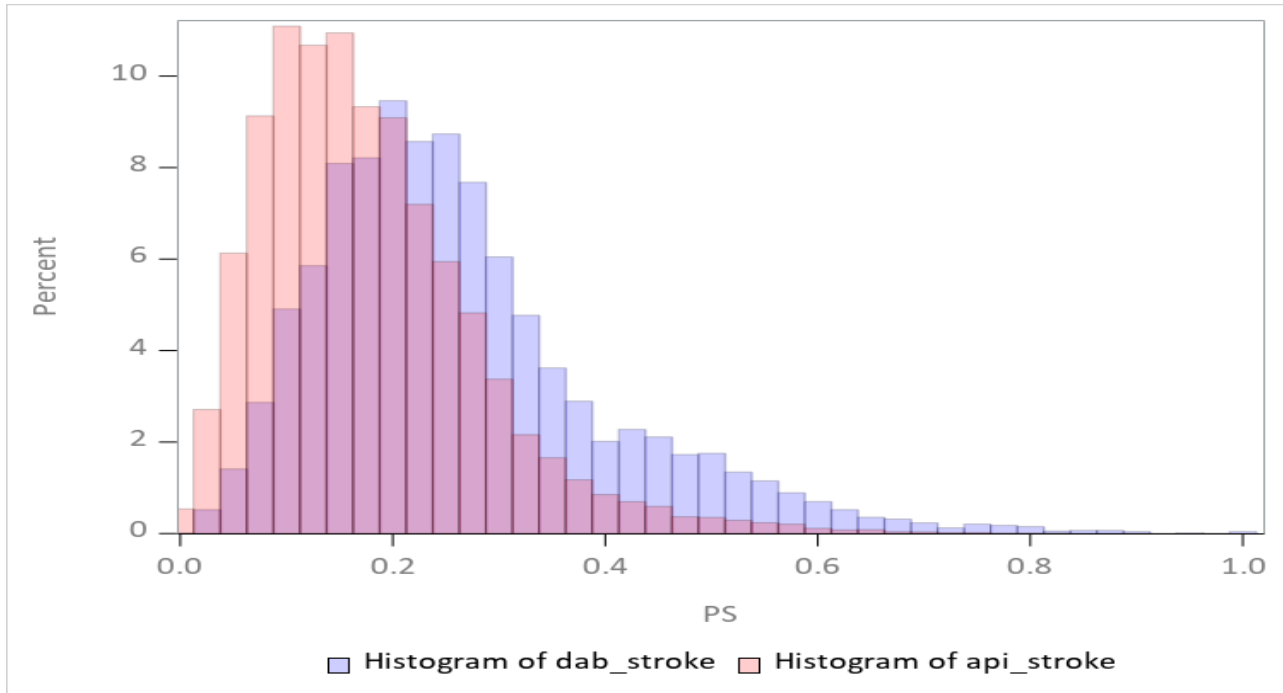
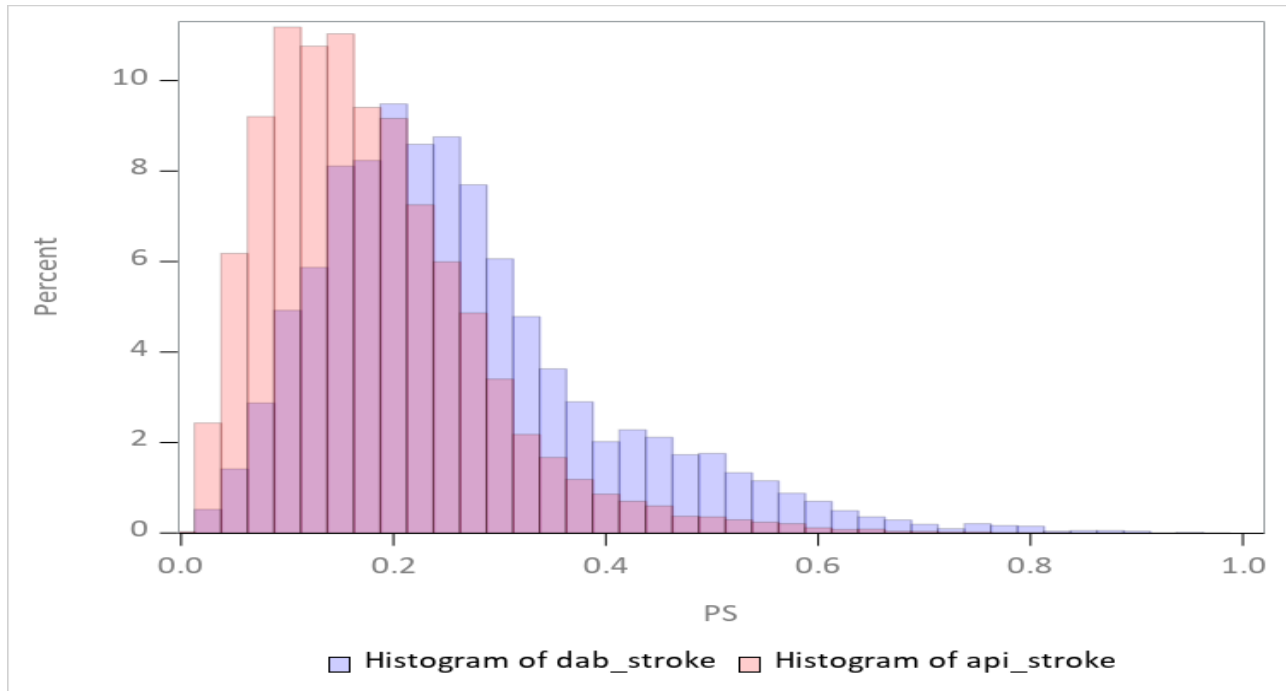


Figure 1g. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 1

Unweighted Propensity Score Distribution After Trimming



Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

Figure 1g. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 1

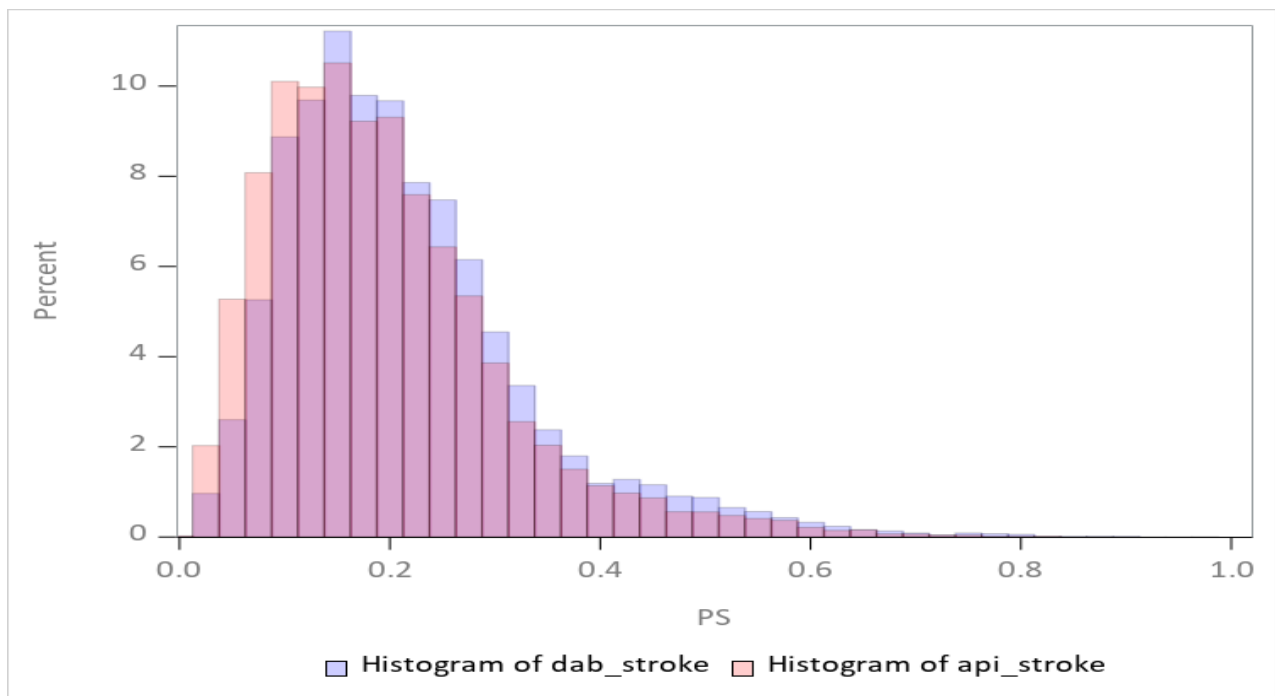


Figure 1h. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 2

Unweighted Propensity Score Distribution Before Trimming

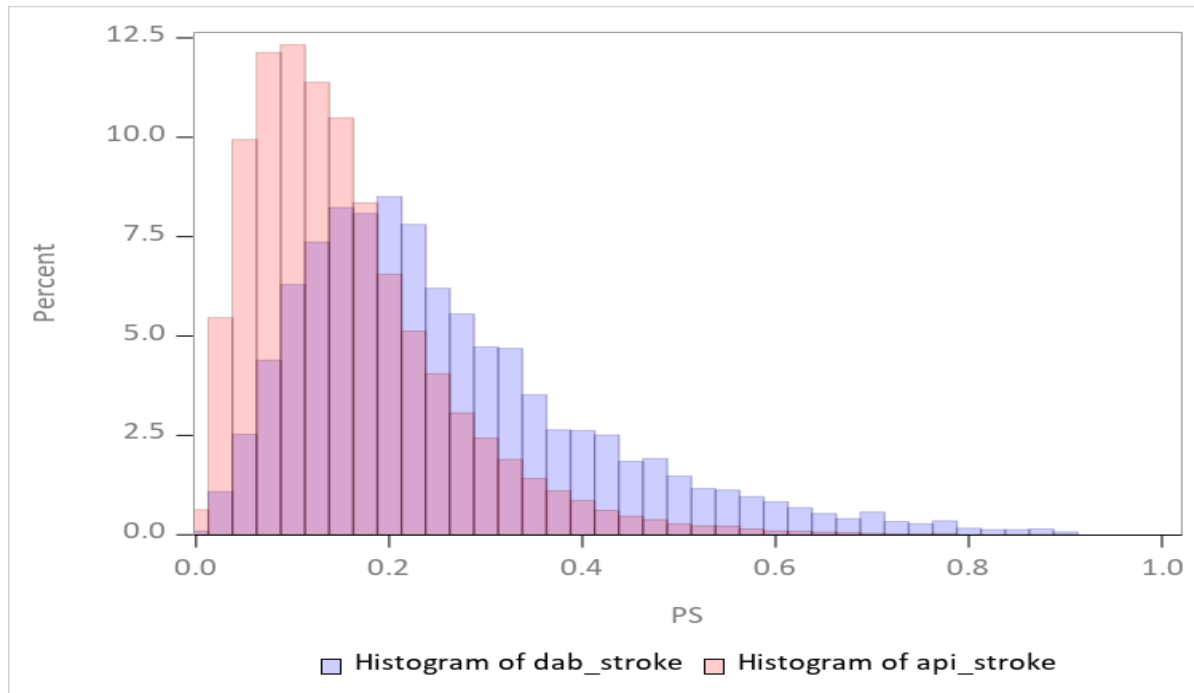


Figure 1h. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 2

Unweighted Propensity Score Distribution After Trimming

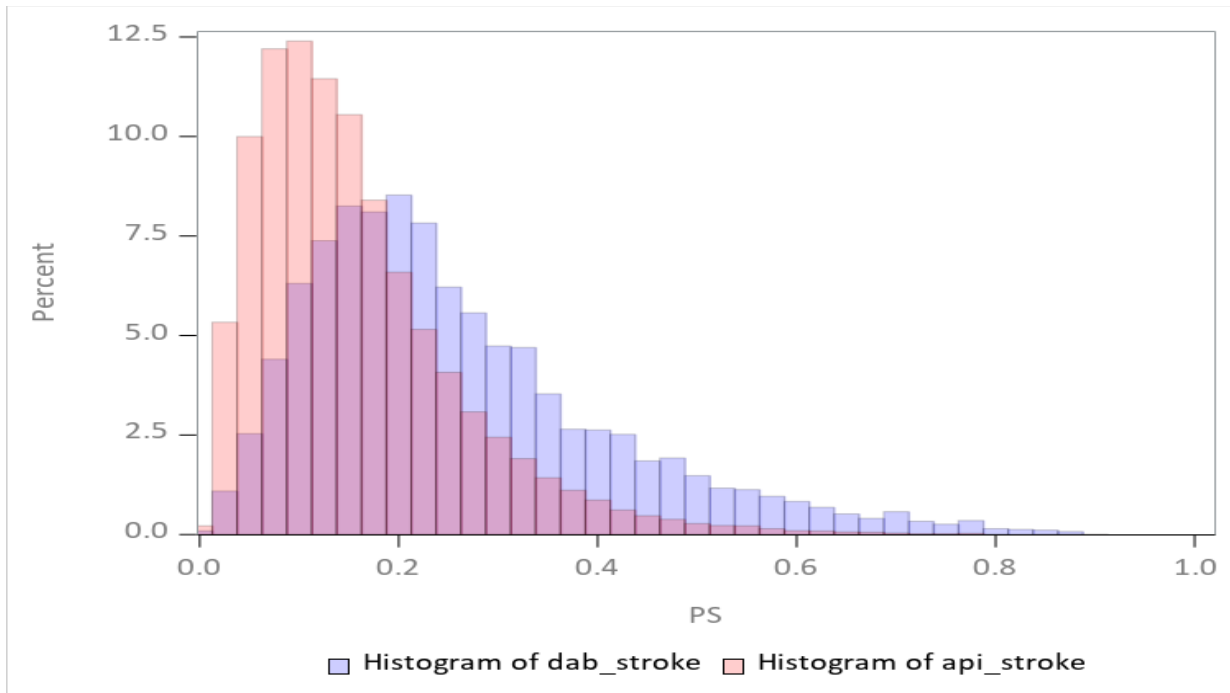


Figure 1h. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 2

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

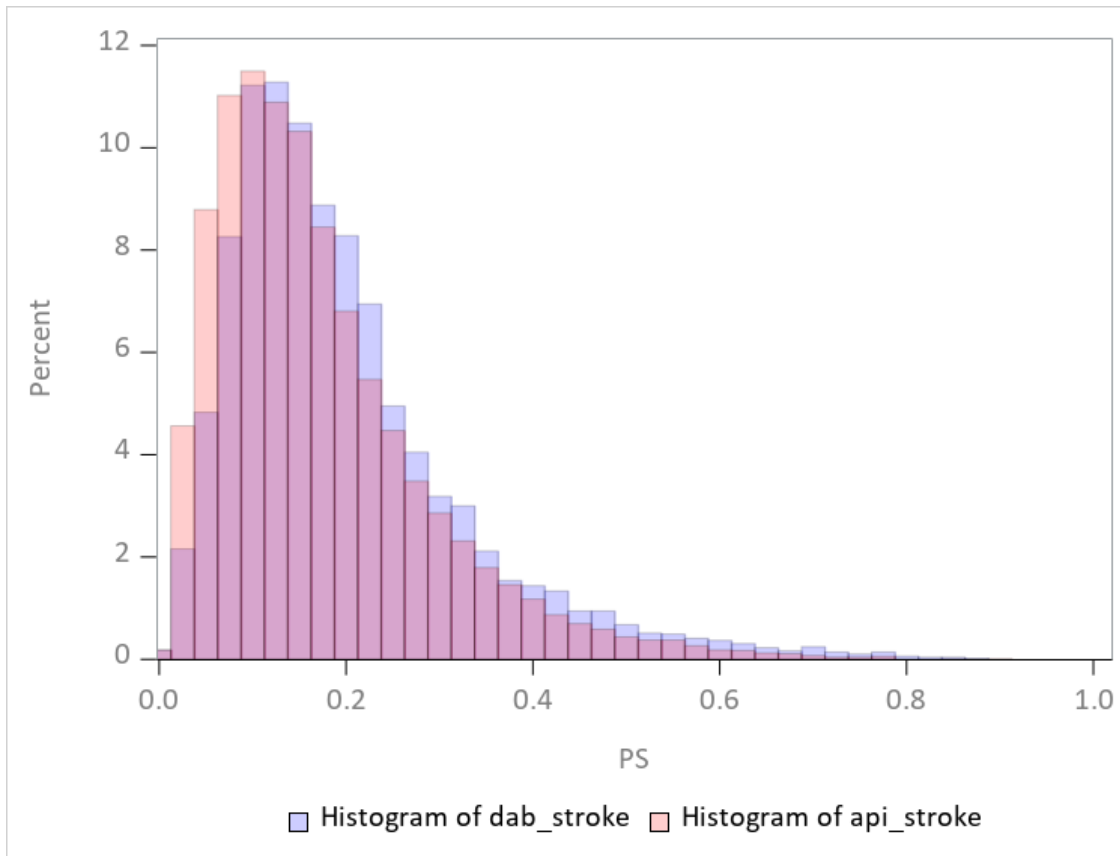


Figure 1i. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 3

Unweighted Propensity Score Distribution Before Trimming

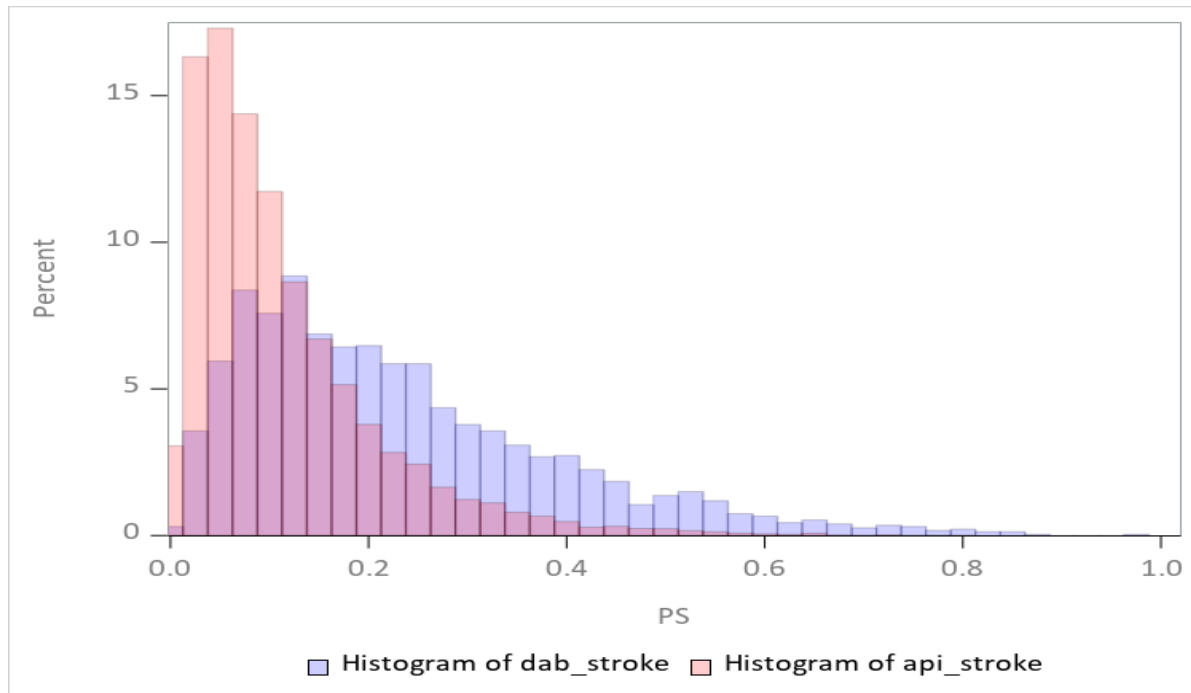


Figure 1i. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 3

Unweighted Propensity Score Distribution After Trimming

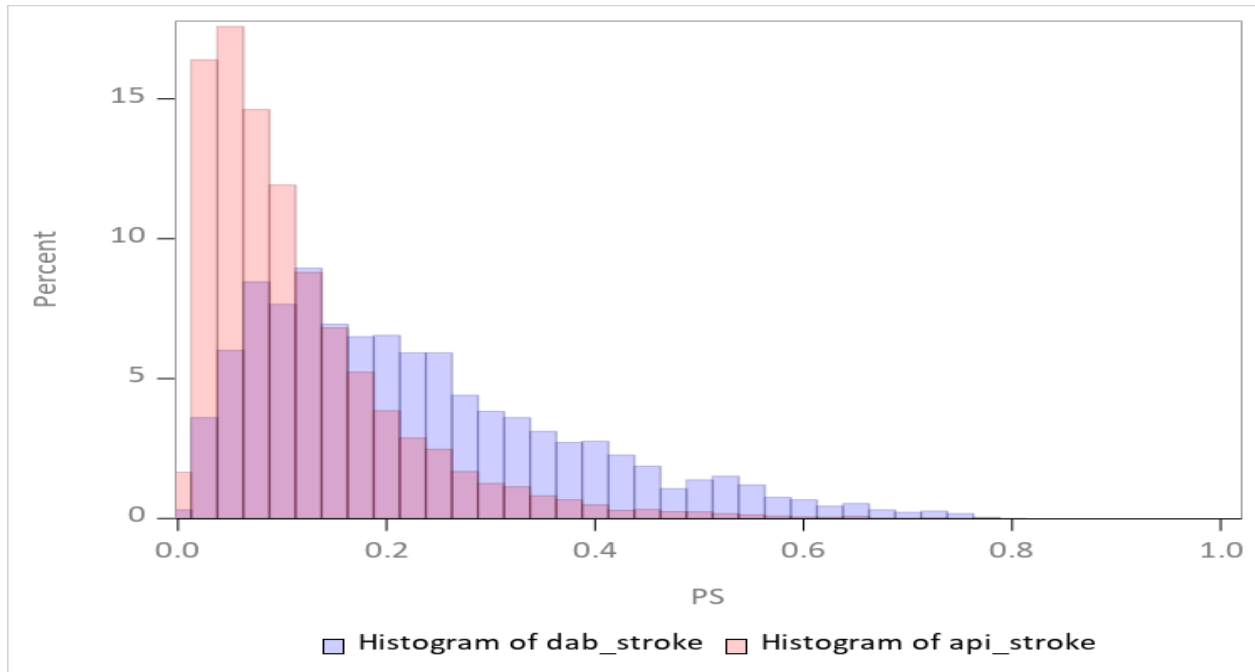


Figure 1i. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 3

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

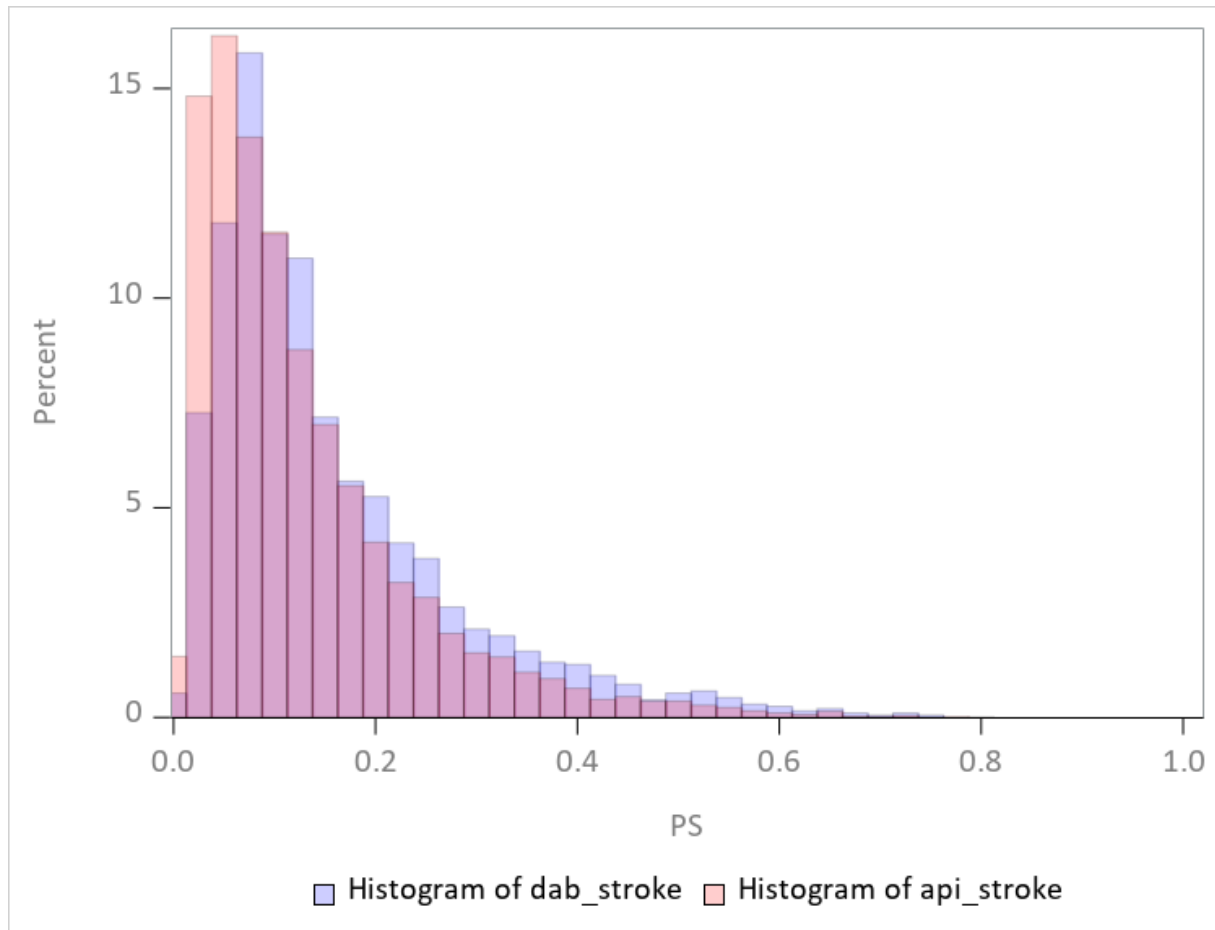


Figure 1j. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 4

Unweighted Propensity Score Distribution Before Trimming

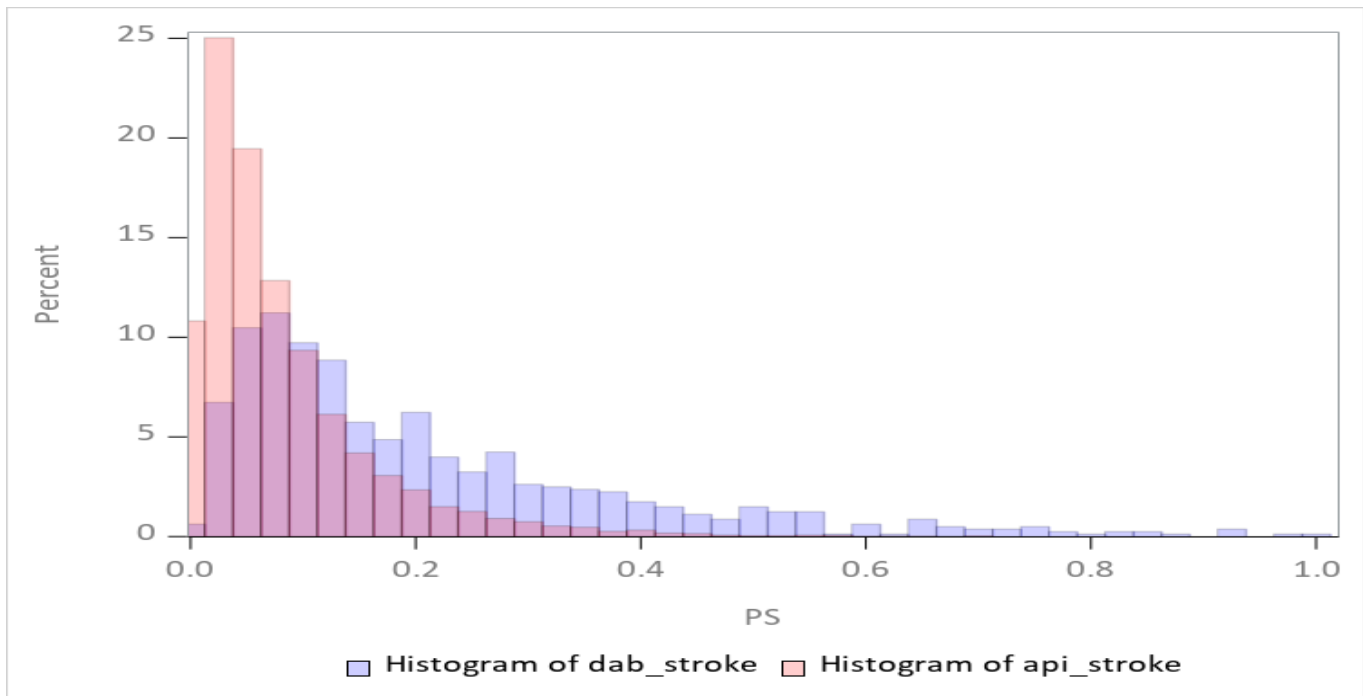


Figure 1j. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 4

Unweighted Propensity Score Distribution After Trimming

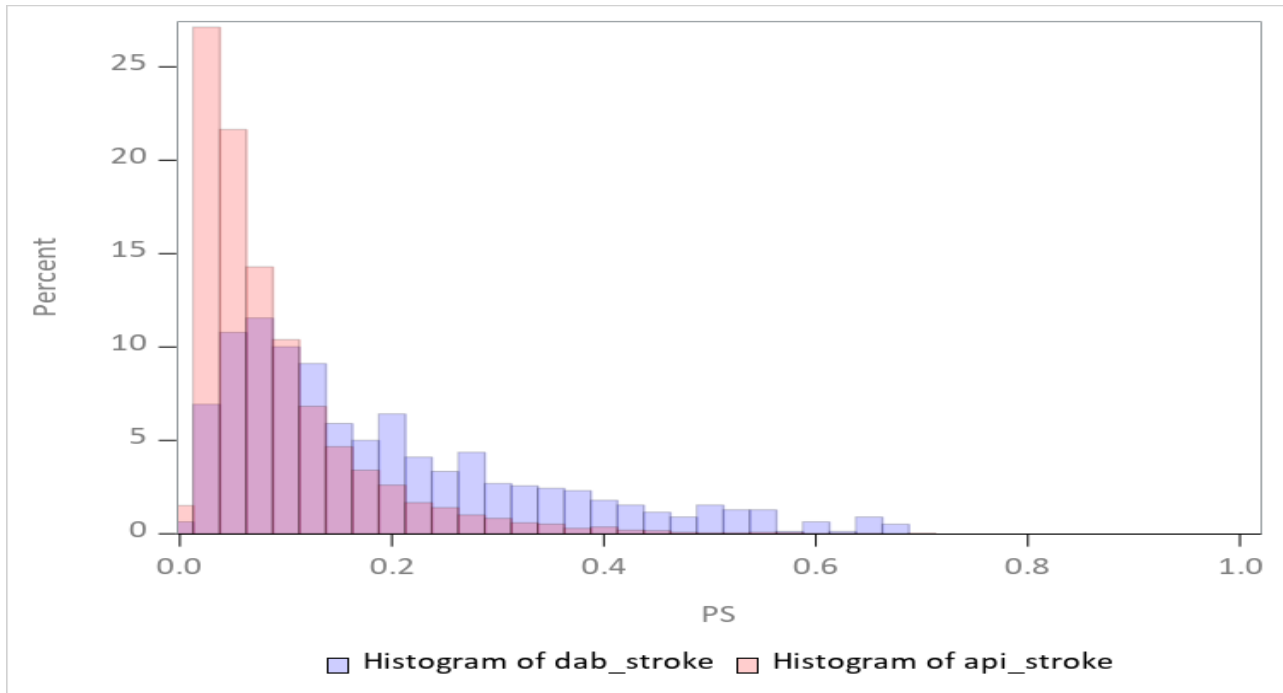


Figure 1j. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 4

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

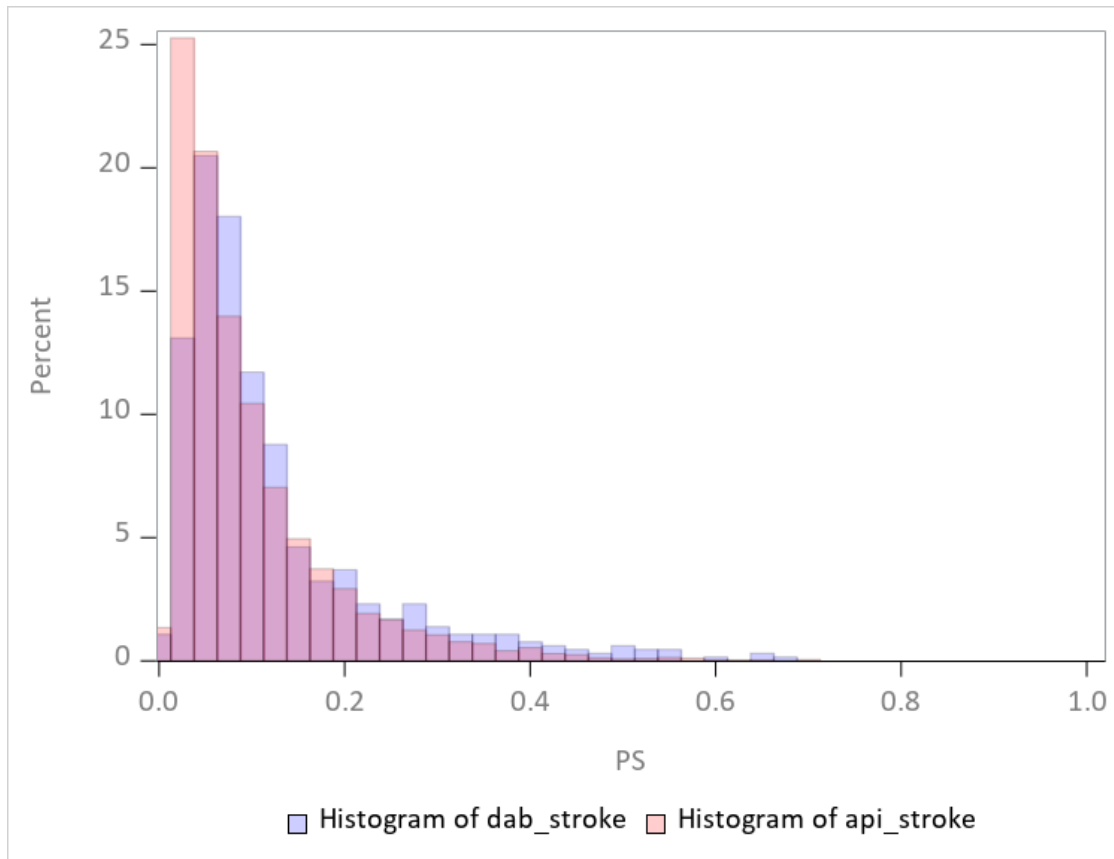


Figure 1k. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 5+

Unweighted Propensity Score Distribution Before Trimming

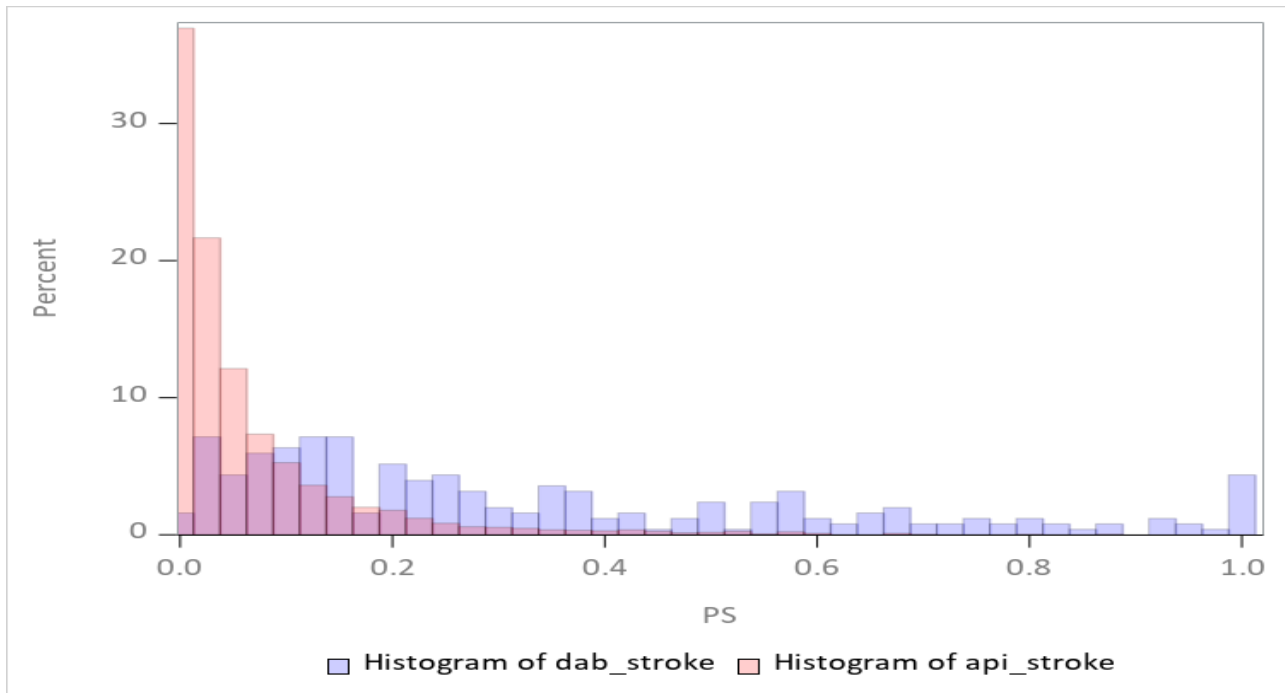


Figure 1k. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATES Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 5+

Unweighted Propensity Score Distribution After Trimming

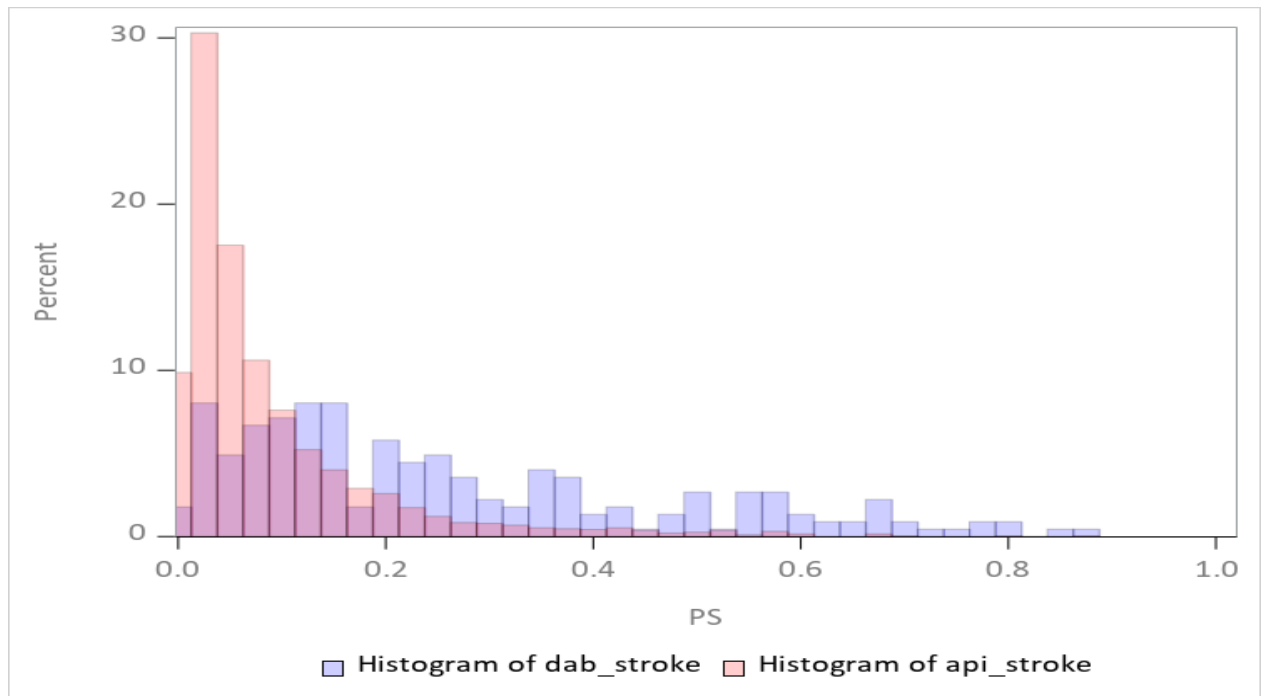


Figure 1k. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, CHADVASC: 5+

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

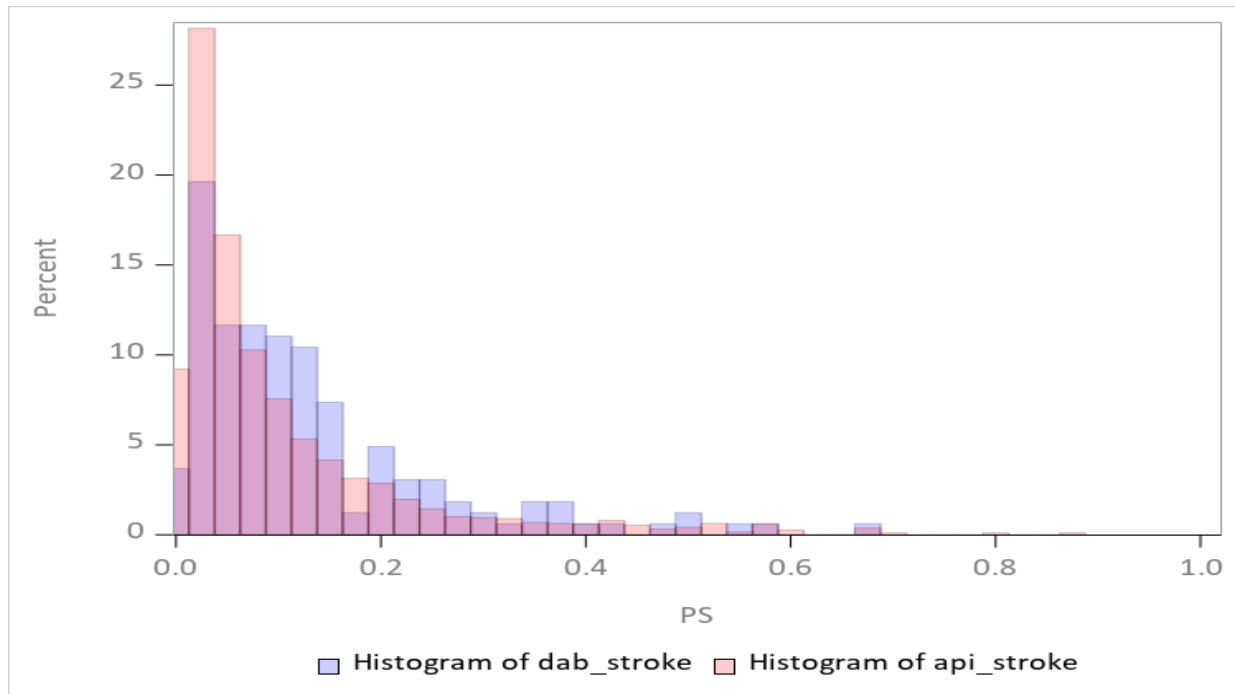


Figure 11. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 0

Unweighted Propensity Score Distribution Before Trimming

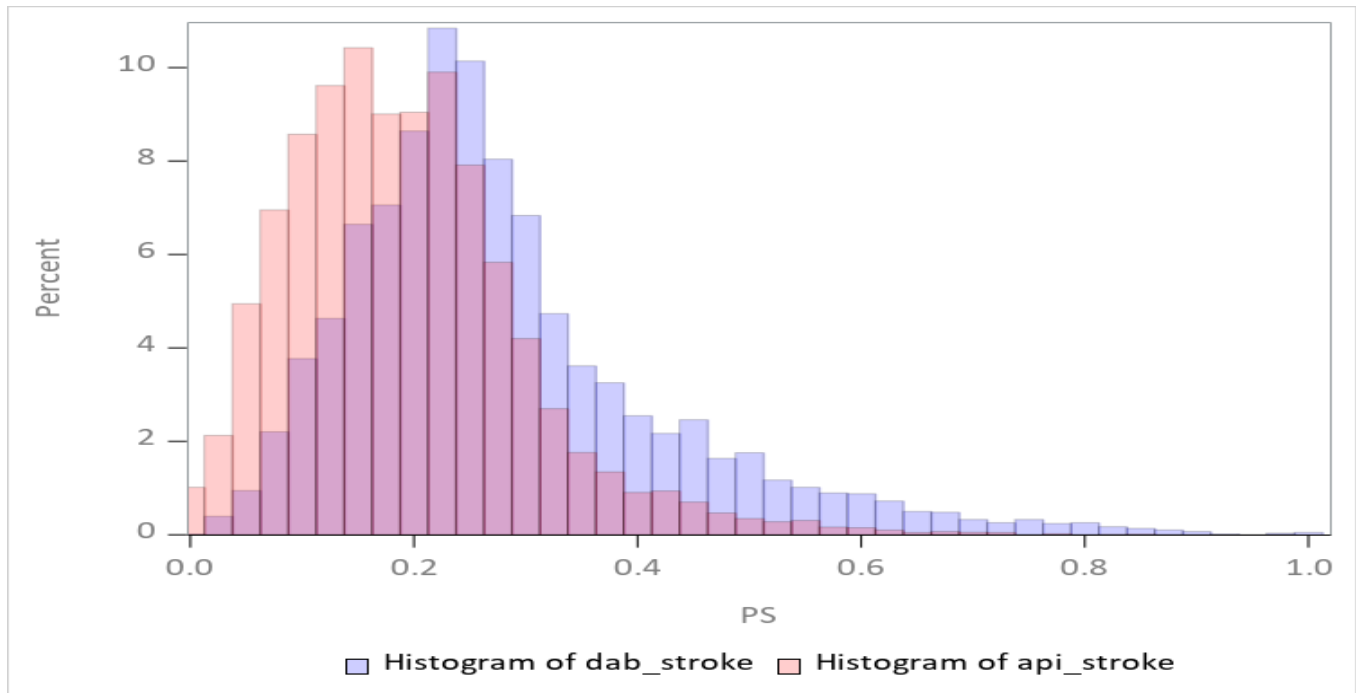


Figure 11. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 0

Unweighted Propensity Score Distribution After Trimming

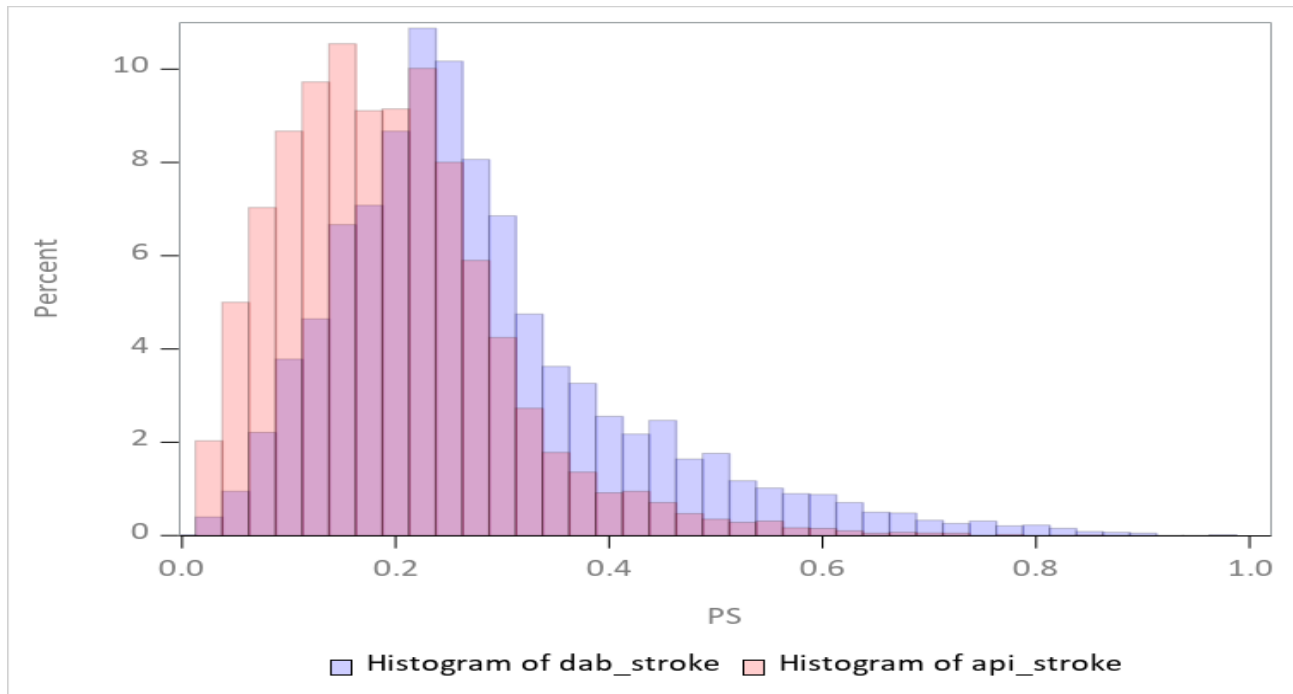


Figure 11. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 0

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

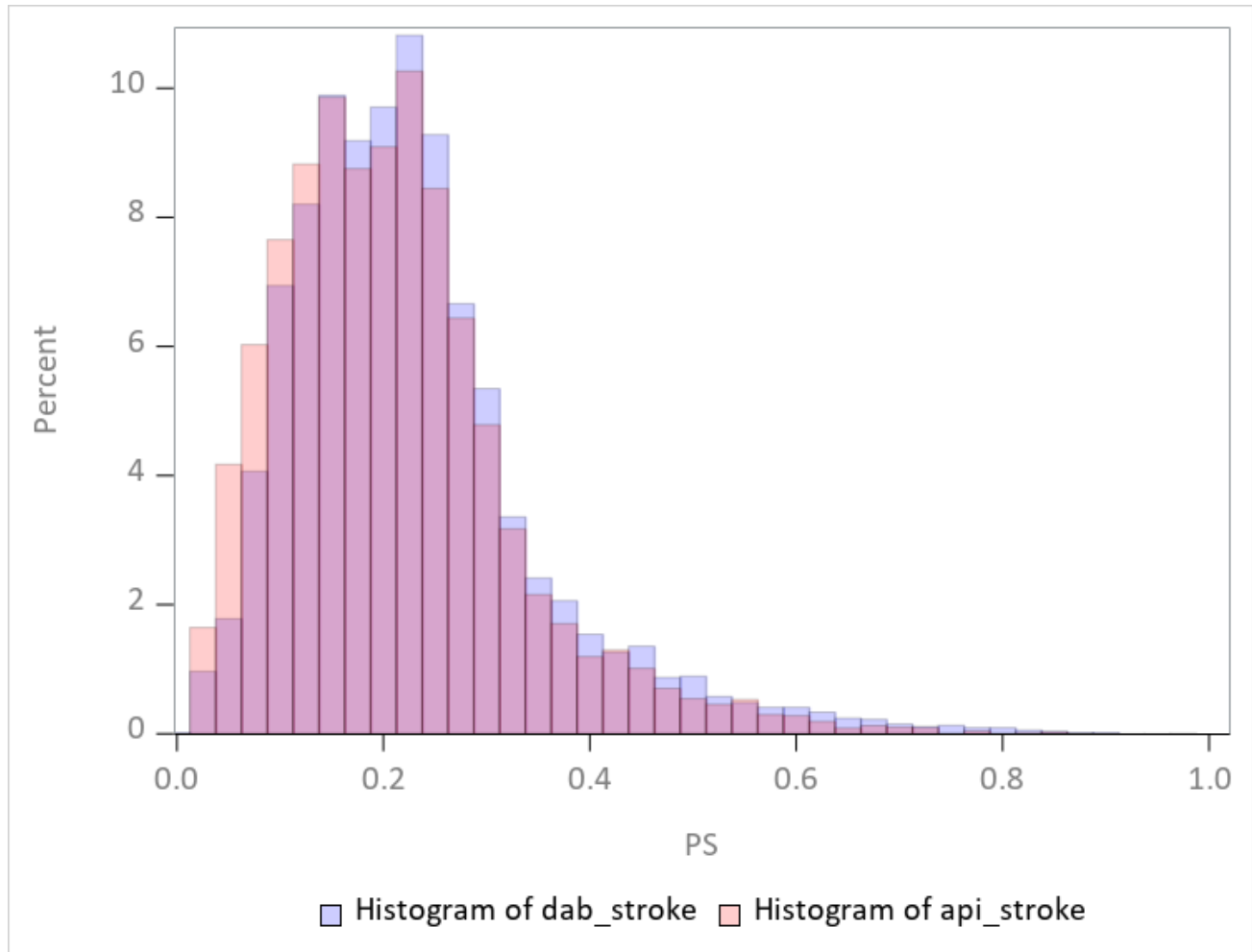


Figure 1m. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 1

Unweighted Propensity Score Distribution Before Trimming

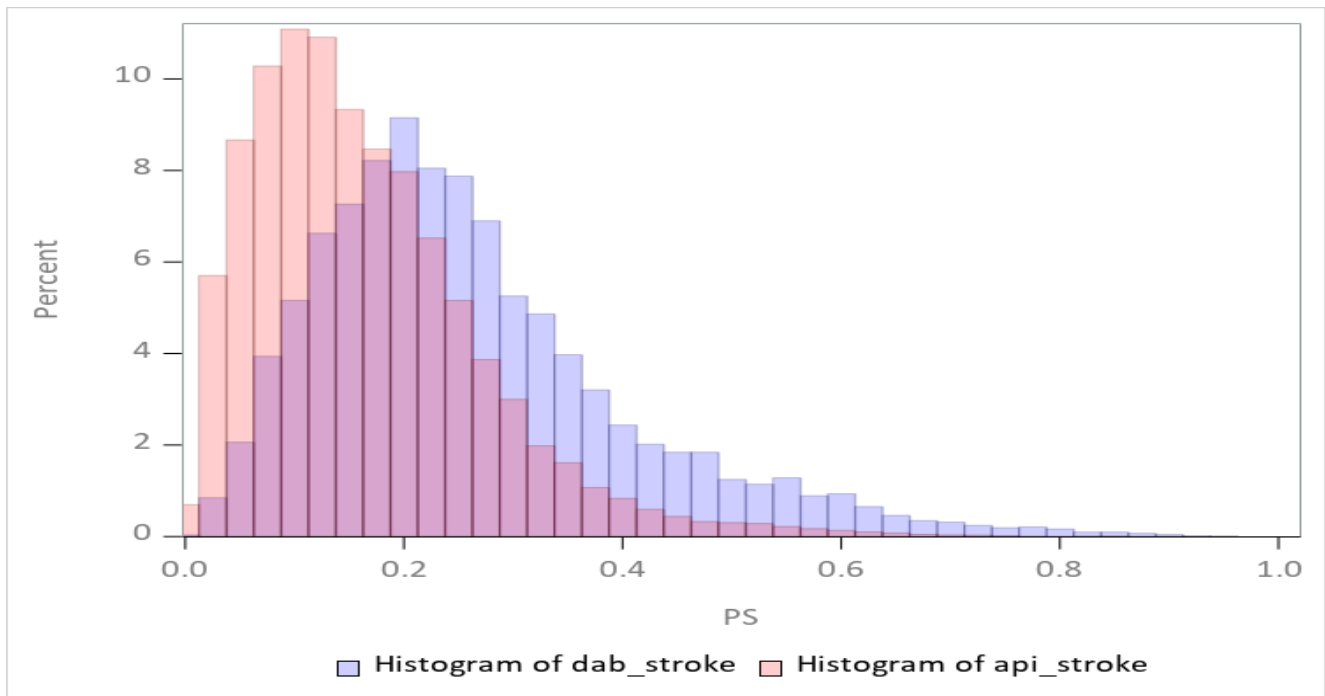


Figure 1m. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 1

Unweighted Propensity Score Distribution After Trimming

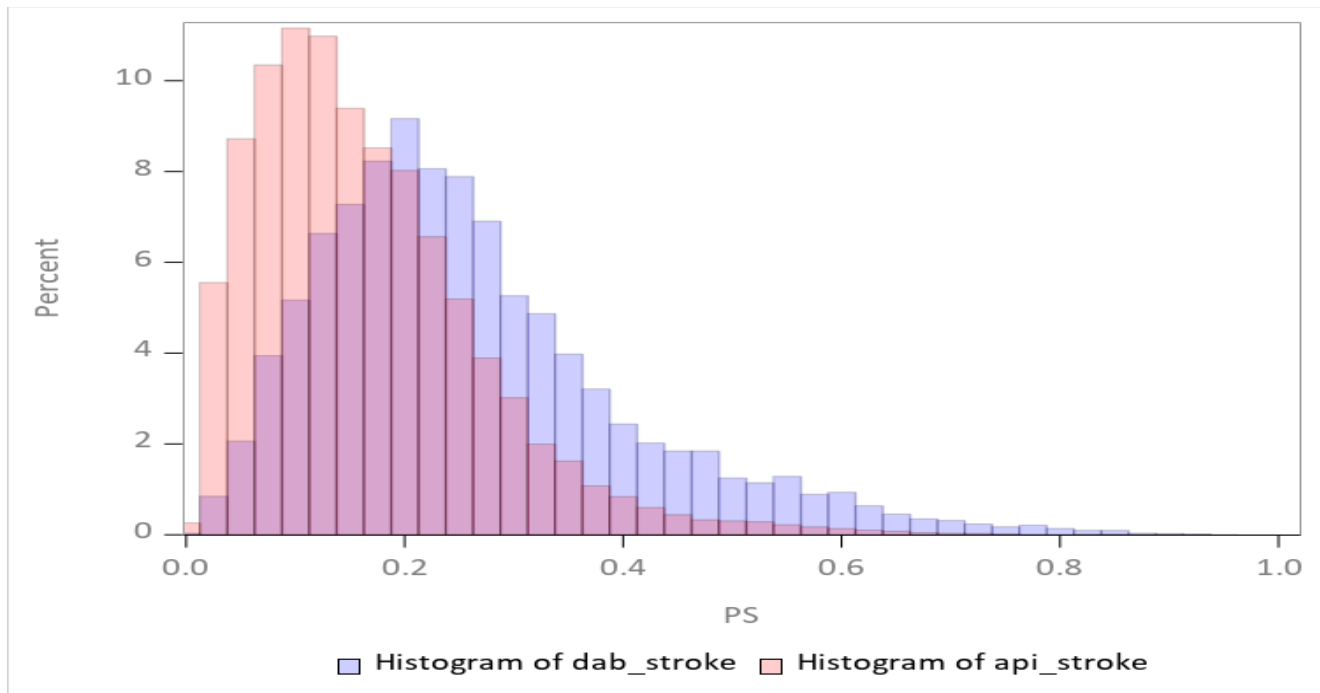


Figure 1m. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 1

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

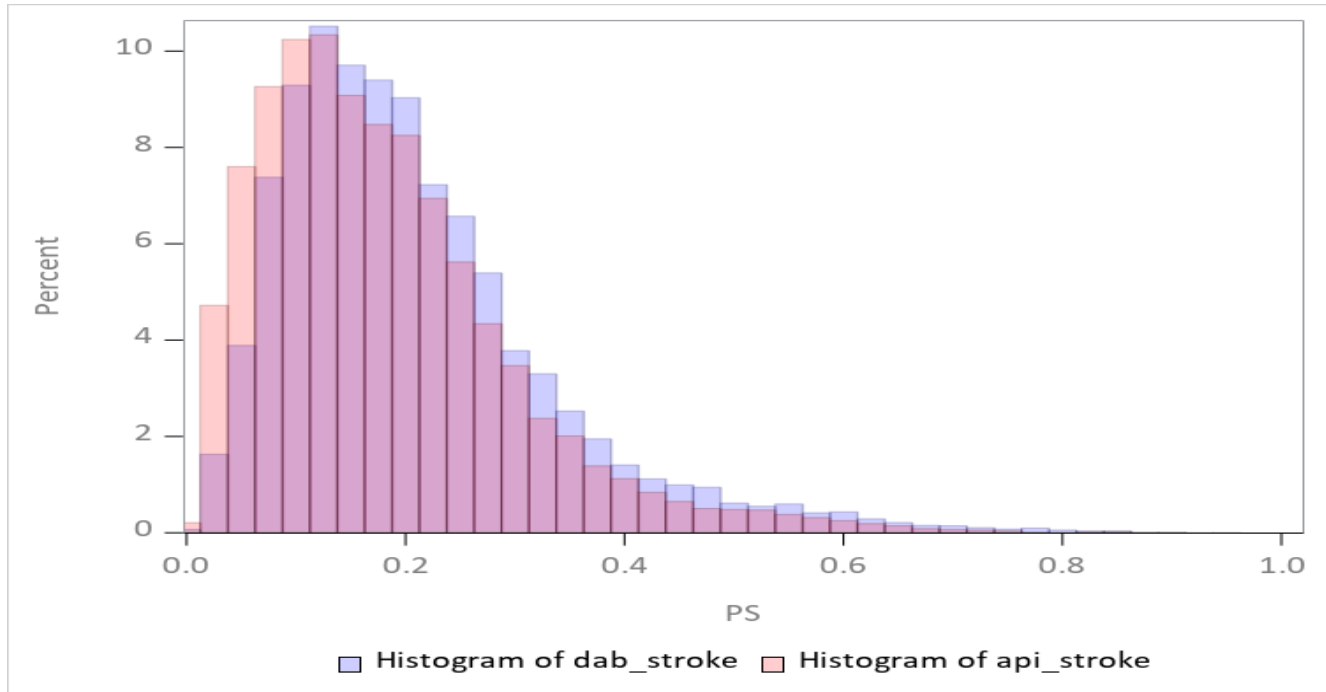


Figure 1n. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 2

Unweighted Propensity Score Distribution Before Trimming

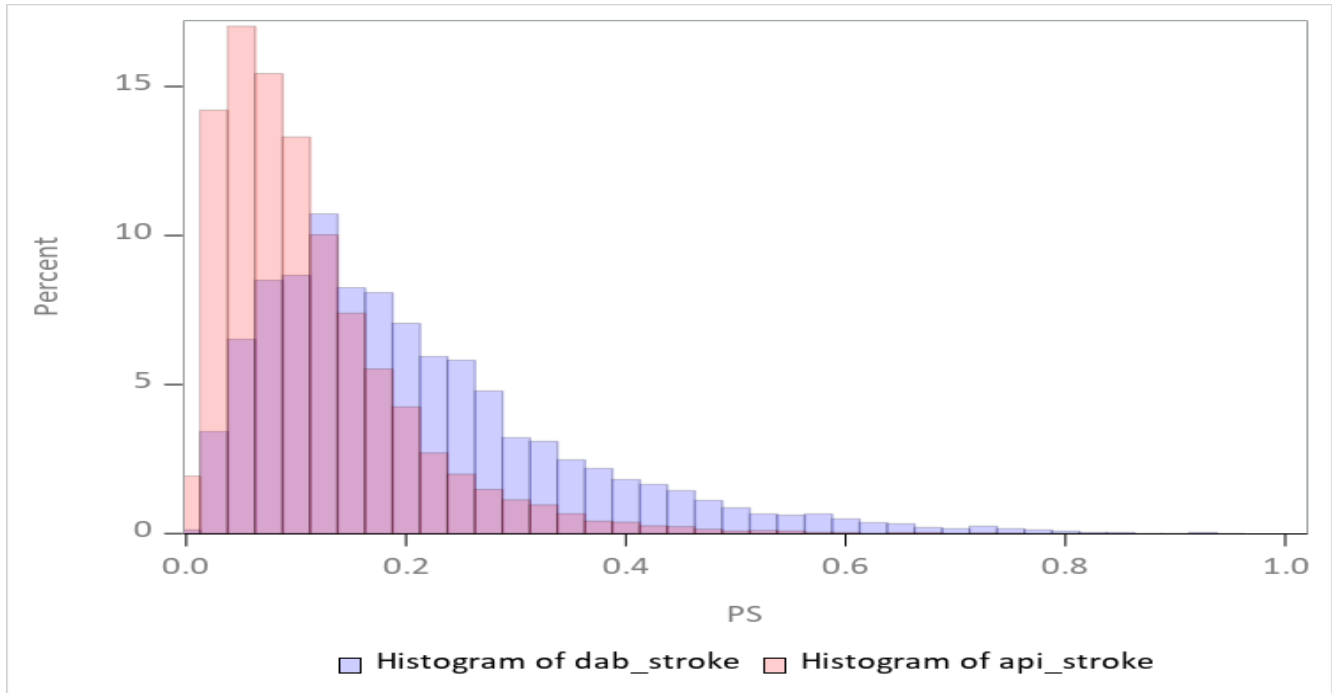


Figure 1n. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 2

Unweighted Propensity Score Distribution After Trimming

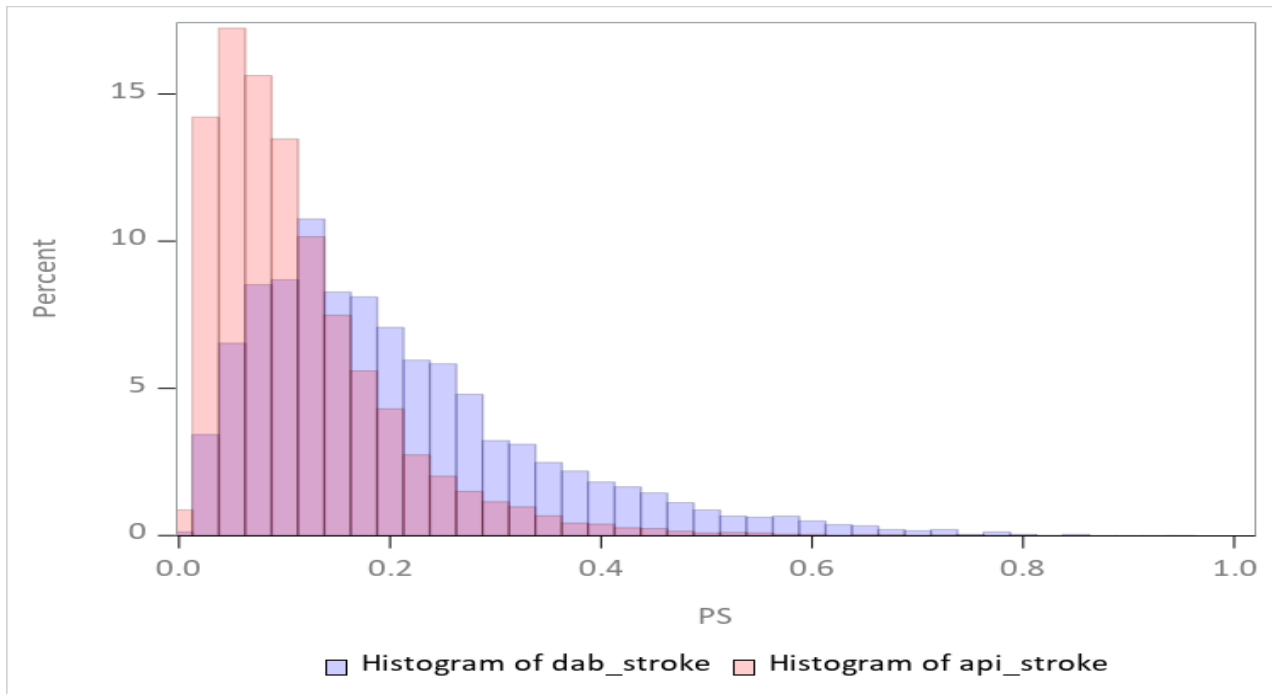


Figure 1n. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 2

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

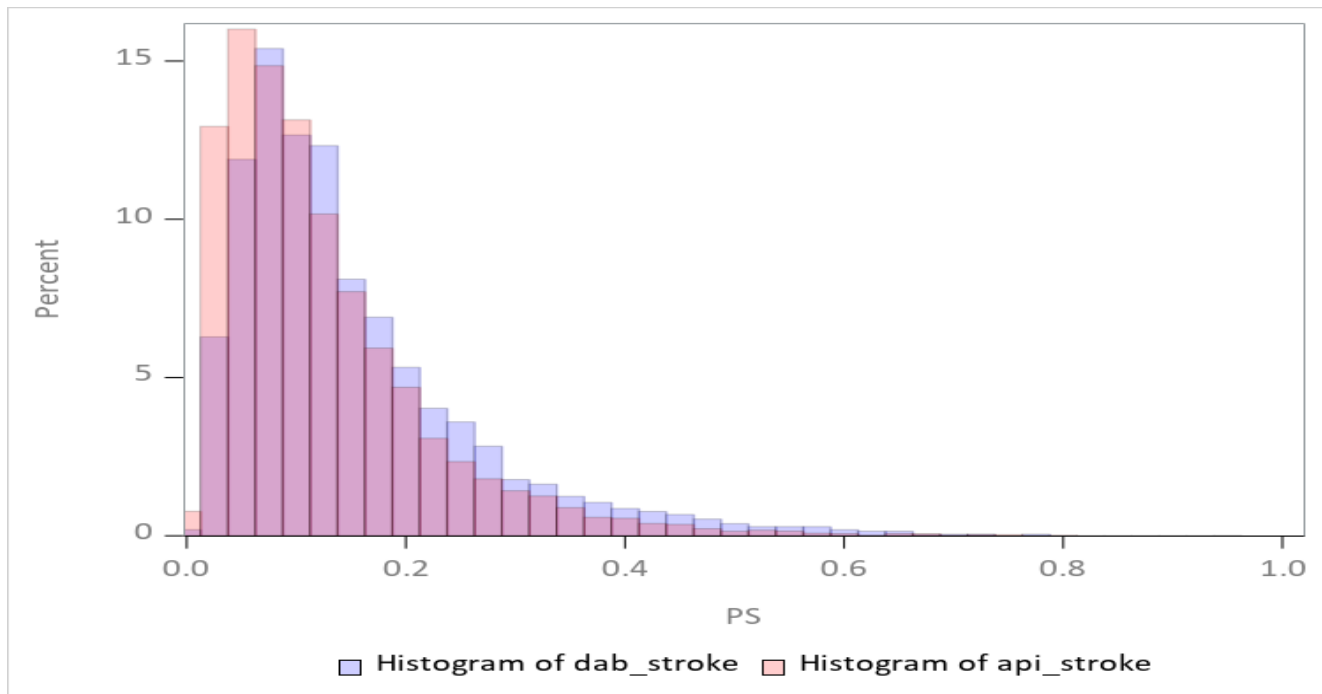


Figure 1o. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 3+

Unweighted Propensity Score Distribution Before Trimming

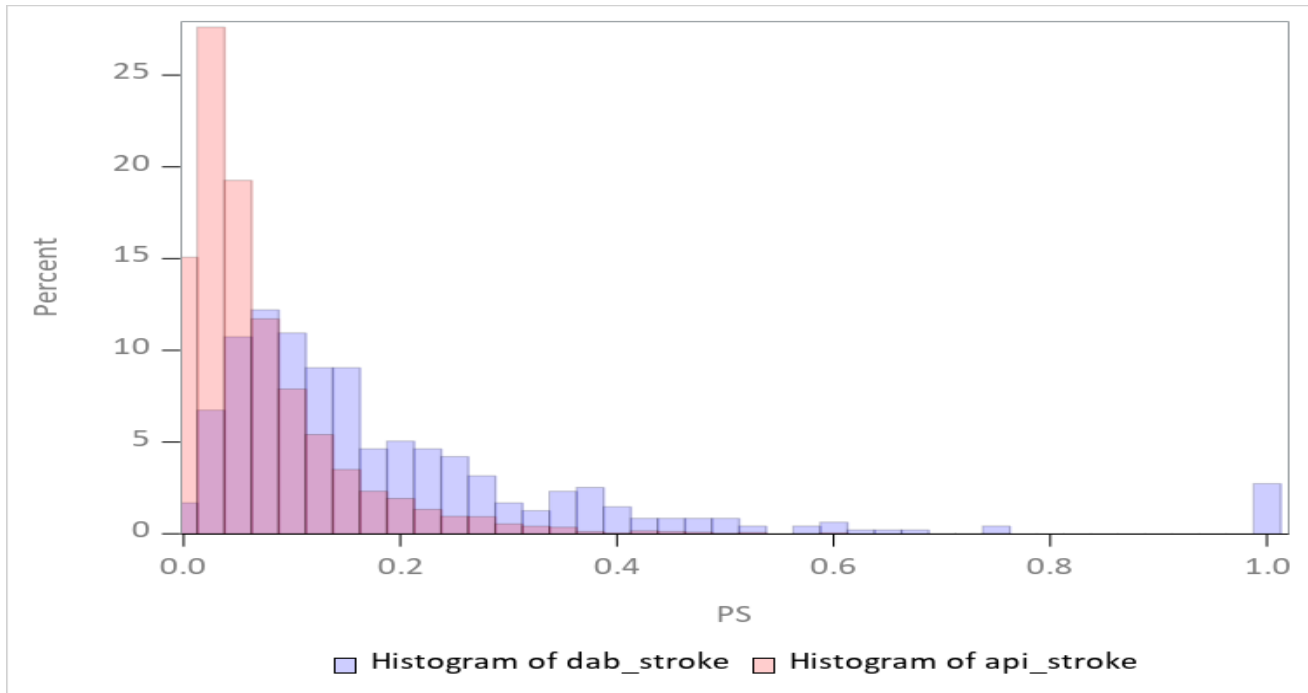


Figure 1o. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 3+

Unweighted Propensity Score Distribution After Trimming

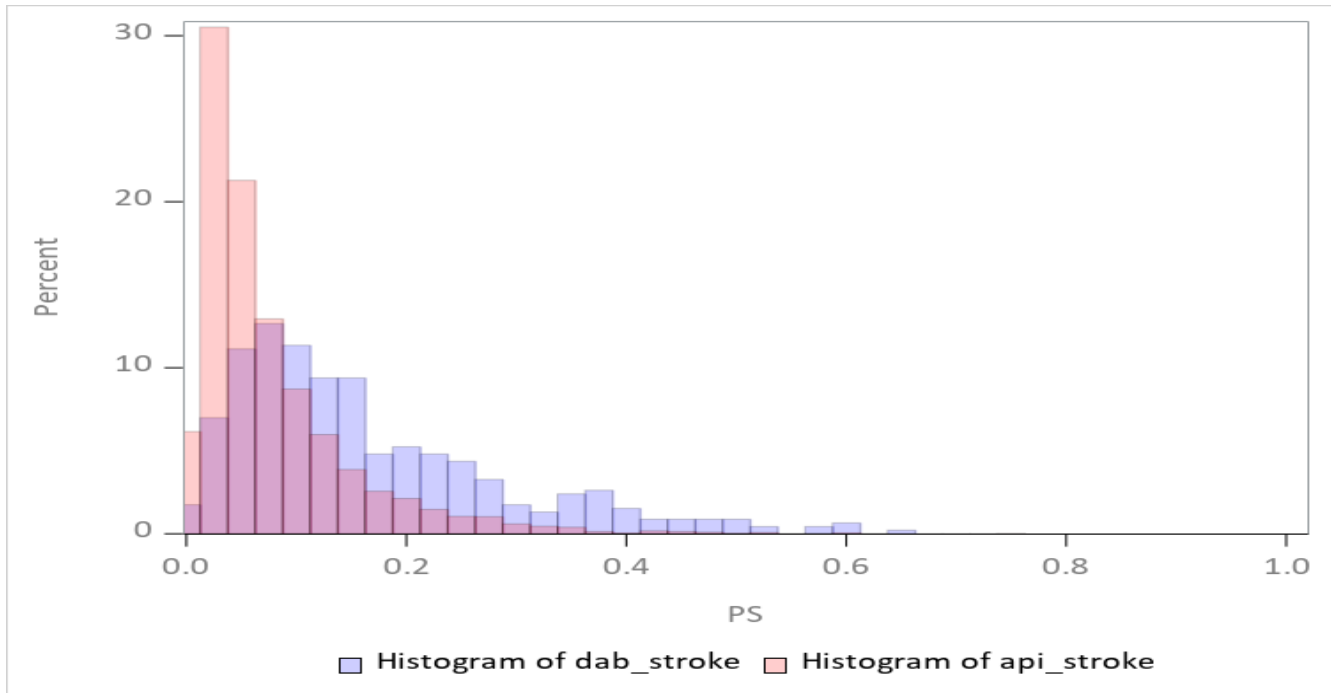


Figure 1o. Histograms Depicting Propensity Score Distributions Before and After Adjustment, Truncation Weight = 2.5%, ATEs Weights in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022, HASBLED: 3+

Weighted Propensity Score Distribution After Trimming, Inverse Probability of Treatment Weighted, Average Treatment Effect Stabilized (ATES)

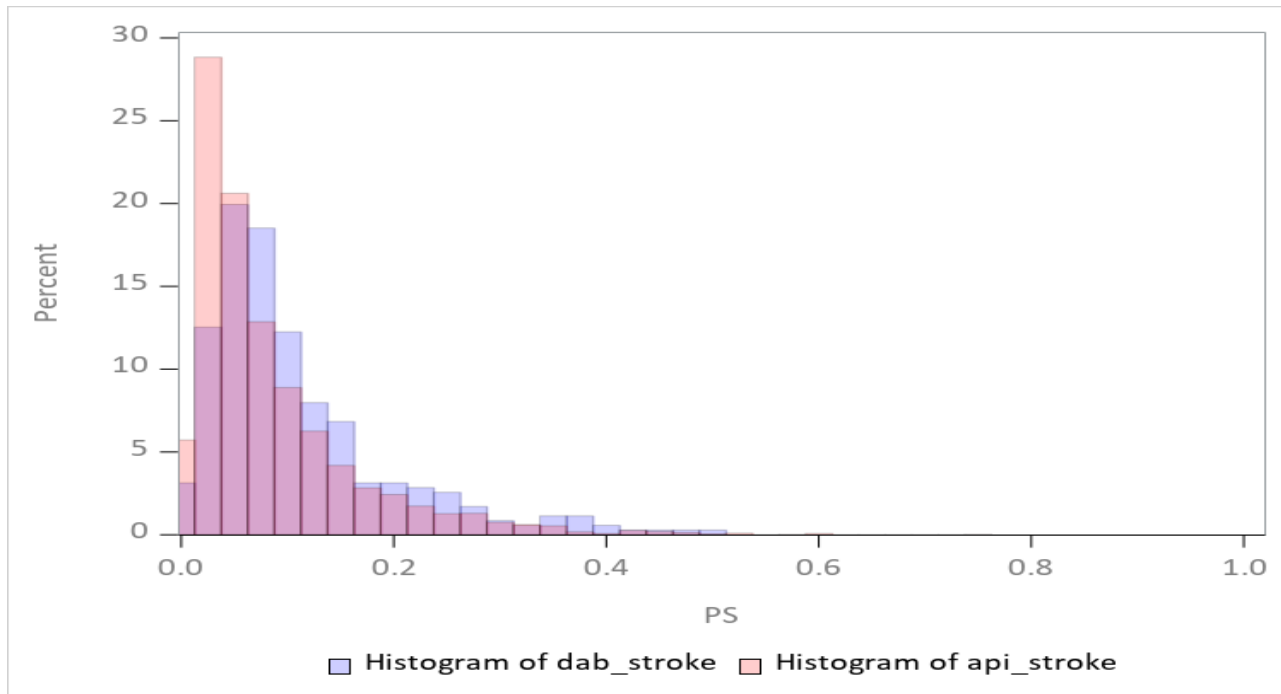
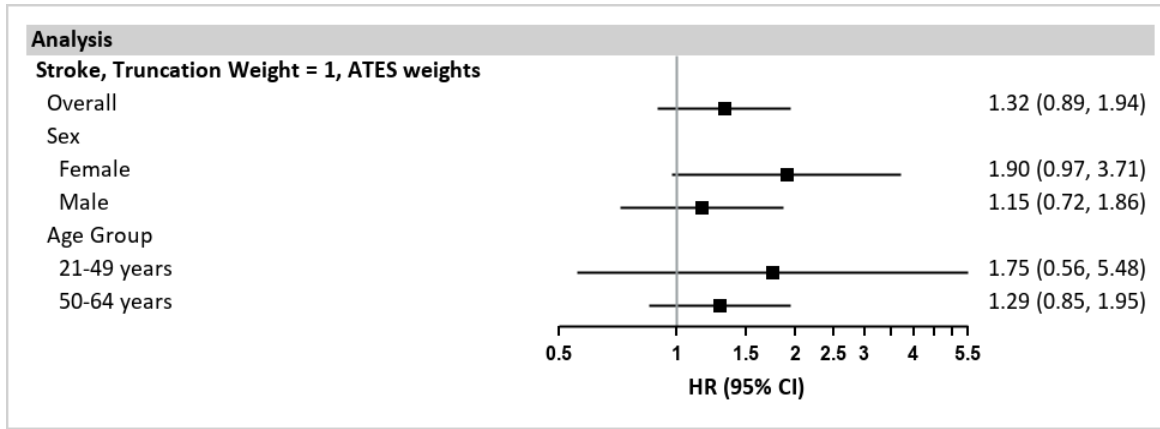
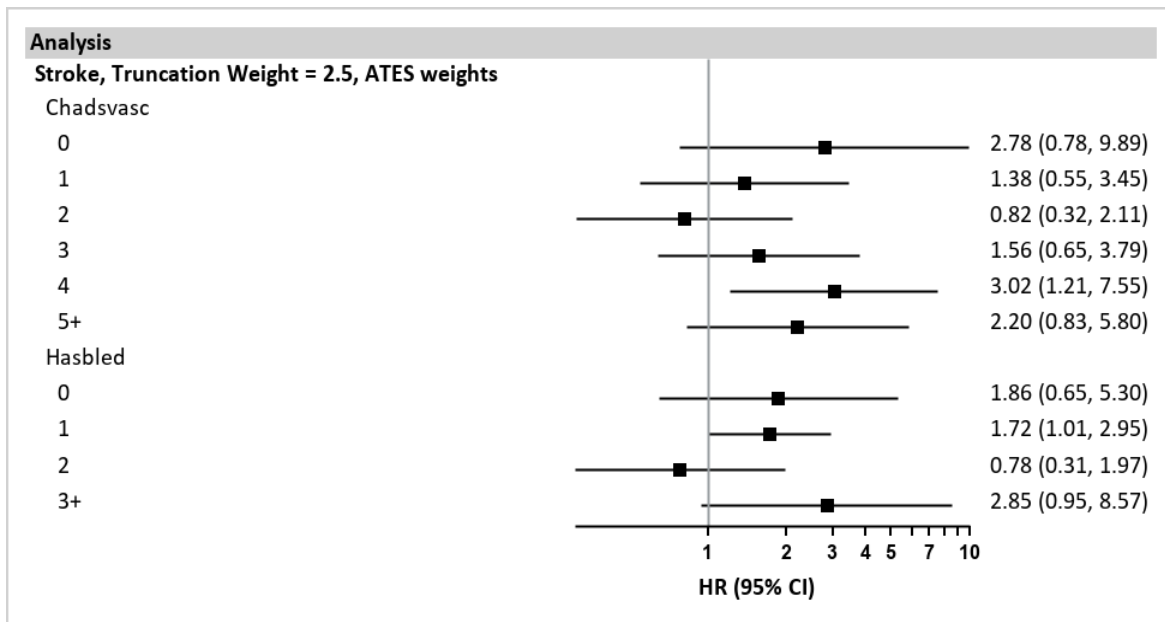


Figure 2a. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Thromboembolic Stroke, Truncation Weight = 1%, ATEs Weights, Site-Adjusted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



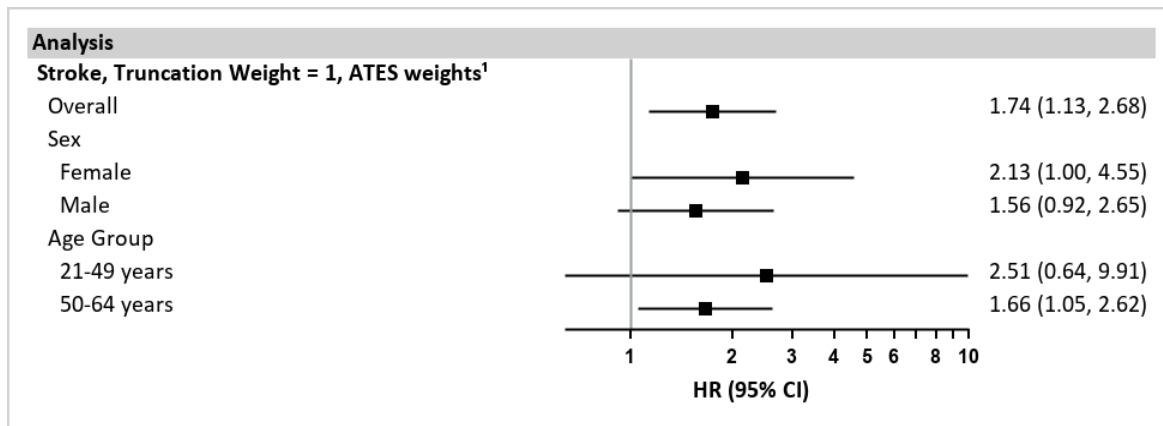
Weighted using Average Treatment Effect, Stabilized, (ATES)

Figure 2b. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Thromboembolic Stroke, Truncation Weight = 2.5%, ATES Weights, Site-Adjusted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



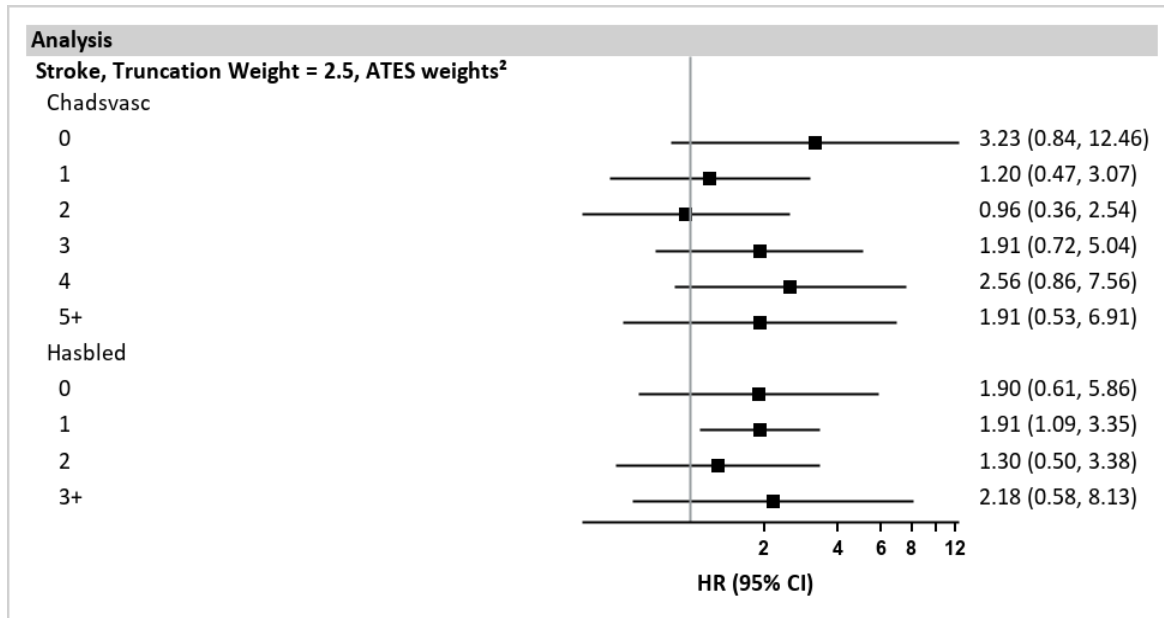
Weighted using Average Treatment Effect, Stabilized, (ATES)

Figure 2c. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Thromboembolic Stroke, Truncation Weight = 1%, ATEs Weights, Inverse Probability of Treatment Weighted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



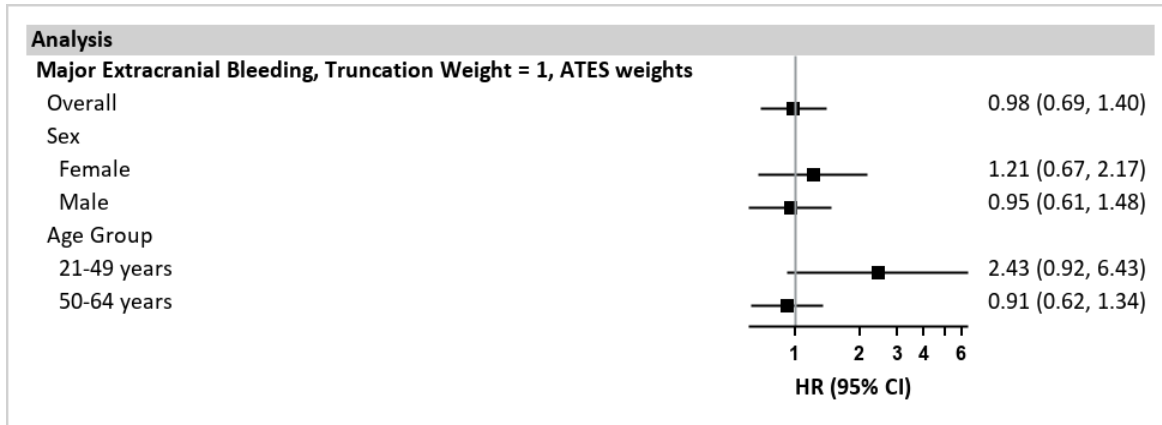
Weighted using Average Treatment Effect, Stabilized, (ATES).

Figure 2d. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Thromboembolic Stroke, Truncation Weight = 2.5%, ATES Weights, Inverse Probability of Treatment Weighted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



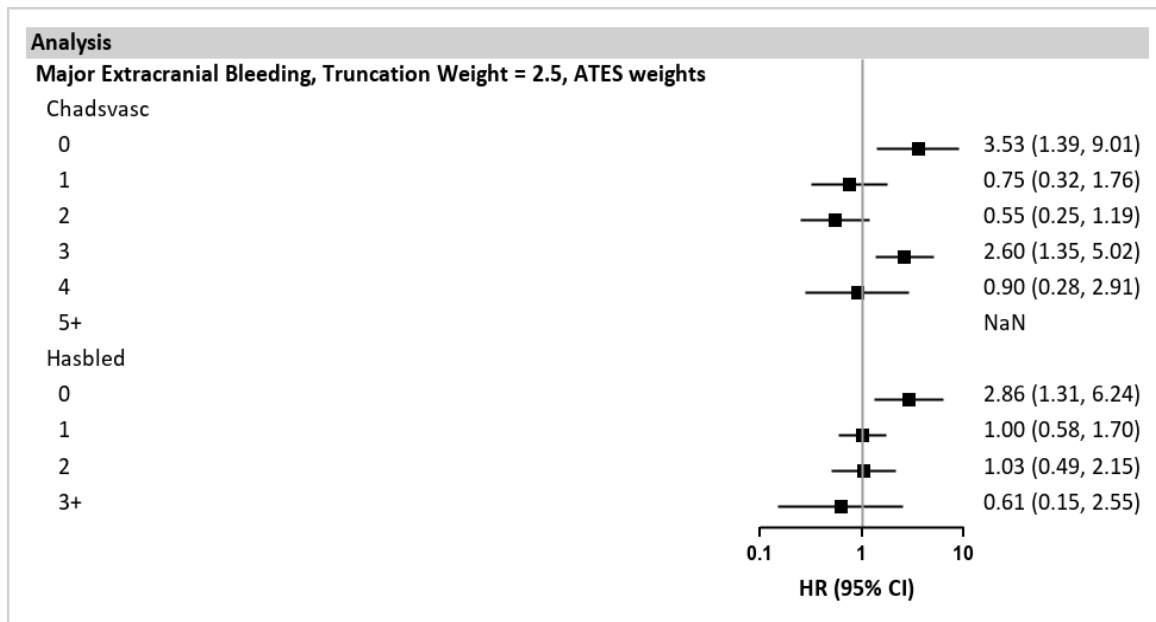
Weighted using Average Treatment Effect, Stabilized, (ATES).

Figure 2e. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Major Extracranial Bleeding, Truncation Weight = 1%, ATES Weights, Site-Adjusted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



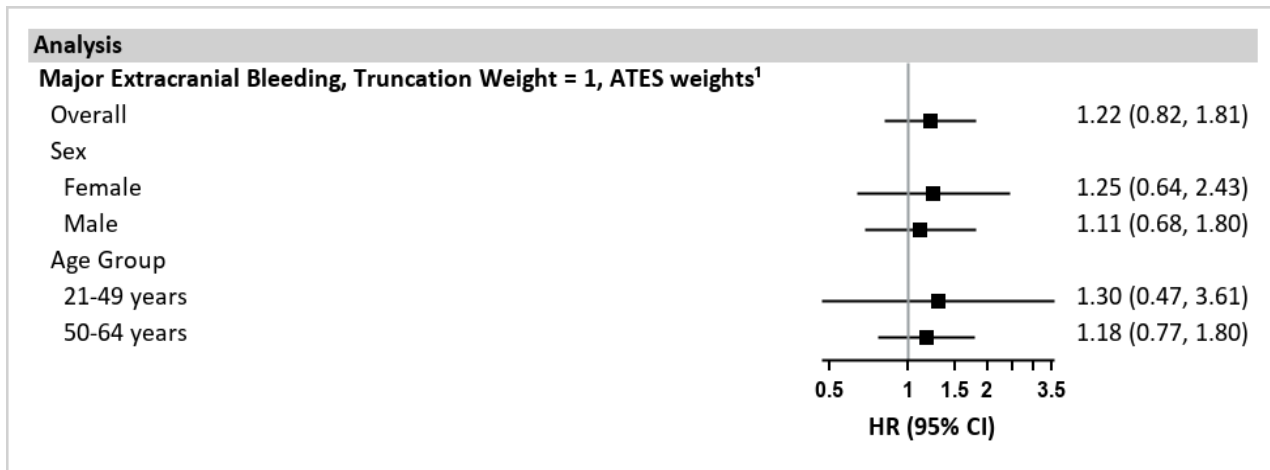
Weighted using Average Treatment Effect, Stabilized, (ATES)

Figure 2f. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Major Extracranial Bleeding, Truncation Weight = 2.5%, ATES Weights, Site-Adjusted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



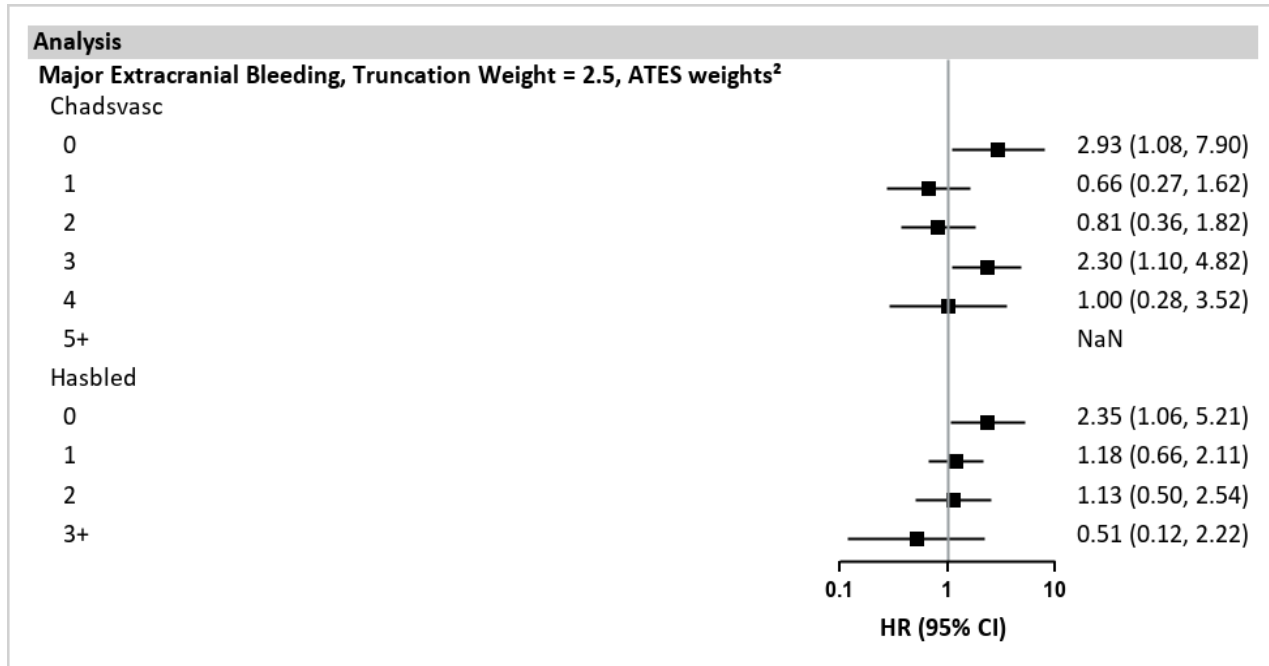
Weighted using Average Treatment Effect, Stabilized, (ATES). Hazard ratio could not be calculated for all analyses

Figure 2g. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Major Extracranial Bleeding, Truncation Weight = 1%, ATEs Weights, Inverse Probability of Treatment Weighted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



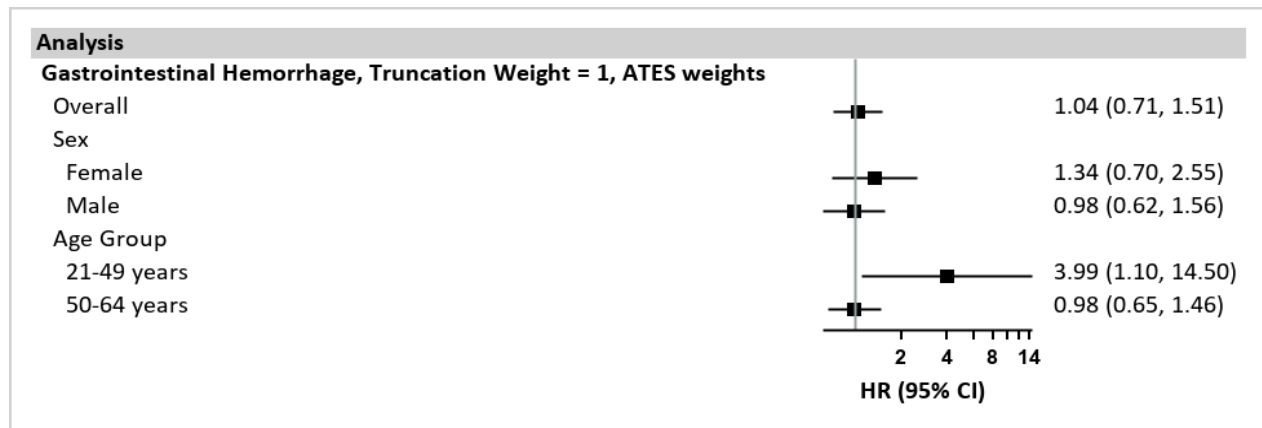
Weighted using Average Treatment Effect, Stabilized, (ATES).

Figure 2h. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Major Extracranial Bleeding, Truncation Weight = 2.5%, ATES Weights, Inverse Probability of Treatment Weighted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



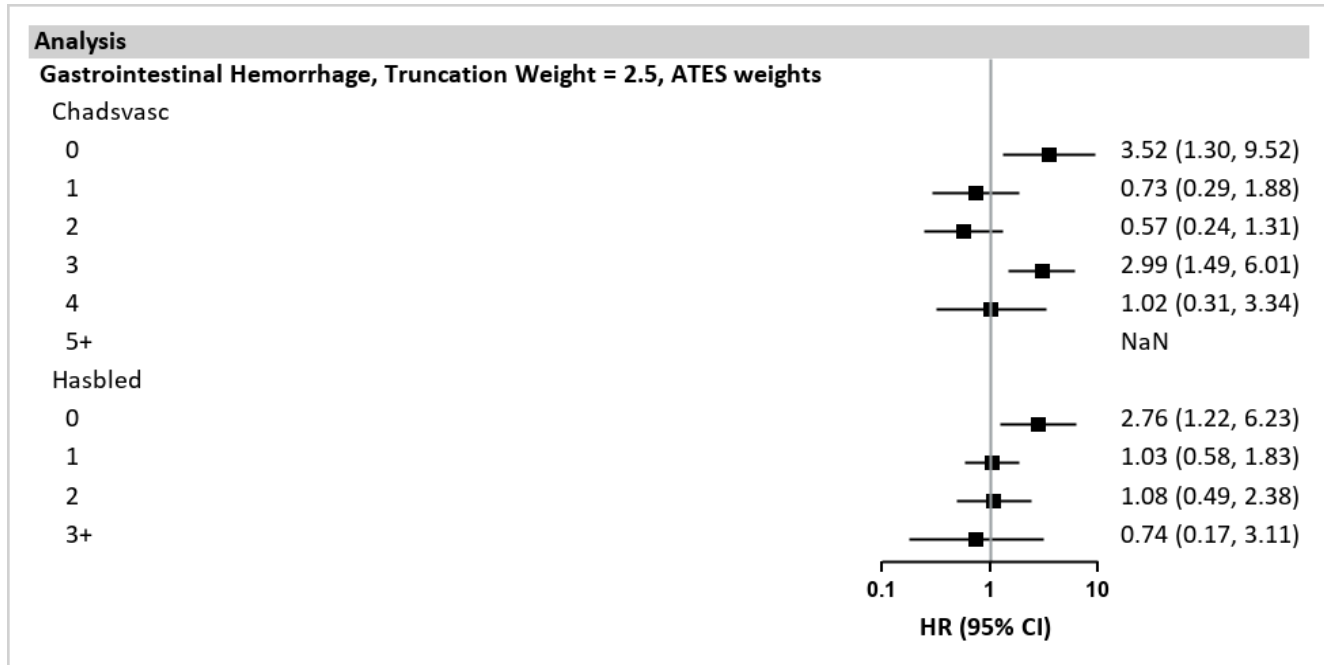
Weighted using Average Treatment Effect, Stabilized, (ATES). Hazard ratio could not be calculated for all analyses

Figure 2i. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Gastrointestinal Hemorrhage, Truncation Weight = 1%, ATEs Weights, Site-Adjusted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



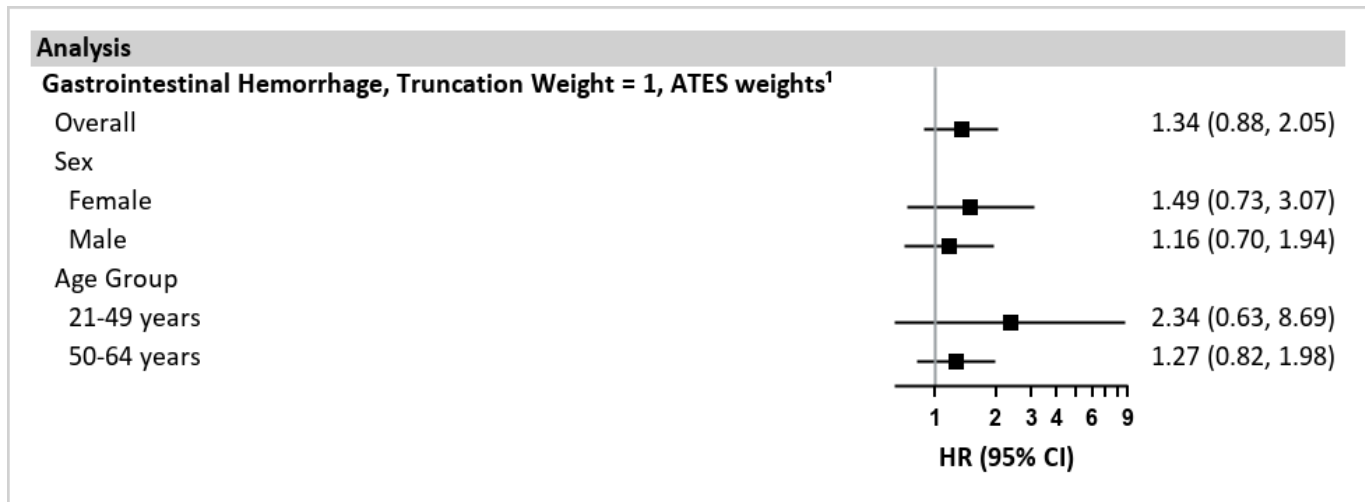
Weighted using Average Treatment Effect, Stabilized, (ATES)

Figure 2j. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Gastrointestinal Hemorrhage, Truncation Weight = 2.5%, ATES Weights, Site-Adjusted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



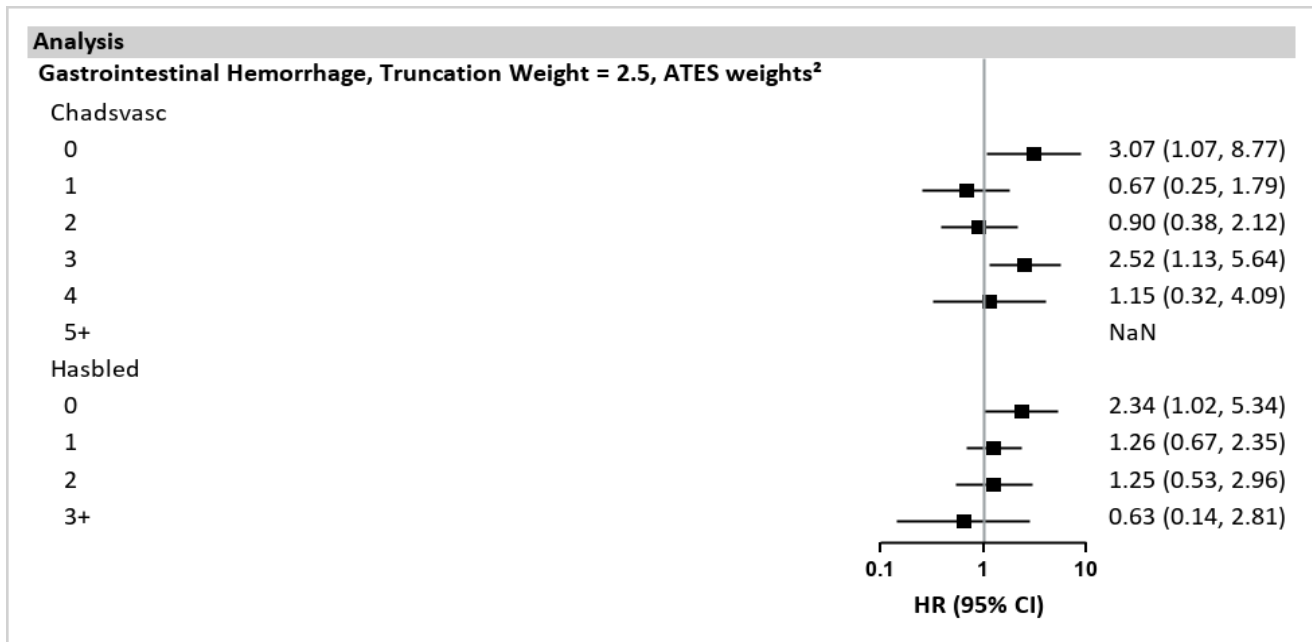
Weighted using Average Treatment Effect, Stabilized, (ATES). Hazard ratio could not be calculated for all analyses

Figure 2k. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Gastrointestinal Hemorrhage, Truncation Weight = 1%, ATES Weights, Inverse Probability of Treatment Weighted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



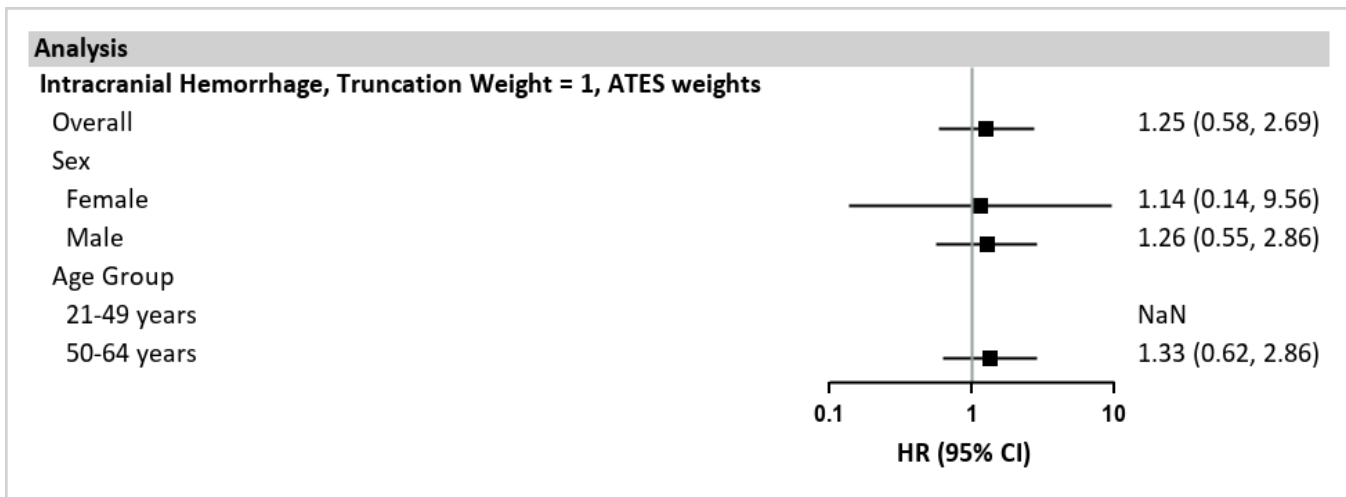
Weighted using Average Treatment Effect, Stabilized, (ATES).

Figure 2I. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Gastrointestinal Hemorrhage, Truncation Weight = 2.5%, ATES Weights, Inverse Probability of Treatment Weighted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



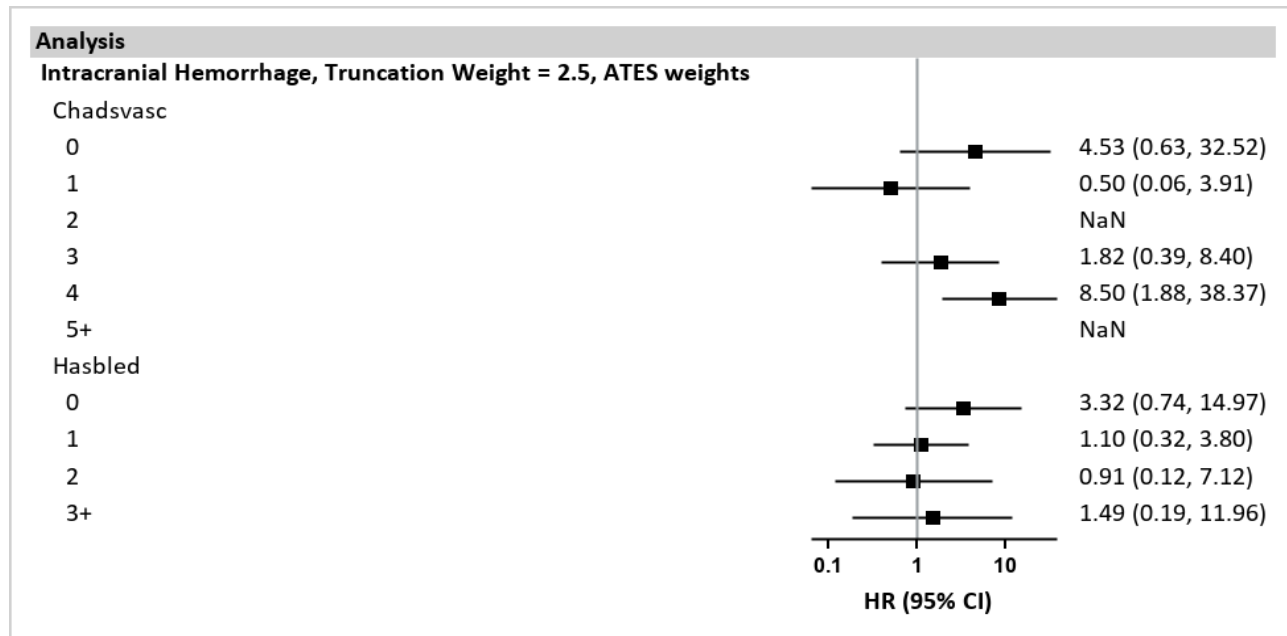
Weighted using Average Treatment Effect, Stabilized, (ATES).

Figure 2m. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Intracranial Hemorrhage, Truncation Weight = 1%, ATES Weights, Site-Adjusted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



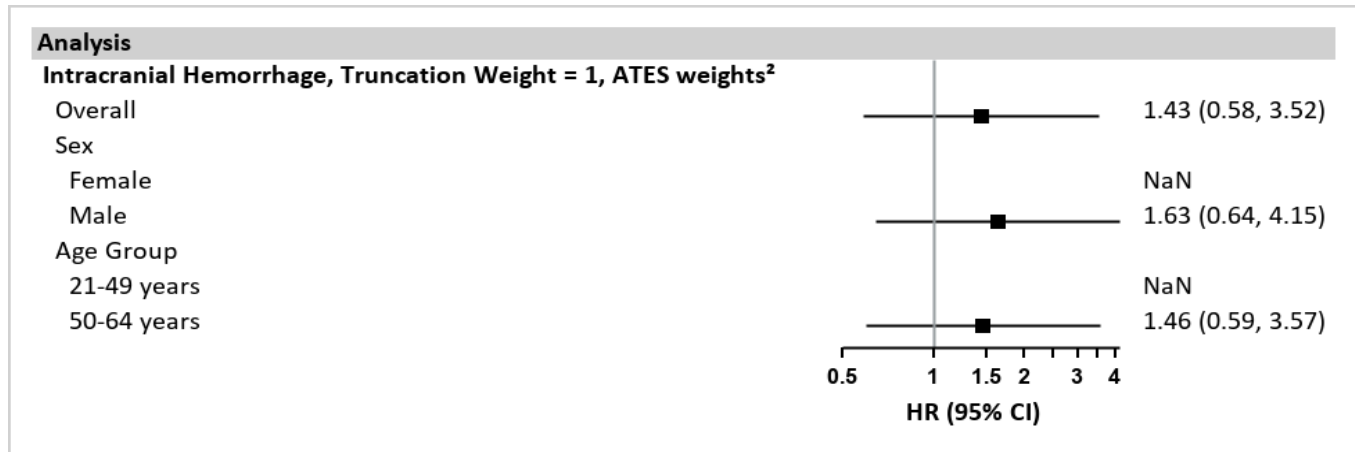
Weighted using Average Treatment Effect, Stabilized, (ATES). Hazard ratio could not be calculated for all analyses

Figure 2n. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Intracranial Hemorrhage, Truncation Weight = 2.5%, ATES Weights, Site-Adjusted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



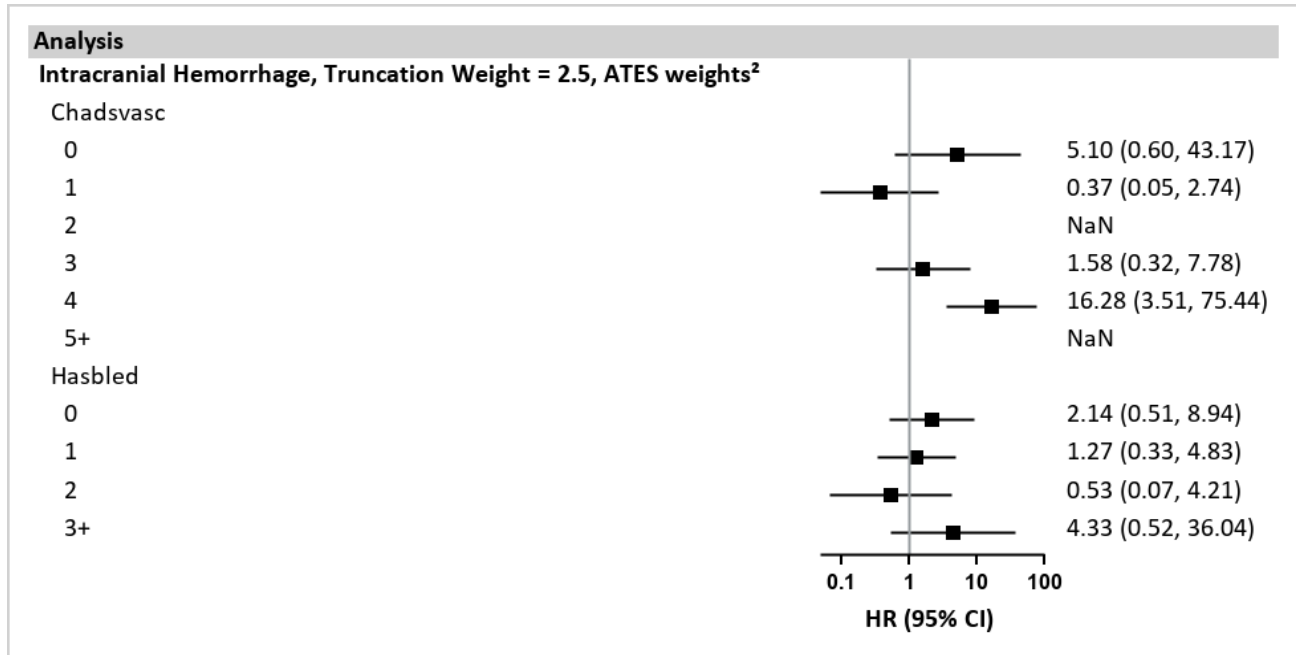
Weighted using Average Treatment Effect, Stabilized, (ATES). Hazard ratio could not be calculated for all analyses

Figure 2o. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Intracranial Hemorrhage, Truncation Weight = 1%, ATEs Weights, Inverse Probability of Treatment Weighted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



Weighted using Average Treatment Effect, Stabilized, (ATES). Hazard ratio could not be calculated for all analyses

Figure 2p. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Intracranial Hemorrhage, Truncation Weight = 2.5%, ATEs Weights, Inverse Probability of Treatment Weighted Analyses in the Sentinel Distributed Database from October 19, 2010 to February 28, 2022



Weighted using Average Treatment Effect, Stabilized, (ATES). Hazard ratio could not be calculated for all analyses

Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (July 7, 2023)

Masked DP ID	DP Start Date	DP End Date ¹
DP01	01/01/2008	02/28/2022
DP02	01/01/2000	12/31/2020
DP03	01/01/2007	02/28/2022
DP04	01/01/2006	02/28/2022
DP05	01/01/2008	02/28/2022

¹End Date represents the earliest of: (1) query end date, or (2) last day of the most recent month for which all of a Data Partner's data tables (enrollment, dispensing, etc.) have at least 80% of the record count relative to the prior month.

Appendix B. List of Generic and Brand Names of Medical Products Used to Define Exposures in this Request

Generic Name	Brand Name
	Dabigatran
dabigatran	Pradaxa
dabigatran	dabigatran etexilate mesylate
	Apixaban
apixaban	Eliquis
apixaban	Eliquis DVT-PE Treat 30D Start

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
Dialysis			
792.5	Cloudy (hemodialysis) (peritoneal) dialysis affluent	DX	ICD-9-CM
V45.1	Renal dialysis status	DX	ICD-9-CM
V45.11	Renal dialysis status	DX	ICD-9-CM
V45.12	Noncompliance with renal dialysis	DX	ICD-9-CM
V56.0	Encounter for extracorporeal dialysis	DX	ICD-9-CM
V56.1	Fitting and adjustment of extracorporeal dialysis catheter	DX	ICD-9-CM
V56.2	Fitting and adjustment of peritoneal dialysis catheter	DX	ICD-9-CM
V56.3	Encounter for adequacy testing for dialysis	DX	ICD-9-CM
V56.31	Encounter for adequacy testing for hemodialysis	DX	ICD-9-CM
V56.32	Encounter for adequacy testing for peritoneal dialysis	DX	ICD-9-CM
V56.8	Encounter other dialysis	DX	ICD-9-CM
R88.0	Cloudy (hemodialysis) (peritoneal) dialysis effluent	DX	ICD-10-CM
Z49.01	Encounter for fitting and adjustment of extracorporeal dialysis catheter	DX	ICD-10-CM
Z49.02	Encounter for fitting and adjustment of peritoneal dialysis catheter	DX	ICD-10-CM
Z49.31	Encounter for adequacy testing for hemodialysis	DX	ICD-10-CM
Z49.32	Encounter for adequacy testing for peritoneal dialysis	DX	ICD-10-CM
Z91.15	Patient's noncompliance with renal dialysis	DX	ICD-10-CM
Z99.2	Dependence on renal dialysis	DX	ICD-10-CM
90935	Hemodialysis procedure with single evaluation by a physician or other qualified health care professional	PX	CPT-4
90937	Hemodialysis procedure requiring repeated evaluation(s) with or without substantial revision of dialysis prescription	PX	CPT-4
90939	Hemodialysis access flow study to determine blood flow in grafts and arteriovenous fistulae by an indicator dilution method, hook-up; transcutaneous measurement and disconnection	PX	CPT-4
90940	Hemodialysis access flow study to determine blood flow in grafts and arteriovenous fistulae by an indicator method	PX	CPT-4
90941	Hemodialysis, For Acute Renal Failure And Or Intoxication,	PX	CPT-4
90942	Hemodialysis, For Acute Renal Failure And Or Intoxication,	PX	CPT-4
90943	Hemodialysis, For Acute Renal Failure And Or Intoxication,	PX	CPT-4
90944	Hemodialysis, For Acute Renal Failure And Or Intoxication,	PX	CPT-4
90945	Dialysis procedure other than hemodialysis (eg, peritoneal dialysis, hemofiltration, or other continuous renal replacement therapies), with single evaluation by a physician or other qualified health care professional	PX	CPT-4
90947	Dialysis procedure other than hemodialysis (eg, peritoneal dialysis, hemofiltration, or other continuous renal replacement therapies) requiring repeated evaluations by a physician or other qualified health care professional, with or without substantial revision of dialysis prescription	PX	CPT-4
90951	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
90952	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4
90953	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month	PX	CPT-4
90954	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4
90955	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4
90956	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month	PX	CPT-4
90957	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4
90958	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4
90959	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month	PX	CPT-4
90960	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4
90961	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4
90962	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 1 face-to-face visit by a physician or other qualified health care professional per month	PX	CPT-4

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
90963	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents	PX	CPT-4
90964	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents	PX	CPT-4
90965	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents	PX	CPT-4
90966	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 20 years of age and older	PX	CPT-4
90967	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients younger than 2 years of age	PX	CPT-4
90968	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 2-11 years of age	PX	CPT-4
90969	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 12-19 years of age	PX	CPT-4
90970	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 20 years of age and older	PX	CPT-4
90976	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90977	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90978	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90979	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90982	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90983	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90984	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90985	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90988	Supervision Of Hemodialysis In Hospital Or Other Facility (excluding Home Dialysis), On Monthly Basis	PX	CPT-4
90989	Dialysis training, patient, including helper where applicable, any mode, completed	PX	CPT-4
90990	Hemodialysis Training And/or Counseling	PX	CPT-4
90991	Home Hemodialysis Care, Outpatient, For Those Services Either Provided By The Physician Primarily Responsible	PX	CPT-4
90992	Peritoneal Dialysis Training And/or Counseling	PX	CPT-4
90993	Dialysis training, patient, including helper where applicable, any mode, course not completed, per training session	PX	CPT-4
90994	Supervision Of Chronic Ambulatory Peritoneal Dialysis (capd), Home Or Out-patient (monthly)	PX	CPT-4
90995	End Stage Renal Disease (esrd) Related Services, Per Full Month	PX	CPT-4
90996	Continuous Arteriovenous Hemofiltration (cavh) (per Day)	PX	CPT-4
90997	Hemoperfusion (eg, with activated charcoal or resin)	PX	CPT-4
90998	End Stage Renal Disease (esrd) Related Services (less Than Full Month), Per Day	PX	CPT-4
90999	Unlisted dialysis procedure, inpatient or outpatient	PX	CPT-4

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
Kidney replacement			
556	Transplant of kidney	PX	ICD-9-CM
5561	Renal autotransplantation	PX	ICD-9-CM
5569	Other kidney transplantation	PX	ICD-9-CM
99681	Complications of transplanted kidney	DX	ICD-9-CM
V420	Kidney replaced by transplant	DX	ICD-9-CM
T86.10	Unspecified complication of kidney transplant	DX	ICD-10-CM
T86.11	Kidney transplant rejection	DX	ICD-10-CM
T86.12	Kidney transplant failure	DX	ICD-10-CM
T86.13	Kidney transplant infection	DX	ICD-10-CM
T86.19	Other complication of kidney transplant	DX	ICD-10-CM
Z48.22	Encounter for aftercare following kidney transplant	DX	ICD-10-CM
Z94.0	Kidney transplant status	DX	ICD-10-CM
OTS00ZZ	Reposition Right Kidney, Open Approach	PX	ICD-10-PCS
OTS10ZZ	Reposition Left Kidney, Open Approach	PX	ICD-10-PCS
OTY00Z0	Transplantation of Right Kidney, Allogeneic, Open Approach	PX	ICD-10-PCS
OTY00Z1	Transplantation of Right Kidney, Syngeneic, Open Approach	PX	ICD-10-PCS
OTY00Z2	Transplantation of Right Kidney, Zooplastic, Open Approach	PX	ICD-10-PCS
OTY10Z0	Transplantation of Left Kidney, Allogeneic, Open Approach	PX	ICD-10-PCS
OTY10Z1	Transplantation of Left Kidney, Syngeneic, Open Approach	PX	ICD-10-PCS
OTY10Z2	Transplantation of Left Kidney, Zooplastic, Open Approach	PX	ICD-10-PCS
Ischemic Stroke			
433.01	Occlusion and stenosis of basilar artery with cerebral infarction	DX	ICD-9-CM
433.11	Occlusion and stenosis of carotid artery with cerebral infarction	DX	ICD-9-CM
433.21	Occlusion and stenosis of vertebral artery with cerebral infarction	DX	ICD-9-CM
433.31	Occlusion and stenosis of multiple and bilateral precerebral arteries with cerebral infarction	DX	ICD-9-CM
433.81	Occlusion and stenosis of other specified precerebral artery with cerebral infarction	DX	ICD-9-CM
433.91	Occlusion and stenosis of unspecified precerebral artery with cerebral infarction	DX	ICD-9-CM
434.01	Cerebral thrombosis with cerebral infarction	DX	ICD-9-CM
434.11	Cerebral embolism with cerebral infarction	DX	ICD-9-CM
434.91	Unspecified cerebral artery occlusion with cerebral infarction	DX	ICD-9-CM
436	Acute, but ill-defined, cerebrovascular disease	DX	ICD-9-CM
I63.22	Cerebral infarction due to unspecified occlusion or stenosis of basilar arteries	DX	ICD-10-CM
I63.139	Cerebral infarction due to embolism of unspecified carotid artery	DX	ICD-10-CM
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid arteries	DX	ICD-10-CM
I63.019	Cerebral infarction due to thrombosis of unspecified vertebral artery	DX	ICD-10-CM
I63.119	Cerebral infarction due to embolism of unspecified vertebral artery	DX	ICD-10-CM
I63.219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral arteries	DX	ICD-10-CM
I63.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
I63.20	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries	DX	ICD-10-CM
I63.30	Cerebral infarction due to thrombosis of unspecified cerebral artery	DX	ICD-10-CM
I63.40	Cerebral infarction due to embolism of unspecified cerebral artery	DX	ICD-10-CM
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral	DX	ICD-10-CM
I67.89	Other cerebrovascular disease	DX	ICD-10-CM
I63.00	Cerebral infarction due to thrombosis of unspecified precerebral artery	DX	ICD-10-CM
I63.011	Cerebral infarction due to thrombosis of right vertebral artery	DX	ICD-10-CM
I63.012	Cerebral infarction due to thrombosis of left vertebral artery	DX	ICD-10-CM
I63.013	Cerebral infarction due to thrombosis of bilateral vertebral arteries	DX	ICD-10-CM
I63.02	Cerebral infarction due to thrombosis of basilar artery	DX	ICD-10-CM
I63.031	Cerebral infarction due to thrombosis of right carotid artery	DX	ICD-10-CM
I63.032	Cerebral infarction due to thrombosis of left carotid artery	DX	ICD-10-CM
I63.033	Cerebral infarction due to thrombosis of bilateral carotid arteries	DX	ICD-10-CM
I63.039	Cerebral infarction due to thrombosis of unspecified carotid artery	DX	ICD-10-CM
I63.09	Cerebral infarction due to thrombosis of other precerebral artery	DX	ICD-10-CM
I63.10	Cerebral infarction due to embolism of unspecified precerebral artery	DX	ICD-10-CM
I63.111	Cerebral infarction due to embolism of right vertebral artery	DX	ICD-10-CM
I63.112	Cerebral infarction due to embolism of left vertebral artery	DX	ICD-10-CM
I63.113	Cerebral infarction due to embolism of bilateral vertebral arteries	DX	ICD-10-CM
I63.12	Cerebral infarction due to embolism of basilar artery	DX	ICD-10-CM
I63.131	Cerebral infarction due to embolism of right carotid artery	DX	ICD-10-CM
I63.132	Cerebral infarction due to embolism of left carotid artery	DX	ICD-10-CM
I63.133	Cerebral infarction due to embolism of bilateral carotid arteries	DX	ICD-10-CM
I63.19	Cerebral infarction due to embolism of other precerebral artery	DX	ICD-10-CM
I63.211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral arteries	DX	ICD-10-CM
I63.212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral arteries	DX	ICD-10-CM
I63.213	Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral	DX	ICD-10-CM
I63.231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries	DX	ICD-10-CM
I63.232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries	DX	ICD-10-CM
I63.233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries	DX	ICD-10-CM
I63.29	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral	DX	ICD-10-CM
I63.311	Cerebral infarction due to thrombosis of right middle cerebral artery	DX	ICD-10-CM
I63.312	Cerebral infarction due to thrombosis of left middle cerebral artery	DX	ICD-10-CM
I63.313	Cerebral infarction due to thrombosis of bilateral middle cerebral arteries	DX	ICD-10-CM
I63.319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery	DX	ICD-10-CM
I63.321	Cerebral infarction due to thrombosis of right anterior cerebral artery	DX	ICD-10-CM
I63.322	Cerebral infarction due to thrombosis of left anterior cerebral artery	DX	ICD-10-CM
I63.323	Cerebral infarction due to thrombosis of bilateral anterior arteries	DX	ICD-10-CM
I63.329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery	DX	ICD-10-CM
I63.331	Cerebral infarction due to thrombosis of right posterior cerebral artery	DX	ICD-10-CM
I63.332	Cerebral infarction due to thrombosis of left posterior cerebral artery	DX	ICD-10-CM
I63.333	Cerebral infarction to thrombosis of bilateral posterior arteries	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
I63.339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery	DX	ICD-10-CM
I63.341	Cerebral infarction due to thrombosis of right cerebellar artery	DX	ICD-10-CM
I63.342	Cerebral infarction due to thrombosis of left cerebellar artery	DX	ICD-10-CM
I63.343	Cerebral infarction to thrombosis of bilateral cerebellar arteries	DX	ICD-10-CM
I63.349	Cerebral infarction due to thrombosis of unspecified cerebellar artery	DX	ICD-10-CM
I63.39	Cerebral infarction due to thrombosis of other cerebral artery	DX	ICD-10-CM
I63.411	Cerebral infarction due to embolism of right middle cerebral artery	DX	ICD-10-CM
I63.412	Cerebral infarction due to embolism of left middle cerebral artery	DX	ICD-10-CM
I63.413	Cerebral infarction due to embolism of bilateral middle cerebral arteries	DX	ICD-10-CM
I63.419	Cerebral infarction due to embolism of unspecified middle cerebral artery	DX	ICD-10-CM
I63.421	Cerebral infarction due to embolism of right anterior cerebral artery	DX	ICD-10-CM
I63.422	Cerebral infarction due to embolism of left anterior cerebral artery	DX	ICD-10-CM
I63.423	Cerebral infarction due to embolism of bilateral anterior cerebral arteries	DX	ICD-10-CM
I63.429	Cerebral infarction due to embolism of unspecified anterior cerebral artery	DX	ICD-10-CM
I63.431	Cerebral infarction due to embolism of right posterior cerebral artery	DX	ICD-10-CM
I63.432	Cerebral infarction due to embolism of left posterior cerebral artery	DX	ICD-10-CM
I63.433	Cerebral infarction due to embolism of bilateral posterior cerebral arteries	DX	ICD-10-CM
I63.439	Cerebral infarction due to embolism of unspecified posterior cerebral artery	DX	ICD-10-CM
I63.441	Cerebral infarction due to embolism of right cerebellar artery	DX	ICD-10-CM
I63.442	Cerebral infarction due to embolism of left cerebellar artery	DX	ICD-10-CM
I63.443	Cerebral infarction due to embolism of bilateral cerebellar arteries	DX	ICD-10-CM
I63.449	Cerebral infarction due to embolism of unspecified cerebellar artery	DX	ICD-10-CM
I63.49	Cerebral infarction due to embolism of other cerebral artery	DX	ICD-10-CM
I63.511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery	DX	ICD-10-CM
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral	DX	ICD-10-CM
I63.513	Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle arteries	DX	ICD-10-CM
I63.519	Cerebral infarction due to unspecified occlusion or stenosis of unspecified middle cerebral artery	DX	ICD-10-CM
I63.521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery	DX	ICD-10-CM
I63.522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery	DX	ICD-10-CM
I63.523	Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior arteries	DX	ICD-10-CM
I63.529	Cerebral infarction due to unspecified occlusion or stenosis of unspecified anterior cerebral artery	DX	ICD-10-CM
I63.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery	DX	ICD-10-CM
I63.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery	DX	ICD-10-CM
I63.533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior	DX	ICD-10-CM
I63.539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
I63.541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery	DX	ICD-10-CM
I63.542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery	DX	ICD-10-CM
I63.543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar	DX	ICD-10-CM
I63.549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery	DX	ICD-10-CM
I63.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic	DX	ICD-10-CM
I63.8	Other cerebral infarction	DX	ICD-10-CM
I63.9	Cerebral infarction, unspecified	DX	ICD-10-CM
Intracranial Hemorrhage			
430	Subarachnoid hemorrhage	DX	ICD-9-CM
431	Intracerebral hemorrhage	DX	ICD-9-CM
432	Other and unspecified intracranial hemorrhage	DX	ICD-9-CM
432	Nontraumatic extradural hemorrhage	DX	ICD-9-CM
432.1	Subdural hemorrhage	DX	ICD-9-CM
432.9	Unspecified intracranial hemorrhage	DX	ICD-9-CM
852	Subarachnoid hemorrhage following injury without mention of open intracranial wound	DX	ICD-9-CM
852	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	DX	ICD-9-CM
852.01	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	DX	ICD-9-CM
852.02	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	DX	ICD-9-CM
852.03	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
852.04	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
852.05	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
852.06	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	DX	ICD-9-CM
852.09	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	DX	ICD-9-CM
852.2	Subdural hemorrhage following injury without mention of open intracranial wound	DX	ICD-9-CM
852.2	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	DX	ICD-9-CM
852.21	Subdural hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	DX	ICD-9-CM
852.22	Subdural hemorrhage following injury, without mention of open intracranial wound, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
852.23	Subdural hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
852.24	Subdural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
852.25	Subdural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
852.26	Subdural hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	DX	ICD-9-CM
852.29	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	DX	ICD-9-CM
852.4	Extradural hemorrhage following injury without mention of open intracranial wound	DX	ICD-9-CM
852.4	Extradural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	DX	ICD-9-CM
852.41	Extradural hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	DX	ICD-9-CM
852.42	Extradural hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	DX	ICD-9-CM
852.43	Extradural hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
852.44	Extradural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
852.45	Extradural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
852.46	Extradural hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	DX	ICD-9-CM
852.49	Extradural hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	DX	ICD-9-CM
853	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound	DX	ICD-9-CM
853	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	DX	ICD-9-CM
853.01	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	DX	ICD-9-CM
853.02	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	DX	ICD-9-CM
853.03	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
853.04	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to preexisting conscious level	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
853.05	Other and unspecified intracranial hemorrhage following injury. Without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
853.06	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	DX	ICD-9-CM
853.09	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	DX	ICD-9-CM
I60.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and	DX	ICD-10-CM
I60.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation	DX	ICD-10-CM
I60.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation	DX	ICD-10-CM
I60.10	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery	DX	ICD-10-CM
I60.11	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery	DX	ICD-10-CM
I60.12	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery	DX	ICD-10-CM
I60.2	Nontraumatic subarachnoid hemorrhage from anterior communicating artery	DX	ICD-10-CM
I60.30	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery	DX	ICD-10-CM
I60.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery	DX	ICD-10-CM
I60.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery	DX	ICD-10-CM
I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery	DX	ICD-10-CM
I60.50	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery	DX	ICD-10-CM
I60.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery	DX	ICD-10-CM
I60.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery	DX	ICD-10-CM
I60.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries	DX	ICD-10-CM
I60.7	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery	DX	ICD-10-CM
I60.8	Other nontraumatic subarachnoid hemorrhage	DX	ICD-10-CM
I60.9	Nontraumatic subarachnoid hemorrhage, unspecified	DX	ICD-10-CM
I61.0	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical	DX	ICD-10-CM
I61.1	Nontraumatic intracerebral hemorrhage in hemisphere, cortical	DX	ICD-10-CM
I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified	DX	ICD-10-CM
I61.3	Nontraumatic intracerebral hemorrhage in brain stem	DX	ICD-10-CM
I61.4	Nontraumatic intracerebral hemorrhage in cerebellum	DX	ICD-10-CM
I61.5	Nontraumatic intracerebral hemorrhage, intraventricular	DX	ICD-10-CM
I61.6	Nontraumatic intracerebral hemorrhage, multiple localized	DX	ICD-10-CM
I61.8	Other nontraumatic intracerebral hemorrhage	DX	ICD-10-CM
I61.9	Nontraumatic intracerebral hemorrhage, unspecified	DX	ICD-10-CM
I62.00	Nontraumatic subdural hemorrhage, unspecified	DX	ICD-10-CM
I62.01	Nontraumatic acute subdural hemorrhage	DX	ICD-10-CM
I62.02	Nontraumatic subacute subdural hemorrhage	DX	ICD-10-CM
I62.03	Nontraumatic chronic subdural hemorrhage	DX	ICD-10-CM
I62.1	Nontraumatic extradural hemorrhage	DX	ICD-10-CM
I62.9	Nontraumatic intracranial hemorrhage, unspecified	DX	ICD-10-CM
S06.340A	Traumatic hemorrhage of right cerebrum without loss of consciousness, initial	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S06.341A	Traumatic hemorrhage of right cerebrum with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.342A	Traumatic hemorrhage of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.343A	Traumatic hemorrhage of right cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.344A	Traumatic hemorrhage of right cerebrum with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.345A	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.346A	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.347A	Traumatic hemorrhage of right cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.348A	Traumatic hemorrhage of right cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.349A	Traumatic hemorrhage of right cerebrum with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S06.350A	Traumatic hemorrhage of left cerebrum without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.351A	Traumatic hemorrhage of left cerebrum with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.352A	Traumatic hemorrhage of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.353A	Traumatic hemorrhage of left cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.354A	Traumatic hemorrhage of left cerebrum with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.355A	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.356A	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.357A	Traumatic hemorrhage of left cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.358A	Traumatic hemorrhage of left cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.359A	Traumatic hemorrhage of left cerebrum with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S06.360A	Traumatic hemorrhage of cerebrum, unspecified, without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.361A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S06.362A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.363A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 1 hours to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.364A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.365A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.366A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.367A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.368A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.369A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S06.4X0A	Epidural hemorrhage without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.4X1A	Epidural hemorrhage with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.4X2A	Epidural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.4X3A	Epidural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.4X4A	Epidural hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.4X5A	Epidural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.4X6A	Epidural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.4X7A	Epidural hemorrhage with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.4X8A	Epidural hemorrhage with loss of consciousness of any duration with death due to other causes prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.4X9A	Epidural hemorrhage with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S06.5X0A	Traumatic subdural hemorrhage without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.5X1A	Traumatic subdural hemorrhage with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.5X2A	Traumatic subdural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.5X3A	Traumatic subdural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S06.5X4A	Traumatic subdural hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.5X5A	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.5X6A	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.5X7A	Traumatic subdural hemorrhage with loss of consciousness of any duration with death due to brain injury before regaining consciousness, initial encounter	DX	ICD-10-CM
S06.5X8A	Traumatic subdural hemorrhage with loss of consciousness of any duration with death due to other cause before regaining consciousness, initial encounter	DX	ICD-10-CM
S06.5X9A	Traumatic subdural hemorrhage with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S06.6X0A	Traumatic subarachnoid hemorrhage without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.6X1A	Traumatic subarachnoid hemorrhage with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.6X2A	Traumatic subarachnoid hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.6X3A	Traumatic subarachnoid hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.6X4A	Traumatic subarachnoid hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.6X5A	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.6X6A	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.6X7A	Traumatic subarachnoid hemorrhage with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.6X8A	Traumatic subarachnoid hemorrhage with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.6X9A	Traumatic subarachnoid hemorrhage with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM

Gastrointestinal Bleeding - List 1

455.2	Internal hemorrhoids with other complication	ICD-9-CM
455.5	External hemorrhoids with other complication	ICD-9-CM
455.8	Unspecified hemorrhoids with other complication	ICD-9-CM
456	Esophageal varices with bleeding	ICD-9-CM
456.2	Esophageal varices with bleeding in diseases classified elsewhere	ICD-9-CM
459	Unspecified hemorrhage	ICD-9-CM
530.7	Gastroesophageal laceration-hemorrhage syndrome	ICD-9-CM
530.82	Esophageal hemorrhage	ICD-9-CM
531	Acute gastric ulcer with hemorrhage, without mention of obstruction	ICD-9-CM
531.01	Acute gastric ulcer with hemorrhage and obstruction	ICD-9-CM
531.2	Acute gastric ulcer with hemorrhage and perforation, without mention of obstruction	ICD-9-CM

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Code	Description	Code Type	Code Category
531.21	Acute gastric ulcer with hemorrhage, perforation, and obstruction		ICD-9-CM
531.4	Chronic or unspecified gastric ulcer with hemorrhage, without mention of obstruction		ICD-9-CM
531.41	Chronic or unspecified gastric ulcer with hemorrhage and obstruction		ICD-9-CM
531.6	Chronic or unspecified gastric ulcer with hemorrhage and perforation		ICD-9-CM
531.61	Chronic or unspecified gastric ulcer with hemorrhage, perforation, and obstruction		ICD-9-CM
532	Acute duodenal ulcer with hemorrhage, without mention of obstruction		ICD-9-CM
532.01	Acute duodenal ulcer with hemorrhage and obstruction		ICD-9-CM
532.2	Acute duodenal ulcer with hemorrhage and perforation, without mention of		ICD-9-CM
532.21	Acute duodenal ulcer with hemorrhage, perforation, and obstruction		ICD-9-CM
532.4	Duodenal ulcer, chronic or unspecified, with hemorrhage, without mention of obstruction		ICD-9-CM
532.41	Chronic or unspecified duodenal ulcer with hemorrhage and obstruction	DX	ICD-9-CM
532.6	Chronic or unspecified duodenal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
532.61	Chronic or unspecified duodenal ulcer with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
533	Acute peptic ulcer, unspecified site, with hemorrhage, without mention of obstruction	DX	ICD-9-CM
533.01	Acute peptic ulcer, unspecified site, with hemorrhage and obstruction	DX	ICD-9-CM
533.2	Acute peptic ulcer, unspecified site, with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
533.21	Acute peptic ulcer, unspecified site, with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
533.4	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage, without mention of obstruction	DX	ICD-9-CM
533.41	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage and obstruction	DX	ICD-9-CM
533.6	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
533.61	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
534	Acute gastrojejunal ulcer with hemorrhage, without mention of obstruction	DX	ICD-9-CM
534.01	Acute gastrojejunal ulcer, with hemorrhage and obstruction	DX	ICD-9-CM
534.2	Acute gastrojejunal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
534.21	Acute gastrojejunal ulcer with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
534.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage, without mention of obstruction	DX	ICD-9-CM
534.41	Chronic or unspecified gastrojejunal ulcer, with hemorrhage and obstruction	DX	ICD-9-CM
534.6	Chronic or unspecified gastrojejunal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
534.61	Chronic or unspecified gastrojejunal ulcer with hemorrhage, perforation, and	DX	ICD-9-CM
535.01	Acute gastritis with hemorrhage	DX	ICD-9-CM
535.11	Atrophic gastritis with hemorrhage	DX	ICD-9-CM
535.21	Gastric mucosal hypertrophy with hemorrhage	DX	ICD-9-CM
535.31	Alcoholic gastritis with hemorrhage	DX	ICD-9-CM
535.41	Other specified gastritis with hemorrhage	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
535.51	Unspecified gastritis and gastroduodenitis with hemorrhage	DX	ICD-9-CM
535.61	Duodenitis with hemorrhage	DX	ICD-9-CM
537.83	Angiodysplasia of stomach and duodenum with hemorrhage	DX	ICD-9-CM
562.02	Diverticulosis of small intestine with hemorrhage	DX	ICD-9-CM
562.03	Diverticulitis of small intestine with hemorrhage	DX	ICD-9-CM
562.12	Diverticulosis of colon with hemorrhage	DX	ICD-9-CM
562.13	Diverticulitis of colon with hemorrhage	DX	ICD-9-CM
568.81	Hemoperitoneum (nontraumatic)	DX	ICD-9-CM
569.3	Hemorrhage of rectum and anus	DX	ICD-9-CM
569.85	Angiodysplasia of intestine with hemorrhage	DX	ICD-9-CM
578	Hematemesis	DX	ICD-9-CM
578.1	Blood in stool	DX	ICD-9-CM
578.9	Hemorrhage of gastrointestinal tract, unspecified	DX	ICD-9-CM
I85.01	Esophageal varices with bleeding	DX	ICD-10-CM
I85.11	Secondary esophageal varices with bleeding	DX	ICD-10-CM
K22.6	Gastro-esophageal laceration-hemorrhage syndrome	DX	ICD-10-CM
K22.8	Other specified diseases of esophagus	DX	ICD-10-CM
K25.0	Acute gastric ulcer with hemorrhage	DX	ICD-10-CM
K25.2	Acute gastric ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K25.4	Chronic or unspecified gastric ulcer with hemorrhage	DX	ICD-10-CM
K25.6	Chronic or unspecified gastric ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K26.0	Acute duodenal ulcer with hemorrhage	DX	ICD-10-CM
K26.2	Acute duodenal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K26.4	Chronic or unspecified duodenal ulcer with hemorrhage	DX	ICD-10-CM
K26.6	Chronic or unspecified duodenal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K27.0	Acute peptic ulcer, site unspecified, with hemorrhage	DX	ICD-10-CM
K27.2	Acute peptic ulcer, site unspecified, with both hemorrhage and perforation	DX	ICD-10-CM
K27.4	Chronic or unspecified peptic ulcer, site unspecified, with hemorrhage	DX	ICD-10-CM
K27.6	Chronic or unspecified peptic ulcer, site unspecified, with both hemorrhage and perforation	DX	ICD-10-CM
K28.0	Acute gastrojejunal ulcer with hemorrhage	DX	ICD-10-CM
K28.2	Acute gastrojejunal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K28.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage	DX	ICD-10-CM
K28.6	Chronic or unspecified gastrojejunal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K29.01	Acute gastritis with bleeding	DX	ICD-10-CM
K29.21	Alcoholic gastritis with bleeding	DX	ICD-10-CM
K29.31	Chronic superficial gastritis with bleeding	DX	ICD-10-CM
K29.41	Chronic atrophic gastritis with bleeding	DX	ICD-10-CM
K29.51	Unspecified chronic gastritis with bleeding	DX	ICD-10-CM
K29.61	Other gastritis with bleeding	DX	ICD-10-CM
K29.71	Gastritis, unspecified, with bleeding	DX	ICD-10-CM
K29.81	Duodenitis with bleeding	DX	ICD-10-CM
K29.91	Gastroduodenitis, unspecified, with bleeding	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
K31.811	Angiodysplasia of stomach and duodenum with bleeding	DX	ICD-10-CM
K55.21	Angiodysplasia of colon with hemorrhage	DX	ICD-10-CM
K56.699	Other intestinal obstruction unspecified as to partial versus complete obstruction	DX	ICD-10-CM
K57.01	Diverticulitis of small intestine with perforation and abscess with bleeding	DX	ICD-10-CM
K57.11	Diverticulosis of small intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.13	Diverticulitis of small intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.21	Diverticulitis of large intestine with perforation and abscess with bleeding	DX	ICD-10-CM
K57.31	Diverticulosis of large intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.33	Diverticulitis of large intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.41	Diverticulitis of both small and large intestine with perforation and abscess with	DX	ICD-10-CM
K57.51	Diverticulosis of both small and large intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.53	Diverticulitis of both small and large intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.81	Diverticulitis of intestine, part unspecified, with perforation and abscess with bleeding	DX	ICD-10-CM
K57.91	Diverticulosis of intestine, part unspecified, without perforation or abscess with	DX	ICD-10-CM
K57.93	Diverticulitis of intestine, part unspecified, without perforation or abscess with bleeding	DX	ICD-10-CM
K62.5	Hemorrhage of anus and rectum	DX	ICD-10-CM
K64.0	First degree hemorrhoids	DX	ICD-10-CM
K64.1	Second degree hemorrhoids	DX	ICD-10-CM
K64.2	Third degree hemorrhoids	DX	ICD-10-CM
K64.3	Fourth degree hemorrhoids	DX	ICD-10-CM
K64.4	Residual hemorrhoidal skin tags	DX	ICD-10-CM
K64.8	Other hemorrhoids	DX	ICD-10-CM
K66.1	Hemoperitoneum	DX	ICD-10-CM
K92.0	Hematemesis	DX	ICD-10-CM
K92.1	Melena	DX	ICD-10-CM
K92.2	Gastrointestinal hemorrhage, unspecified	DX	ICD-10-CM
R58	Hemorrhage, not elsewhere classified	DX	ICD-10-CM
Gastrointestinal Bleeding - List 2			
455.0	Internal hemorrhoids without mention of complication	DX	ICD-9-CM
455.1	Internal thrombosed hemorrhoids	DX	ICD-9-CM
455.3	External hemorrhoids without mention of complication	DX	ICD-9-CM
455.4	External thrombosed hemorrhoids	DX	ICD-9-CM
455.6	Unspecified hemorrhoids without mention of complication	DX	ICD-9-CM
455.7	Unspecified thrombosed hemorrhoids	DX	ICD-9-CM
531.1	Acute gastric ulcer with perforation	DX	ICD-9-CM
531.3	Acute gastric ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
531.5	Chronic or unspecified gastric ulcer with perforation	DX	ICD-9-CM
531.7	Chronic gastric ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
531.9	Gastric ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation	DX	ICD-9-CM
532.1	Acute duodenal ulcer with perforation	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
532.3	Acute duodenal ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
532.5	Chronic or unspecified duodenal ulcer with perforation	DX	ICD-9-CM
532.7	Chronic duodenal ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
532.9	Duodenal ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation	DX	ICD-9-CM
533.1	Acute peptic ulcer, unspecified site, with perforation	DX	ICD-9-CM
533.3	Acute peptic ulcer, unspecified site, without mention of hemorrhage and perforation	DX	ICD-9-CM
533.5	Chronic or unspecified peptic ulcer, unspecified site, with perforation	DX	ICD-9-CM
533.7	Chronic peptic ulcer, unspecified site, without mention of hemorrhage or perforation	DX	ICD-9-CM
533.9	Peptic ulcer, unspecified site, unspecified as acute or chronic, without mention of hemorrhage or perforation	DX	ICD-9-CM
534.1	Acute gastrojejunal ulcer with perforation	DX	ICD-9-CM
534.3	Acute gastrojejunal ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
534.5	Chronic or unspecified gastrojejunal ulcer with perforation	DX	ICD-9-CM
534.7	Chronic gastrojejunal ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
534.9	Gastrojejunal ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation	DX	ICD-9-CM
535.00	Acute gastritis without mention of hemorrhage	DX	ICD-9-CM
535.10	Atrophic gastritis without mention of hemorrhage	DX	ICD-9-CM
535.20	Gastric mucosal hypertrophy without mention of hemorrhage	DX	ICD-9-CM
535.30	Alcoholic gastritis without mention of hemorrhage	DX	ICD-9-CM
535.40	Other specified gastritis without mention of hemorrhage	DX	ICD-9-CM
535.50	Unspecified gastritis and gastroduodenitis without mention of hemorrhage	DX	ICD-9-CM
535.60	Duodenitis without mention of hemorrhage	DX	ICD-9-CM
562.00	Diverticulosis of small intestine (without mention of hemorrhage)	DX	ICD-9-CM
562.01	Diverticulitis of small intestine (without mention of hemorrhage)	DX	ICD-9-CM
562.10	Diverticulosis of colon (without mention of hemorrhage)	DX	ICD-9-CM
562.11	Diverticulitis of colon (without mention of hemorrhage)	DX	ICD-9-CM
530.1	Esophagitis	DX	ICD-9-CM
K29.00	Acute gastritis without bleeding	DX	ICD-10-CM
K29.20	Alcoholic gastritis without bleeding	DX	ICD-10-CM
K29.30	Chronic superficial gastritis without bleeding	DX	ICD-10-CM
K29.40	Chronic atrophic gastritis without bleeding	DX	ICD-10-CM
K29.50	Unspecified chronic gastritis without bleeding	DX	ICD-10-CM
K29.60	Other gastritis without bleeding	DX	ICD-10-CM
K29.70	Gastritis, unspecified, without bleeding	DX	ICD-10-CM
K29.80	Duodenitis without bleeding	DX	ICD-10-CM
K29.90	Gastroduodenitis, unspecified, without bleeding	DX	ICD-10-CM
K57.00	Diverticulitis of small intestine with perforation and abscess without bleeding	DX	ICD-10-CM
K57.10	Diverticulosis of small intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.12	Diverticulitis of small intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.20	Diverticulitis of large intestine with perforation and abscess without bleeding	DX	ICD-10-CM
K57.30	Diverticulosis of large intestine without perforation or abscess without bleeding	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
K57.32	Diverticulitis of large intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.40	Diverticulitis of both small and large intestine with perforation and abscess without bleeding	DX	ICD-10-CM
K57.50	Diverticulosis of both small and large intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.52	Diverticulitis of both small and large intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.80	Diverticulitis of intestine, part unspecified, with perforation and abscess without bleeding	DX	ICD-10-CM
K57.90	Diverticulosis of intestine, part unspecified, without perforation or abscess without bleeding	DX	ICD-10-CM
K57.92	Diverticulitis of intestine, part unspecified, without perforation or abscess without bleeding	DX	ICD-10-CM
K64.0	First degree hemorrhoids	DX	ICD-10-CM
K64.1	Second degree hemorrhoids	DX	ICD-10-CM
K64.2	Third degree hemorrhoids	DX	ICD-10-CM
K64.3	Fourth degree hemorrhoids	DX	ICD-10-CM
K64.4	Residual hemorrhoidal skin tags	DX	ICD-10-CM
K64.5	Perianal venous thrombosis	DX	ICD-10-CM
K64.8	Other hemorrhoids	DX	ICD-10-CM
K64.9	Unspecified hemorrhoids	DX	ICD-10-CM
Major Extracranial Bleeding - List 1			
423.0	Hemopericardium	DX	ICD-9-CM
455.2	Internal hemorrhoids with other complication	DX	ICD-9-CM
455.5	External hemorrhoids with other complication	DX	ICD-9-CM
455.8	Unspecified hemorrhoids with other complication	DX	ICD-9-CM
456.0	Esophageal varices with bleeding	DX	ICD-9-CM
456.20	Esophageal varices with bleeding in diseases classified elsewhere	DX	ICD-9-CM
459.0	Unspecified hemorrhage	DX	ICD-9-CM
530.7	Gastroesophageal laceration-hemorrhage syndrome	DX	ICD-9-CM
530.82	Esophageal hemorrhage	DX	ICD-9-CM
531.0	Acute gastric ulcer with hemorrhage	DX	ICD-9-CM
531.00	Acute gastric ulcer with hemorrhage, without mention of obstruction	DX	ICD-9-CM
531.01	Acute gastric ulcer with hemorrhage and obstruction	DX	ICD-9-CM
531.2	Acute gastric ulcer with hemorrhage and perforation	DX	ICD-9-CM
531.20	Acute gastric ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
531.21	Acute gastric ulcer with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
531.4	Chronic or unspecified gastric ulcer with hemorrhage	DX	ICD-9-CM
531.40	Chronic or unspecified gastric ulcer with hemorrhage, without mention of obstruction	DX	ICD-9-CM
531.41	Chronic or unspecified gastric ulcer with hemorrhage and obstruction	DX	ICD-9-CM
531.6	Chronic or unspecified gastric ulcer with hemorrhage and perforation	DX	ICD-9-CM
531.60	Chronic or unspecified gastric ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
531.61	Chronic or unspecified gastric ulcer with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
532.0	Acute duodenal ulcer with hemorrhage	DX	ICD-9-CM
532.00	Acute duodenal ulcer with hemorrhage, without mention of obstruction	DX	ICD-9-CM
532.01	Acute duodenal ulcer with hemorrhage and obstruction	DX	ICD-9-CM
532.2	Acute duodenal ulcer with hemorrhage and perforation	DX	ICD-9-CM
532.20	Acute duodenal ulcer with hemorrhage and perforation, without mention of	DX	ICD-9-CM
532.21	Acute duodenal ulcer with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
532.4	Chronic or unspecified duodenal ulcer with hemorrhage	DX	ICD-9-CM
532.40	Duodenal ulcer, chronic or unspecified, with hemorrhage, without mention of obstruction	DX	ICD-9-CM
532.41	Chronic or unspecified duodenal ulcer with hemorrhage and obstruction	DX	ICD-9-CM
532.6	Chronic or unspecified duodenal ulcer with hemorrhage and perforation	DX	ICD-9-CM
532.60	Chronic or unspecified duodenal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
532.61	Chronic or unspecified duodenal ulcer with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
533.0	Acute peptic ulcer, unspecified site, with hemorrhage	DX	ICD-9-CM
533.00	Acute peptic ulcer, unspecified site, with hemorrhage, without mention of obstruction	DX	ICD-9-CM
533.01	Acute peptic ulcer, unspecified site, with hemorrhage and obstruction	DX	ICD-9-CM
533.2	Acute peptic ulcer, unspecified site, with hemorrhage and perforation	DX	ICD-9-CM
533.20	Acute peptic ulcer, unspecified site, with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
533.21	Acute peptic ulcer, unspecified site, with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
533.4	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage	DX	ICD-9-CM
533.40	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage, without mention of obstruction	DX	ICD-9-CM
533.41	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage and obstruction	DX	ICD-9-CM
533.6	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage and perforation	DX	ICD-9-CM
533.60	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
533.61	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
534.0	Acute gastrojejunal ulcer with hemorrhage	DX	ICD-9-CM
534.00	Acute gastrojejunal ulcer with hemorrhage, without mention of obstruction	DX	ICD-9-CM
534.01	Acute gastrojejunal ulcer, with hemorrhage and obstruction	DX	ICD-9-CM
534.2	Acute gastrojejunal ulcer with hemorrhage and perforation	DX	ICD-9-CM
534.20	Acute gastrojejunal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
534.21	Acute gastrojejunal ulcer with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
534.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage	DX	ICD-9-CM
534.40	Chronic or unspecified gastrojejunal ulcer with hemorrhage, without mention of obstruction	DX	ICD-9-CM
534.41	Chronic or unspecified gastrojejunal ulcer, with hemorrhage and obstruction	DX	ICD-9-CM
534.6	Chronic or unspecified gastrojejunal ulcer with hemorrhage and perforation	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
534.60	Chronic or unspecified gastrojejunal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
534.61	Chronic or unspecified gastrojejunal ulcer with hemorrhage, perforation, and	DX	ICD-9-CM
535.01	Acute gastritis with hemorrhage	DX	ICD-9-CM
535.11	Atrophic gastritis with hemorrhage	DX	ICD-9-CM
535.21	Gastric mucosal hypertrophy with hemorrhage	DX	ICD-9-CM
535.31	Alcoholic gastritis with hemorrhage	DX	ICD-9-CM
535.41	Other specified gastritis with hemorrhage	DX	ICD-9-CM
535.51	Unspecified gastritis and gastroduodenitis with hemorrhage	DX	ICD-9-CM
535.61	Duodenitis with hemorrhage	DX	ICD-9-CM
537.83	Angiodysplasia of stomach and duodenum with hemorrhage	DX	ICD-9-CM
562.02	Diverticulosis of small intestine with hemorrhage	DX	ICD-9-CM
562.03	Diverticulitis of small intestine with hemorrhage	DX	ICD-9-CM
562.12	Diverticulosis of colon with hemorrhage	DX	ICD-9-CM
562.13	Diverticulitis of colon with hemorrhage	DX	ICD-9-CM
568.81	Hemoperitoneum (nontraumatic)	DX	ICD-9-CM
569.3	Hemorrhage of rectum and anus	DX	ICD-9-CM
569.85	Angiodysplasia of intestine with hemorrhage	DX	ICD-9-CM
578.0	Hematemesis	DX	ICD-9-CM
578.1	Blood in stool	DX	ICD-9-CM
578.9	Hemorrhage of gastrointestinal tract, unspecified	DX	ICD-9-CM
593.81	Vascular disorders of kidney	DX	ICD-9-CM
599.7	Hematuria	DX	ICD-9-CM
623.8	Other specified noninflammatory disorder of vagina	DX	ICD-9-CM
626.2	Excessive or frequent menstruation	DX	ICD-9-CM
626.6	Metrorrhagia	DX	ICD-9-CM
719.1	Hemarthrosis	DX	ICD-9-CM
719.10	Hemarthrosis, site unspecified	DX	ICD-9-CM
719.11	Hemarthrosis, shoulder region	DX	ICD-9-CM
719.12	Hemarthrosis, upper arm	DX	ICD-9-CM
719.13	Hemarthrosis, forearm	DX	ICD-9-CM
719.14	Hemarthrosis, hand	DX	ICD-9-CM
719.15	Hemarthrosis, pelvic region and thigh	DX	ICD-9-CM
719.16	Hemarthrosis, lower leg	DX	ICD-9-CM
719.17	Hemarthrosis, ankle and foot	DX	ICD-9-CM
719.18	Hemarthrosis, other specified site	DX	ICD-9-CM
719.19	Hemarthrosis, multiple sites	DX	ICD-9-CM
784.7	Epistaxis	DX	ICD-9-CM
784.8	Hemorrhage from throat	DX	ICD-9-CM
786.3	Hemoptysis	DX	ICD-9-CM
I31.2	Hemopericardium, not elsewhere classified	DX	ICD-10-CM
I85.01	Esophageal varices with bleeding	DX	ICD-10-CM
I85.11	Secondary esophageal varices with bleeding	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
K22.6	Gastro-esophageal laceration-hemorrhage syndrome	DX	ICD-10-CM
K22.8	Other specified diseases of esophagus	DX	ICD-10-CM
K25.0	Acute gastric ulcer with hemorrhage	DX	ICD-10-CM
K25.2	Acute gastric ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K25.4	Chronic or unspecified gastric ulcer with hemorrhage	DX	ICD-10-CM
K25.6	Chronic or unspecified gastric ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K26.0	Acute duodenal ulcer with hemorrhage	DX	ICD-10-CM
K26.2	Acute duodenal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K26.4	Chronic or unspecified duodenal ulcer with hemorrhage	DX	ICD-10-CM
K26.6	Chronic or unspecified duodenal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K27.0	Acute peptic ulcer, site unspecified, with hemorrhage	DX	ICD-10-CM
K27.2	Acute peptic ulcer, site unspecified, with both hemorrhage and perforation	DX	ICD-10-CM
K27.4	Chronic or unspecified peptic ulcer, site unspecified, with hemorrhage	DX	ICD-10-CM
K27.6	Chronic or unspecified peptic ulcer, site unspecified, with both hemorrhage and perforation	DX	ICD-10-CM
K28.0	Acute gastrojejunal ulcer with hemorrhage	DX	ICD-10-CM
K28.2	Acute gastrojejunal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K28.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage	DX	ICD-10-CM
K28.6	Chronic or unspecified gastrojejunal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K29.01	Acute gastritis with bleeding	DX	ICD-10-CM
K29.21	Alcoholic gastritis with bleeding	DX	ICD-10-CM
K29.31	Chronic superficial gastritis with bleeding	DX	ICD-10-CM
K29.41	Chronic atrophic gastritis with bleeding	DX	ICD-10-CM
K29.51	Unspecified chronic gastritis with bleeding	DX	ICD-10-CM
K29.61	Other gastritis with bleeding	DX	ICD-10-CM
K29.71	Gastritis, unspecified, with bleeding	DX	ICD-10-CM
K29.81	Duodenitis with bleeding	DX	ICD-10-CM
K29.91	Gastroduodenitis, unspecified, with bleeding	DX	ICD-10-CM
K31.811	Angiodysplasia of stomach and duodenum with bleeding	DX	ICD-10-CM
K55.21	Angiodysplasia of colon with hemorrhage	DX	ICD-10-CM
K56.699	Other intestinal obstruction unspecified as to partial versus complete obstruction	DX	ICD-10-CM
K57.01	Diverticulitis of small intestine with perforation and abscess with bleeding	DX	ICD-10-CM
K57.11	Diverticulosis of small intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.13	Diverticulitis of small intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.21	Diverticulitis of large intestine with perforation and abscess with bleeding	DX	ICD-10-CM
K57.31	Diverticulosis of large intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.33	Diverticulitis of large intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.41	Diverticulitis of both small and large intestine with perforation and abscess with	DX	ICD-10-CM
K57.51	Diverticulosis of both small and large intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.53	Diverticulitis of both small and large intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.81	Diverticulitis of intestine, part unspecified, with perforation and abscess with bleeding	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
K57.91	Diverticulosis of intestine, part unspecified, without perforation or abscess with	DX	ICD-10-CM
K57.93	Diverticulitis of intestine, part unspecified, without perforation or abscess with bleeding	DX	ICD-10-CM
K62.5	Hemorrhage of anus and rectum	DX	ICD-10-CM
K64.0	First degree hemorrhoids	DX	ICD-10-CM
K64.1	Second degree hemorrhoids	DX	ICD-10-CM
K64.2	Third degree hemorrhoids	DX	ICD-10-CM
K64.3	Fourth degree hemorrhoids	DX	ICD-10-CM
K64.4	Residual hemorrhoidal skin tags	DX	ICD-10-CM
K64.8	Other hemorrhoids	DX	ICD-10-CM
K66.1	Hemoperitoneum	DX	ICD-10-CM
K92.0	Hematemesis	DX	ICD-10-CM
K92.1	Melena	DX	ICD-10-CM
K92.2	Gastrointestinal hemorrhage, unspecified	DX	ICD-10-CM
M25.00	Hemarthrosis, unspecified joint	DX	ICD-10-CM
M25.011	Hemarthrosis, right shoulder	DX	ICD-10-CM
M25.012	Hemarthrosis, left shoulder	DX	ICD-10-CM
M25.019	Hemarthrosis, unspecified shoulder	DX	ICD-10-CM
M25.021	Hemarthrosis, right elbow	DX	ICD-10-CM
M25.022	Hemarthrosis, left elbow	DX	ICD-10-CM
M25.029	Hemarthrosis, unspecified elbow	DX	ICD-10-CM
M25.031	Hemarthrosis, right wrist	DX	ICD-10-CM
M25.032	Hemarthrosis, left wrist	DX	ICD-10-CM
M25.039	Hemarthrosis, unspecified wrist	DX	ICD-10-CM
M25.041	Hemarthrosis, right hand	DX	ICD-10-CM
M25.042	Hemarthrosis, left hand	DX	ICD-10-CM
M25.049	Hemarthrosis, unspecified hand	DX	ICD-10-CM
M25.051	Hemarthrosis, right hip	DX	ICD-10-CM
M25.052	Hemarthrosis, left hip	DX	ICD-10-CM
M25.059	Hemarthrosis, unspecified hip	DX	ICD-10-CM
M25.061	Hemarthrosis, right knee	DX	ICD-10-CM
M25.062	Hemarthrosis, left knee	DX	ICD-10-CM
M25.069	Hemarthrosis, unspecified knee	DX	ICD-10-CM
M25.071	Hemarthrosis, right ankle	DX	ICD-10-CM
M25.072	Hemarthrosis, left ankle	DX	ICD-10-CM
M25.073	Hemarthrosis, unspecified ankle	DX	ICD-10-CM
M25.074	Hemarthrosis, right foot	DX	ICD-10-CM
M25.075	Hemarthrosis, left foot	DX	ICD-10-CM
M25.076	Hemarthrosis, unspecified foot	DX	ICD-10-CM
M25.08	Hemarthrosis, other specified site	DX	ICD-10-CM
N28.0	Ischemia and infarction of kidney	DX	ICD-10-CM
N89.8	Other specified noninflammatory disorders of vagina	DX	ICD-10-CM
N92.0	Excessive and frequent menstruation with regular cycle	DX	ICD-10-CM
N92.1	Excessive and frequent menstruation with irregular cycle	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
R04.0	Epistaxis	DX	ICD-10-CM
R04.1	Hemorrhage from throat	DX	ICD-10-CM
R58	Hemorrhage, not elsewhere classified	DX	ICD-10-CM
531.60	Chronic or unspecified gastric ulcer with hemorrhage and perforation	DX	ICD-10-CM
Major Extracranial Bleeding - List 2			
280.0	Iron deficiency anemia secondary to blood loss (chronic)	DX	ICD-9-CM
285.1	Acute posthemorrhagic anemia	DX	ICD-9-CM
285.9	Unspecified anemia	DX	ICD-9-CM
455.0	Internal hemorrhoids without mention of complication	DX	ICD-9-CM
455.1	Internal thrombosed hemorrhoids	DX	ICD-9-CM
455.2	Internal hemorrhoids with other complication	DX	ICD-9-CM
455.3	External hemorrhoids without mention of complication	DX	ICD-9-CM
455.4	External thrombosed hemorrhoids	DX	ICD-9-CM
455.5	External hemorrhoids with other complication	DX	ICD-9-CM
455.6	Unspecified hemorrhoids without mention of complication	DX	ICD-9-CM
455.7	Unspecified thrombosed hemorrhoids	DX	ICD-9-CM
455.8	Unspecified hemorrhoids with other complication	DX	ICD-9-CM
455.9	Residual hemorrhoidal skin tags	DX	ICD-9-CM
530.1	Esophagitis	DX	ICD-9-CM
531.1	Acute gastric ulcer with perforation	DX	ICD-9-CM
531.3	Acute gastric ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
531.5	Chronic or unspecified gastric ulcer with perforation	DX	ICD-9-CM
531.7	Chronic gastric ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
531.9	Gastric ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation	DX	ICD-9-CM
532.1	Acute duodenal ulcer with perforation	DX	ICD-9-CM
532.3	Acute duodenal ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
532.5	Chronic or unspecified duodenal ulcer with perforation	DX	ICD-9-CM
532.7	Chronic duodenal ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
532.9	Duodenal ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation	DX	ICD-9-CM
533.1	Acute peptic ulcer, unspecified site, with perforation	DX	ICD-9-CM
533.3	Acute peptic ulcer, unspecified site, without mention of hemorrhage and perforation	DX	ICD-9-CM
533.5	Chronic or unspecified peptic ulcer, unspecified site, with perforation	DX	ICD-9-CM
533.7	Chronic peptic ulcer, unspecified site, without mention of hemorrhage or perforation	DX	ICD-9-CM
533.9	Peptic ulcer, unspecified site, unspecified as acute or chronic, without mention of hemorrhage or perforation	DX	ICD-9-CM
534.1	Acute gastrojejunal ulcer with perforation	DX	ICD-9-CM
534.3	Acute gastrojejunal ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
534.5	Chronic or unspecified gastrojejunal ulcer with perforation	DX	ICD-9-CM
534.7	Chronic gastrojejunal ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
534.9	Gastrojejunal ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
535.00	Acute gastritis without mention of hemorrhage	DX	ICD-9-CM
535.10	Atrophic gastritis without mention of hemorrhage	DX	ICD-9-CM
535.20	Gastric mucosal hypertrophy without mention of hemorrhage	DX	ICD-9-CM
535.30	Alcoholic gastritis without mention of hemorrhage	DX	ICD-9-CM
535.40	Other specified gastritis without mention of hemorrhage	DX	ICD-9-CM
535.50	Unspecified gastritis and gastroduodenitis without mention of hemorrhage	DX	ICD-9-CM
535.60	Duodenitis without mention of hemorrhage	DX	ICD-9-CM
562.00	Diverticulosis of small intestine (without mention of hemorrhage)	DX	ICD-9-CM
562.01	Diverticulitis of small intestine (without mention of hemorrhage)	DX	ICD-9-CM
562.10	Diverticulosis of colon (without mention of hemorrhage)	DX	ICD-9-CM
562.11	Diverticulitis of colon (without mention of hemorrhage)	DX	ICD-9-CM
790.92	Abnormal coagulation profile	DX	ICD-9-CM
D50.0	Iron deficiency anemia secondary to blood loss (chronic)	DX	ICD-10-CM
D62	Acute posthemorrhagic anemia	DX	ICD-10-CM
D64.9	Anemia, unspecified	DX	ICD-10-CM
K29.00	Acute gastritis without bleeding	DX	ICD-10-CM
K29.20	Alcoholic gastritis without bleeding	DX	ICD-10-CM
K29.30	Chronic superficial gastritis without bleeding	DX	ICD-10-CM
K29.40	Chronic atrophic gastritis without bleeding	DX	ICD-10-CM
K29.50	Unspecified chronic gastritis without bleeding	DX	ICD-10-CM
K29.60	Other gastritis without bleeding	DX	ICD-10-CM
K29.70	Gastritis, unspecified, without bleeding	DX	ICD-10-CM
K29.80	Duodenitis without bleeding	DX	ICD-10-CM
K29.90	Gastroduodenitis, unspecified, without bleeding	DX	ICD-10-CM
K57.00	Diverticulitis of small intestine with perforation and abscess without bleeding	DX	ICD-10-CM
K57.10	Diverticulosis of small intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.12	Diverticulitis of small intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.20	Diverticulitis of large intestine with perforation and abscess without bleeding	DX	ICD-10-CM
K57.30	Diverticulosis of large intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.32	Diverticulitis of large intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.40	Diverticulitis of both small and large intestine with perforation and abscess without bleeding	DX	ICD-10-CM
K57.50	Diverticulosis of both small and large intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.52	Diverticulitis of both small and large intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.80	Diverticulitis of intestine, part unspecified, with perforation and abscess without bleeding	DX	ICD-10-CM
K57.90	Diverticulosis of intestine, part unspecified, without perforation or abscess without bleeding	DX	ICD-10-CM
K57.92	Diverticulitis of intestine, part unspecified, without perforation or abscess without bleeding	DX	ICD-10-CM
K64.0	First degree hemorrhoids	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
K64.1	Second degree hemorrhoids	DX	ICD-10-CM
K64.2	Third degree hemorrhoids	DX	ICD-10-CM
K64.3	Fourth degree hemorrhoids	DX	ICD-10-CM
K64.4	Residual hemorrhoidal skin tags	DX	ICD-10-CM
K64.5	Perianal venous thrombosis	DX	ICD-10-CM
K64.8	Other hemorrhoids	DX	ICD-10-CM
K64.9	Unspecified hemorrhoids	DX	ICD-10-CM
R79.1	Abnormal coagulation profile	DX	ICD-10-CM
Major Extracranial Bleeding - List 3			
62000	Elevation of depressed skull fracture; simple, extradural	DX	CPT-4
62005	Elevation of depressed skull fracture; compound or comminuted, extradural	DX	CPT-4
62010	Elevation of depressed skull fracture; with repair of dura and/or debridement of brain	DX	CPT-4
800	Fracture of vault of skull	DX	ICD-9-CM
800.0	Closed fracture of vault of skull without mention of intracranial injury	DX	ICD-9-CM
800.00	Closed fracture of vault of skull without mention of intracranial injury, unspecified state of consciousness	DX	ICD-9-CM
800.01	Closed fracture of vault of skull without mention of intracranial injury, no loss of consciousness	DX	ICD-9-CM
800.02	Closed fracture of vault of skull without mention of intracranial injury, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
800.03	Closed fracture of vault of skull without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
800.04	Closed fracture of vault of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
800.05	Closed fracture of vault of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
800.06	Closed fracture of vault of skull without mention of intracranial injury, loss of consciousness of unspecified duration	DX	ICD-9-CM
800.09	Closed fracture of vault of skull without mention of intracranial injury, unspecified concussion	DX	ICD-9-CM
800.1	Closed fracture of vault of skull with cerebral laceration and contusion	DX	ICD-9-CM
800.10	Closed fracture of vault of skull with cerebral laceration and contusion, unspecified state of consciousness	DX	ICD-9-CM
800.11	Closed fracture of vault of skull with cerebral laceration and contusion, no loss of consciousness	DX	ICD-9-CM
800.12	Closed fracture of vault of skull with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
800.13	Closed fracture of vault of skull with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
800.14	Closed fracture of vault of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
800.15	Closed fracture of vault of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
800.16	Closed fracture of vault of skull with cerebral laceration and contusion, loss of consciousness of unspecified duration	DX	ICD-9-CM
800.19	Closed fracture of vault of skull with cerebral laceration and contusion, unspecified concussion	DX	ICD-9-CM
800.2	Closed fracture of vault of skull with subarachnoid, subdural, and extradural	DX	ICD-9-CM
800.20	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
800.21	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	DX	ICD-9-CM
800.22	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
800.23	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
800.24	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
800.25	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
800.26	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
800.29	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	DX	ICD-9-CM
800.3	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage	DX	ICD-9-CM
800.30	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
800.31	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, no loss of consciousness	DX	ICD-9-CM
800.32	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
800.33	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
800.34	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
800.35	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
800.36	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
800.39	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, unspecified concussion	DX	ICD-9-CM
800.4	Closed fracture of vault of skull with intercranial injury of other and unspecified nature	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
800.40	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, unspecified state of consciousness	DX	ICD-9-CM
800.41	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, no loss of consciousness	DX	ICD-9-CM
800.42	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
800.43	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
800.44	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
800.45	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
800.46	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration	DX	ICD-9-CM
800.49	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, unspecified concussion	DX	ICD-9-CM
800.5	Open fracture of vault of skull without mention of intracranial injury	DX	ICD-9-CM
800.50	Open fracture of vault of skull without mention of intracranial injury, unspecified state of consciousness	DX	ICD-9-CM
800.51	Open fracture of vault of skull without mention of intracranial injury, no loss of consciousness	DX	ICD-9-CM
800.52	Open fracture of vault of skull without mention of intracranial injury, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
800.53	Open fracture of vault of skull without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
800.54	Open fracture of vault of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
800.55	Open fracture of vault of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
800.56	Open fracture of vault of skull without mention of intracranial injury, loss of consciousness of unspecified duration	DX	ICD-9-CM
800.59	Open fracture of vault of skull without mention of intracranial injury, unspecified concussion	DX	ICD-9-CM
800.6	Open fracture of vault of skull with cerebral laceration and contusion	DX	ICD-9-CM
800.60	Open fracture of vault of skull with cerebral laceration and contusion, unspecified state of consciousness	DX	ICD-9-CM
800.61	Open fracture of vault of skull with cerebral laceration and contusion, no loss of consciousness	DX	ICD-9-CM
800.62	Open fracture of vault of skull with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
800.63	Open fracture of vault of skull with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
800.64	Open fracture of vault of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
800.65	Open fracture of vault of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
800.66	Open fracture of vault of skull with cerebral laceration and contusion, loss of consciousness of unspecified duration	DX	ICD-9-CM
800.69	Open fracture of vault of skull with cerebral laceration and contusion, unspecified concussion	DX	ICD-9-CM
800.7	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage	DX	ICD-9-CM
800.70	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
800.71	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	DX	ICD-9-CM
800.72	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
800.73	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
800.74	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
800.75	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
800.76	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
800.79	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	DX	ICD-9-CM
800.8	Open fracture of vault of skull with other and unspecified intracranial hemorrhage	DX	ICD-9-CM
800.80	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
800.81	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, no loss of consciousness	DX	ICD-9-CM
800.82	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
800.83	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
800.84	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
800.85	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
800.86	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
800.89	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, unspecified concussion	DX	ICD-9-CM
800.9	Open fracture of vault of skull with intracranial injury of other and unspecified nature	DX	ICD-9-CM
800.90	Open fracture of vault of skull with intracranial injury of other and unspecified nature, unspecified state of consciousness	DX	ICD-9-CM
800.91	Open fracture of vault of skull with intracranial injury of other and unspecified nature, no loss of consciousness	DX	ICD-9-CM
800.92	Open fracture of vault of skull with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
800.93	Open fracture of vault of skull with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
800.94	Open fracture of vault of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
800.95	Open fracture of vault of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
800.96	Open fracture of vault of skull with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration	DX	ICD-9-CM
800.99	Open fracture of vault of skull with intracranial injury of other and unspecified nature, unspecified concussion	DX	ICD-9-CM
801	Fracture of base of skull	DX	ICD-9-CM
801.0	Closed fracture of base of skull without mention of intracranial injury	DX	ICD-9-CM
801.00	Closed fracture of base of skull without mention of intracranial injury, unspecified state of consciousness	DX	ICD-9-CM
801.01	Closed fracture of base of skull without mention of intracranial injury, no loss of consciousness	DX	ICD-9-CM
801.02	Closed fracture of base of skull without mention of intracranial injury, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
801.03	Closed fracture of base of skull without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
801.04	Closed fracture of base of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
801.05	Closed fracture of base of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
801.06	Closed fracture of base of skull without mention of intracranial injury, loss of consciousness of unspecified duration	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
801.09	Closed fracture of base of skull without mention of intracranial injury, unspecified concussion	DX	ICD-9-CM
801.1	Closed fracture of base of skull with cerebral laceration and contusion	DX	ICD-9-CM
801.10	Closed fracture of base of skull with cerebral laceration and contusion, unspecified state of consciousness	DX	ICD-9-CM
801.11	Closed fracture of base of skull with cerebral laceration and contusion, no loss of consciousness	DX	ICD-9-CM
801.12	Closed fracture of base of skull with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
801.13	Closed fracture of base of skull with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
801.14	Closed fracture of base of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
801.15	Closed fracture of base of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
801.16	Closed fracture of base of skull with cerebral laceration and contusion, loss of consciousness of unspecified duration	DX	ICD-9-CM
801.19	Closed fracture of base of skull with cerebral laceration and contusion, unspecified concussion	DX	ICD-9-CM
801.2	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
801.20	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
801.21	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	DX	ICD-9-CM
801.22	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
801.23	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
801.24	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
801.25	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
801.26	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
801.29	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	DX	ICD-9-CM
801.3	Closed fracture of base of skull with other and unspecified intracranial hemorrhage	DX	ICD-9-CM
801.30	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
801.31	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, no loss of consciousness	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
801.32	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
801.33	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
801.34	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
801.35	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
801.36	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
801.39	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, unspecified concussion	DX	ICD-9-CM
801.4	Closed fracture of base of skull with intracranial injury of other and unspecified nature	DX	ICD-9-CM
801.40	Closed fracture of base of skull with intracranial injury of other and unspecified nature, unspecified state of consciousness	DX	ICD-9-CM
801.41	Closed fracture of base of skull with intracranial injury of other and unspecified nature, no loss of consciousness	DX	ICD-9-CM
801.42	Closed fracture of base of skull with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
801.43	Closed fracture of base of skull with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
801.44	Closed fracture of base of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
801.45	Closed fracture of base of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
801.46	Closed fracture of base of skull with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration	DX	ICD-9-CM
801.49	Closed fracture of base of skull with intracranial injury of other and unspecified nature, unspecified concussion	DX	ICD-9-CM
801.5	Open fracture of base of skull without mention of intracranial injury	DX	ICD-9-CM
801.50	Open fracture of base of skull without mention of intracranial injury, unspecified state of consciousness	DX	ICD-9-CM
801.51	Open fracture of base of skull without mention of intracranial injury, no loss of consciousness	DX	ICD-9-CM
801.52	Open fracture of base of skull without mention of intracranial injury, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
801.53	Open fracture of base of skull without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
801.54	Open fracture of base of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
801.55	Open fracture of base of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
801.56	Open fracture of base of skull without mention of intracranial injury, loss of consciousness of unspecified duration	DX	ICD-9-CM
801.59	Open fracture of base of skull without mention of intracranial injury, unspecified concussion	DX	ICD-9-CM
801.6	Open fracture of base of skull with cerebral laceration and contusion	DX	ICD-9-CM
801.60	Open fracture of base of skull with cerebral laceration and contusion, unspecified state of consciousness	DX	ICD-9-CM
801.61	Open fracture of base of skull with cerebral laceration and contusion, no loss of consciousness	DX	ICD-9-CM
801.62	Open fracture of base of skull with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
801.63	Open fracture of base of skull with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
801.64	Open fracture of base of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
801.65	Open fracture of base of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
801.66	Open fracture of base of skull with cerebral laceration and contusion, loss of consciousness of unspecified duration	DX	ICD-9-CM
801.69	Open fracture of base of skull with cerebral laceration and contusion, unspecified concussion	DX	ICD-9-CM
801.7	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage	DX	ICD-9-CM
801.70	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
801.71	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	DX	ICD-9-CM
801.72	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
801.73	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
801.74	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
801.75	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
801.76	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
801.79	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	DX	ICD-9-CM
801.8	Open fracture of base of skull with other and unspecified intracranial hemorrhage	DX	ICD-9-CM
801.80	Open fracture of base of skull with other and unspecified intracranial hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
801.81	Open fracture of base of skull with other and unspecified intracranial hemorrhage, no loss of consciousness	DX	ICD-9-CM
801.82	Open fracture of base of skull with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
801.83	Open fracture of base of skull with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
801.84	Open fracture of base of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
801.85	Open fracture of base of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
801.86	Open fracture of base of skull with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
801.89	Open fracture of base of skull with other and unspecified intracranial hemorrhage, unspecified concussion	DX	ICD-9-CM
801.9	Open fracture of base of skull with intracranial injury of other and unspecified nature	DX	ICD-9-CM
801.90	Open fracture of base of skull with intracranial injury of other and unspecified nature, unspecified state of consciousness	DX	ICD-9-CM
801.91	Open fracture of base of skull with intracranial injury of other and unspecified nature, no loss of consciousness	DX	ICD-9-CM
801.92	Open fracture of base of skull with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
801.93	Open fracture of base of skull with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
801.94	Open fracture of base of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
801.95	Open fracture of base of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
801.96	Open fracture of base of skull with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration	DX	ICD-9-CM
801.99	Open fracture of base of skull with intracranial injury of other and unspecified nature, unspecified concussion	DX	ICD-9-CM
802	Fracture of face bones	DX	ICD-9-CM
802.0	Nasal bones, closed fracture	DX	ICD-9-CM
802.1	Nasal bones, open fracture	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
802.2	Mandible, closed fracture	DX	ICD-9-CM
802.20	Closed fracture of unspecified site of mandible	DX	ICD-9-CM
802.21	Closed fracture of condylar process of mandible	DX	ICD-9-CM
802.22	Closed fracture of subcondylar process of mandible	DX	ICD-9-CM
802.23	Closed fracture of coronoid process of mandible	DX	ICD-9-CM
802.24	Closed fracture of unspecified part of ramus of mandible	DX	ICD-9-CM
802.25	Closed fracture of angle of jaw	DX	ICD-9-CM
802.26	Closed fracture of symphysis of body of mandible	DX	ICD-9-CM
802.27	Closed fracture of alveolar border of body of mandible	DX	ICD-9-CM
802.28	Closed fracture of other and unspecified part of body of mandible	DX	ICD-9-CM
802.29	Closed fracture of multiple sites of mandible	DX	ICD-9-CM
802.3	Mandible, open fracture	DX	ICD-9-CM
802.30	Open fracture of unspecified site of mandible	DX	ICD-9-CM
802.31	Open fracture of condylar process of mandible	DX	ICD-9-CM
802.32	Open fracture of subcondylar process of mandible	DX	ICD-9-CM
802.33	Open fracture of coronoid process of mandible	DX	ICD-9-CM
802.34	Open fracture of unspecified part of ramus of mandible	DX	ICD-9-CM
802.35	Open fracture of angle of jaw	DX	ICD-9-CM
802.36	Open fracture of symphysis of body of mandible	DX	ICD-9-CM
802.37	Open fracture of alveolar border of body of mandible	DX	ICD-9-CM
802.38	Open fracture of other and unspecified part of body of mandible	DX	ICD-9-CM
802.39	Open fracture of multiple sites of mandible	DX	ICD-9-CM
802.4	Malar and maxillary bones, closed fracture	DX	ICD-9-CM
802.5	Malar and maxillary bones, open fracture	DX	ICD-9-CM
802.6	Orbital floor (blow-out), closed fracture	DX	ICD-9-CM
802.7	Orbital floor (blow-out), open fracture	DX	ICD-9-CM
802.8	Other facial bones, closed fracture	DX	ICD-9-CM
802.9	Other facial bones, open fracture	DX	ICD-9-CM
803	Other and unqualified skull fractures	DX	ICD-9-CM
803.0	Other closed skull fracture without mention of intracranial injury	DX	ICD-9-CM
803.00	Other closed skull fracture without mention of intracranial injury, unspecified state of consciousness	DX	ICD-9-CM
803.01	Other closed skull fracture without mention of intracranial injury, no loss of consciousness	DX	ICD-9-CM
803.02	Other closed skull fracture without mention of intracranial injury, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
803.03	Other closed skull fracture without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
803.04	Other closed skull fracture without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
803.05	Other closed skull fracture without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
803.06	Other closed skull fracture without mention of intracranial injury, loss of consciousness of unspecified duration	DX	ICD-9-CM
803.09	Other closed skull fracture without mention of intracranial injury, unspecified	DX	ICD-9-CM
803.1	Other closed skull fracture with cerebral laceration and contusion	DX	ICD-9-CM
803.10	Other closed skull fracture with cerebral laceration and contusion, unspecified state of consciousness	DX	ICD-9-CM
803.11	Other closed skull fracture with cerebral laceration and contusion, no loss of consciousness	DX	ICD-9-CM
803.12	Other closed skull fracture with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
803.13	Other closed skull fracture with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
803.14	Other closed skull fracture with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
803.15	Other closed skull fracture with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
803.16	Other closed skull fracture with cerebral laceration and contusion, loss of consciousness of unspecified duration	DX	ICD-9-CM
803.19	Other closed skull fracture with cerebral laceration and contusion, unspecified concussion	DX	ICD-9-CM
803.2	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage	DX	ICD-9-CM
803.20	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
803.21	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	DX	ICD-9-CM
803.22	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
803.23	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
803.24	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
803.25	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
803.26	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
803.29	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	DX	ICD-9-CM
803.3	Closed skull fracture with other and unspecified intracranial hemorrhage	DX	ICD-9-CM
803.30	Other closed skull fracture with other and unspecified intracranial hemorrhage, unspecified state of unconsciousness	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
803.31	Other closed skull fracture with other and unspecified intracranial hemorrhage, no loss of consciousness	DX	ICD-9-CM
803.32	Other closed skull fracture with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
803.33	Other closed skull fracture with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
803.34	Other closed skull fracture with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
803.35	Other closed skull fracture with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
803.36	Other closed skull fracture with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
803.39	Other closed skull fracture with other and unspecified intracranial hemorrhage, unspecified concussion	DX	ICD-9-CM
803.4	Other closed skull fracture with intracranial injury of other and unspecified nature	DX	ICD-9-CM
803.40	Other closed skull fracture with intracranial injury of other and unspecified nature, unspecified state of consciousness	DX	ICD-9-CM
803.41	Other closed skull fracture with intracranial injury of other and unspecified nature, no loss of consciousness	DX	ICD-9-CM
803.42	Other closed skull fracture with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
803.43	Other closed skull fracture with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
803.44	Other closed skull fracture with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
803.45	Other closed skull fracture with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
803.46	Other closed skull fracture with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration	DX	ICD-9-CM
803.49	Other closed skull fracture with intracranial injury of other and unspecified nature, unspecified concussion	DX	ICD-9-CM
803.5	Other open skull fracture without mention of intracranial injury	DX	ICD-9-CM
803.50	Other open skull fracture without mention of injury, state of consciousness unspecified	DX	ICD-9-CM
803.51	Other open skull fracture without mention of intracranial injury, no loss of	DX	ICD-9-CM
803.52	Other open skull fracture without mention of intracranial injury, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
803.53	Other open skull fracture without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
803.54	Other open skull fracture without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
803.55	Other open skull fracture without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
803.56	Other open skull fracture without mention of intracranial injury, loss of consciousness of unspecified duration	DX	ICD-9-CM
803.59	Other open skull fracture without mention of intracranial injury, unspecified concussion	DX	ICD-9-CM
803.6	Other open skull fracture with cerebral laceration and contusion	DX	ICD-9-CM
803.60	Other open skull fracture with cerebral laceration and contusion, unspecified state of consciousness	DX	ICD-9-CM
803.61	Other open skull fracture with cerebral laceration and contusion, no loss of consciousness	DX	ICD-9-CM
803.62	Other open skull fracture with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
803.63	Other open skull fracture with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
803.64	Other open skull fracture with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
803.65	Other open skull fracture with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
803.66	Other open skull fracture with cerebral laceration and contusion, loss of consciousness of unspecified duration	DX	ICD-9-CM
803.69	Other open skull fracture with cerebral laceration and contusion, unspecified	DX	ICD-9-CM
803.7	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage	DX	ICD-9-CM
803.70	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
803.71	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	DX	ICD-9-CM
803.72	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
803.73	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
803.74	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
803.75	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
803.76	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
803.79	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	DX	ICD-9-CM
803.8	Other open skull fracture with other and unspecified intracranial hemorrhage	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
803.80	Other open skull fracture with other and unspecified intracranial hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
803.81	Other open skull fracture with other and unspecified intracranial hemorrhage, no loss of consciousness	DX	ICD-9-CM
803.82	Other open skull fracture with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
803.83	Other open skull fracture with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
803.84	Other open skull fracture with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing	DX	ICD-9-CM
803.85	Other open skull fracture with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
803.86	Other open skull fracture with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
803.89	Other open skull fracture with other and unspecified intracranial hemorrhage, unspecified concussion	DX	ICD-9-CM
803.9	Other open skull fracture with intracranial injury of other and unspecified nature	DX	ICD-9-CM
803.90	Other open skull fracture with intracranial injury of other and unspecified nature, unspecified state of consciousness	DX	ICD-9-CM
803.91	Other open skull fracture with intracranial injury of other and unspecified nature, no loss of consciousness	DX	ICD-9-CM
803.92	Other open skull fracture with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
803.93	Other open skull fracture with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
803.94	Other open skull fracture with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
803.95	Other open skull fracture with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
803.96	Other open skull fracture with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration	DX	ICD-9-CM
803.99	Other open skull fracture with intracranial injury of other and unspecified nature, unspecified concussion	DX	ICD-9-CM
804	Multiple fractures involving skull or face with other bones	DX	ICD-9-CM
804.0	Closed fractures involving skull or face with other bones, without mention of intracranial injury	DX	ICD-9-CM
804.00	Closed fractures involving skull or face with other bones, without mention of intracranial injury, unspecified state of consciousness	DX	ICD-9-CM
804.01	Closed fractures involving skull or face with other bones, without mention of intracranial injury, no loss of consciousness	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
804.02	Closed fractures involving skull or face with other bones, without mention of intracranial injury, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
804.03	Closed fractures involving skull or face with other bones, without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
804.04	Closed fractures involving skull or face with other bones, without mention or intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
804.05	Closed fractures involving skull of face with other bones, without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
804.06	Closed fractures involving skull of face with other bones, without mention of intracranial injury, loss of consciousness of unspecified duration	DX	ICD-9-CM
804.09	Closed fractures involving skull of face with other bones, without mention of intracranial injury, unspecified concussion	DX	ICD-9-CM
804.1	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion	DX	ICD-9-CM
804.10	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, unspecified state of consciousness	DX	ICD-9-CM
804.11	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, no loss of consciousness	DX	ICD-9-CM
804.12	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
804.13	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
804.14	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
804.15	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
804.16	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, loss of consciousness of unspecified duration	DX	ICD-9-CM
804.19	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, unspecified concussion	DX	ICD-9-CM
804.2	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage	DX	ICD-9-CM
804.20	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
804.21	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	DX	ICD-9-CM
804.22	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
804.23	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
804.24	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
804.25	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
804.26	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
804.29	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	DX	ICD-9-CM
804.3	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage	DX	ICD-9-CM
804.30	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
804.31	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, no loss of consciousness	DX	ICD-9-CM
804.32	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
804.33	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
804.34	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to preexisting conscious level	DX	ICD-9-CM
804.35	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
804.36	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
804.39	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, unspecified concussion	DX	ICD-9-CM
804.4	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature	DX	ICD-9-CM
804.40	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, unspecified state of consciousness	DX	ICD-9-CM
804.41	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, no loss of consciousness	DX	ICD-9-CM
804.42	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
804.43	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
804.44	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
804.45	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
804.46	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration	DX	ICD-9-CM
804.49	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, unspecified concussion	DX	ICD-9-CM
804.5	Open fractures involving skull or face with other bones, without mention of intracranial injury	DX	ICD-9-CM
804.50	Open fractures involving skull or face with other bones, without mention of intracranial injury, unspecified state of consciousness	DX	ICD-9-CM
804.51	Open fractures involving skull or face with other bones, without mention of intracranial injury, no loss of consciousness	DX	ICD-9-CM
804.52	Open fractures involving skull or face with other bones, without mention of intracranial injury, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
804.53	Open fractures involving skull or face with other bones, without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
804.54	Open fractures involving skull or face with other bones, without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
804.55	Open fractures involving skull or face with other bones, without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
804.56	Open fractures involving skull or face with other bones, without mention of intracranial injury, loss of consciousness of unspecified duration	DX	ICD-9-CM
804.59	Open fractures involving skull or face with other bones, without mention of intracranial injury, unspecified concussion	DX	ICD-9-CM
804.6	Open fractures involving skull or face with other bones, with cerebral laceration and contusion	DX	ICD-9-CM
804.60	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, unspecified state of consciousness	DX	ICD-9-CM
804.61	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, no loss of consciousness	DX	ICD-9-CM
804.62	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
804.63	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
804.64	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
804.65	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
804.66	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, loss of consciousness of unspecified duration	DX	ICD-9-CM
804.69	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, unspecified concussion	DX	ICD-9-CM
804.7	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage	DX	ICD-9-CM
804.70	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
804.71	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	DX	ICD-9-CM
804.72	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
804.73	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
804.74	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
804.75	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM
804.76	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
804.79	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	DX	ICD-9-CM
804.8	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage	DX	ICD-9-CM
804.80	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, unspecified state of consciousness	DX	ICD-9-CM
804.81	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, no loss of consciousness	DX	ICD-9-CM
804.82	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
804.83	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
804.84	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
804.85	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
804.86	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	DX	ICD-9-CM
804.89	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, unspecified concussion	DX	ICD-9-CM
804.9	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature	DX	ICD-9-CM
804.90	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, unspecified state of consciousness	DX	ICD-9-CM
804.91	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, no loss of consciousness	DX	ICD-9-CM
804.92	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness	DX	ICD-9-CM
804.93	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness	DX	ICD-9-CM
804.94	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-9-CM
804.95	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing level	DX	ICD-9-CM
804.96	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration	DX	ICD-9-CM
804.99	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, unspecified concussion	DX	ICD-9-CM
805	Fracture of vertebral column without mention of spinal cord injury	DX	ICD-9-CM
805.0	Closed fracture of cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.00	Closed fracture of cervical vertebra, unspecified level without mention of spinal cord injury	DX	ICD-9-CM
805.01	Closed fracture of first cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.02	Closed fracture of second cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.03	Closed fracture of third cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.04	Closed fracture of fourth cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.05	Closed fracture of fifth cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.06	Closed fracture of sixth cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.07	Closed fracture of seventh cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.08	Closed fracture of multiple cervical vertebrae without mention of spinal cord injury	DX	ICD-9-CM
805.1	Open fracture of cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.10	Open fracture of cervical vertebra, unspecified level without mention of spinal cord injury	DX	ICD-9-CM
805.11	Open fracture of first cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.12	Open fracture of second cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.13	Open fracture of third cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.14	Open fracture of fourth cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
805.15	Open fracture of fifth cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.16	Open fracture of sixth cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.17	Open fracture of seventh cervical vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.18	Open fracture of multiple cervical vertebrae without mention of spinal cord injury	DX	ICD-9-CM
805.2	Closed fracture of dorsal (thoracic) vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.3	Open fracture of dorsal (thoracic) vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.4	Closed fracture of lumbar vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.5	Open fracture of lumbar vertebra without mention of spinal cord injury	DX	ICD-9-CM
805.6	Closed fracture of sacrum and coccyx without mention of spinal cord injury	DX	ICD-9-CM
805.7	Open fracture of sacrum and coccyx without mention of spinal cord injury	DX	ICD-9-CM
805.8	Closed fracture of unspecified part of vertebral column without mention of spinal cord injury	DX	ICD-9-CM
805.9	Open fracture of unspecified part of vertebral column without mention of spinal cord injury	DX	ICD-9-CM
806	Fracture of vertebral column with spinal cord injury	DX	ICD-9-CM
806.0	Closed fracture of cervical vertebra with spinal cord injury	DX	ICD-9-CM
806.00	Closed fracture of C1-C4 level with unspecified spinal cord injury	DX	ICD-9-CM
806.01	Closed fracture of C1-C4 level with complete lesion of cord	DX	ICD-9-CM
806.02	Closed fracture of C1-C4 level with anterior cord syndrome	DX	ICD-9-CM
806.03	Closed fracture of C1-C4 level with central cord syndrome	DX	ICD-9-CM
806.04	Closed fracture of C1-C4 level with other specified spinal cord injury	DX	ICD-9-CM
806.05	Closed fracture of C5-C7 level with unspecified spinal cord injury	DX	ICD-9-CM
806.06	Closed fracture of C5-C7 level with complete lesion of cord	DX	ICD-9-CM
806.07	Closed fracture of C5-C7 level with anterior cord syndrome	DX	ICD-9-CM
806.08	Closed fracture of C5-C7 level with central cord syndrome	DX	ICD-9-CM
806.09	Closed fracture of C5-C7 level with other specified spinal cord injury	DX	ICD-9-CM
806.1	Open fracture of cervical vertebra with spinal cord injury	DX	ICD-9-CM
806.10	Open fracture of C1-C4 level with unspecified spinal cord injury	DX	ICD-9-CM
806.11	Open fracture of C1-C4 level with complete lesion of cord	DX	ICD-9-CM
806.12	Open fracture of C1-C4 level with anterior cord syndrome	DX	ICD-9-CM
806.13	Open fracture of C1-C4 level with central cord syndrome	DX	ICD-9-CM
806.14	Open fracture of C1-C4 level with other specified spinal cord injury	DX	ICD-9-CM
806.15	Open fracture of C5-C7 level with unspecified spinal cord injury	DX	ICD-9-CM
806.16	Open fracture of C5-C7 level with complete lesion of cord	DX	ICD-9-CM
806.17	Open fracture of C5-C7 level with anterior cord syndrome	DX	ICD-9-CM
806.18	Open fracture of C5-C7 level with central cord syndrome	DX	ICD-9-CM
806.19	Open fracture of C5-C7 level with other specified spinal cord injury	DX	ICD-9-CM
806.2	Closed fracture of dorsal (thoracic) vertebra with spinal cord injury	DX	ICD-9-CM
806.20	Closed fracture of T1-T6 level with unspecified spinal cord injury	DX	ICD-9-CM
806.21	Closed fracture of T1-T6 level with complete lesion of cord	DX	ICD-9-CM
806.22	Closed fracture of T1-T6 level with anterior cord syndrome	DX	ICD-9-CM
806.23	Closed fracture of T1-T6 level with central cord syndrome	DX	ICD-9-CM
806.24	Closed fracture of T1-T6 level with other specified spinal cord injury	DX	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
806.25	Closed fracture of T7-T12 level with unspecified spinal cord injury	DX	ICD-9-CM
806.26	Closed fracture of T7-T12 level with complete lesion of cord	DX	ICD-9-CM
806.27	Closed fracture of T7-T12 level with anterior cord syndrome	DX	ICD-9-CM
806.28	Closed fracture of T7-T12 level with central cord syndrome	DX	ICD-9-CM
806.29	Closed fracture of T7-T12 level with other specified spinal cord injury	DX	ICD-9-CM
806.3	Open fracture of dorsal vertebra with spinal cord injury	DX	ICD-9-CM
806.30	Open fracture of T1-T6 level with unspecified spinal cord injury	DX	ICD-9-CM
806.31	Open fracture of T1-T6 level with complete lesion of cord	DX	ICD-9-CM
806.32	Open fracture of T1-T6 level with anterior cord syndrome	DX	ICD-9-CM
806.33	Open fracture of T1-T6 level with central cord syndrome	DX	ICD-9-CM
806.34	Open fracture of T1-T6 level with other specified spinal cord injury	DX	ICD-9-CM
806.35	Open fracture of T7-T12 level with unspecified spinal cord injury	DX	ICD-9-CM
806.36	Open fracture of T7-T12 level with complete lesion of cord	DX	ICD-9-CM
806.37	Open fracture of T7-T12 level with anterior cord syndrome	DX	ICD-9-CM
806.38	Open fracture of T7-T12 level with central cord syndrome	DX	ICD-9-CM
806.39	Open fracture of T7-T12 level with other specified spinal cord injury	DX	ICD-9-CM
806.4	Closed fracture of lumbar spine with spinal cord injury	DX	ICD-9-CM
806.5	Open fracture of lumbar spine with spinal cord injury	DX	ICD-9-CM
806.6	Closed fracture of sacrum and coccyx with spinal cord injury	DX	ICD-9-CM
806.60	Closed fracture of sacrum and coccyx with unspecified spinal cord injury	DX	ICD-9-CM
806.61	Closed fracture of sacrum and coccyx with complete cauda equina lesion	DX	ICD-9-CM
806.62	Closed fracture of sacrum and coccyx with other cauda equina injury	DX	ICD-9-CM
806.69	Closed fracture of sacrum and coccyx with other spinal cord injury	DX	ICD-9-CM
806.7	Open fracture of sacrum and coccyx with spinal cord injury	DX	ICD-9-CM
806.70	Open fracture of sacrum and coccyx with unspecified spinal cord injury	DX	ICD-9-CM
806.71	Open fracture of sacrum and coccyx with complete cauda equina lesion	DX	ICD-9-CM
806.72	Open fracture of sacrum and coccyx with other cauda equina injury	DX	ICD-9-CM
806.79	Open fracture of sacrum and coccyx with other spinal cord injury	DX	ICD-9-CM
806.8	Closed fracture of unspecified vertebra with spinal cord injury	DX	ICD-9-CM
806.9	Open fracture of unspecified vertebra with spinal cord injury	DX	ICD-9-CM
807	Fracture of rib(s), sternum, larynx, and trachea	DX	ICD-9-CM
807.0	Closed fracture of rib(s)	DX	ICD-9-CM
807.00	Closed fracture of rib(s), unspecified	DX	ICD-9-CM
807.01	Closed fracture of one rib	DX	ICD-9-CM
807.02	Closed fracture of two ribs	DX	ICD-9-CM
807.03	Closed fracture of three ribs	DX	ICD-9-CM
807.04	Closed fracture of four ribs	DX	ICD-9-CM
807.05	Closed fracture of five ribs	DX	ICD-9-CM
807.06	Closed fracture of six ribs	DX	ICD-9-CM
807.07	Closed fracture of seven ribs	DX	ICD-9-CM
807.08	Closed fracture of eight or more ribs	DX	ICD-9-CM
807.09	Closed fracture of multiple ribs, unspecified	DX	ICD-9-CM
807.1	Open fracture of rib(s)	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
807.10	Open fracture of rib(s), unspecified	DX	ICD-9-CM
807.11	Open fracture of one rib	DX	ICD-9-CM
807.12	Open fracture of two ribs	DX	ICD-9-CM
807.13	Open fracture of three ribs	DX	ICD-9-CM
807.14	Open fracture of four ribs	DX	ICD-9-CM
807.15	Open fracture of five ribs	DX	ICD-9-CM
807.16	Open fracture of six ribs	DX	ICD-9-CM
807.17	Open fracture of seven ribs	DX	ICD-9-CM
807.18	Open fracture of eight or more ribs	DX	ICD-9-CM
807.19	Open fracture of multiple ribs, unspecified	DX	ICD-9-CM
807.2	Closed fracture of sternum	DX	ICD-9-CM
807.3	Open fracture of sternum	DX	ICD-9-CM
807.4	Flail chest	DX	ICD-9-CM
807.5	Closed fracture of larynx and trachea	DX	ICD-9-CM
807.6	Open fracture of larynx and trachea	DX	ICD-9-CM
808	Fracture of pelvis	DX	ICD-9-CM
808.0	Closed fracture of acetabulum	DX	ICD-9-CM
808.1	Open fracture of acetabulum	DX	ICD-9-CM
808.2	Closed fracture of pubis	DX	ICD-9-CM
808.3	Open fracture of pubis	DX	ICD-9-CM
808.4	Closed fracture of other specified part of pelvis	DX	ICD-9-CM
808.41	Closed fracture of ilium	DX	ICD-9-CM
808.42	Closed fracture of ischium	DX	ICD-9-CM
808.43	Multiple closed pelvic fractures with disruption of pelvic circle	DX	ICD-9-CM
808.44	Multiple closed pelvic fractures without disruption of pelvic circle	DX	ICD-9-CM
808.49	Closed fracture of other specified part of pelvis	DX	ICD-9-CM
808.5	Open fracture of other specified part of pelvis	DX	ICD-9-CM
808.51	Open fracture of ilium	DX	ICD-9-CM
808.52	Open fracture of ischium	DX	ICD-9-CM
808.53	Multiple open pelvic fractures with disruption of pelvic circle	DX	ICD-9-CM
808.54	Multiple open pelvic fractures without disruption of pelvic circle	DX	ICD-9-CM
808.59	Open fracture of other specified part of pelvis	DX	ICD-9-CM
808.8	Unspecified closed fracture of pelvis	DX	ICD-9-CM
808.9	Unspecified open fracture of pelvis	DX	ICD-9-CM
809	Ill-defined fractures of bones of trunk	DX	ICD-9-CM
809.0	Fracture of bones of trunk, closed	DX	ICD-9-CM
809.1	Fracture of bones of trunk, open	DX	ICD-9-CM
810	Fracture of clavicle	DX	ICD-9-CM
810.0	Closed fracture of clavicle	DX	ICD-9-CM
810.00	Unspecified part of closed fracture of clavicle	DX	ICD-9-CM
810.01	Closed fracture of sternal end of clavicle	DX	ICD-9-CM
810.02	Closed fracture of shaft of clavicle	DX	ICD-9-CM
810.03	Closed fracture of acromial end of clavicle	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
810.1	Open fracture of clavicle	DX	ICD-9-CM
810.10	Unspecified part of open fracture of clavicle	DX	ICD-9-CM
810.11	Open fracture of sternal end of clavicle	DX	ICD-9-CM
810.12	Open fracture of shaft of clavicle	DX	ICD-9-CM
810.13	Open fracture of acromial end of clavicle	DX	ICD-9-CM
811	Fracture of scapula	DX	ICD-9-CM
811.0	Closed fracture of scapula	DX	ICD-9-CM
811.00	Closed fracture of unspecified part of scapula	DX	ICD-9-CM
811.01	Closed fracture of acromial process of scapula	DX	ICD-9-CM
811.02	Closed fracture of coracoid process of scapula	DX	ICD-9-CM
811.03	Closed fracture of glenoid cavity and neck of scapula	DX	ICD-9-CM
811.09	Closed fracture of other part of scapula	DX	ICD-9-CM
811.1	Open fracture of scapula	DX	ICD-9-CM
811.10	Open fracture of unspecified part of scapula	DX	ICD-9-CM
811.11	Open fracture of acromial process of scapula	DX	ICD-9-CM
811.12	Open fracture of coracoid process	DX	ICD-9-CM
811.13	Open fracture of glenoid cavity and neck of scapula	DX	ICD-9-CM
811.19	Open fracture of other part of scapula	DX	ICD-9-CM
812	Fracture of humerus	DX	ICD-9-CM
812.0	Closed fracture of upper end of humerus	DX	ICD-9-CM
812.00	Closed fracture of unspecified part of upper end of humerus	DX	ICD-9-CM
812.01	Closed fracture of surgical neck of humerus	DX	ICD-9-CM
812.02	Closed fracture of anatomical neck of humerus	DX	ICD-9-CM
812.03	Closed fracture of greater tuberosity of humerus	DX	ICD-9-CM
812.09	Other closed fractures of upper end of humerus	DX	ICD-9-CM
812.1	Open fracture of upper end of humerus	DX	ICD-9-CM
812.10	Open fracture of unspecified part of upper end of humerus	DX	ICD-9-CM
812.11	Open fracture of surgical neck of humerus	DX	ICD-9-CM
812.12	Open fracture of anatomical neck of humerus	DX	ICD-9-CM
812.13	Open fracture of greater tuberosity of humerus		ICD-9-CM
812.19	Other open fracture of upper end of humerus		ICD-9-CM
812.2	Closed fracture of shaft or unspecified part of humerus		ICD-9-CM
812.20	Closed fracture of unspecified part of humerus		ICD-9-CM
812.21	Closed fracture of shaft of humerus		ICD-9-CM
812.3	Open fracture of shaft or unspecified part of humerus		ICD-9-CM
812.30	Open fracture of unspecified part of humerus		ICD-9-CM
812.31	Open fracture of shaft of humerus		ICD-9-CM
812.4	Closed fracture of lower end of humerus		ICD-9-CM
812.40	Closed fracture of unspecified part of lower end of humerus		ICD-9-CM
812.41	Closed fracture of supracondylar humerus		ICD-9-CM
812.42	Closed fracture of lateral condyle of humerus		ICD-9-CM
812.43	Closed fracture of medial condyle of humerus		ICD-9-CM
812.44	Closed fracture of unspecified condyle(s) of humerus		ICD-9-CM

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Code	Description	Code Type	Code Category
812.49	Other closed fracture of lower end of humerus		ICD-9-CM
812.5	Open fracture of lower end of humerus		ICD-9-CM
812.50	Open fracture of unspecified part of lower end of humerus		ICD-9-CM
812.51	Open fracture of supracondylar humerus		ICD-9-CM
812.52	Open fracture of lateral condyle of humerus		ICD-9-CM
812.53	Open fracture of medial condyle of humerus		ICD-9-CM
812.54	Open fracture of unspecified condyle(s) of humerus		ICD-9-CM
812.59	Other open fracture of lower end of humerus		ICD-9-CM
813	Fracture of radius and ulna		ICD-9-CM
813.0	Closed fracture of upper end of radius and ulna		ICD-9-CM
813.00	Unspecified fracture of radius and ulna, upper end of forearm, closed		ICD-9-CM
813.01	Closed fracture of olecranon process of ulna		ICD-9-CM
813.02	Closed fracture of coronoid process of ulna		ICD-9-CM
813.03	Closed Monteggia's fracture		ICD-9-CM
813.04	Other and unspecified closed fractures of proximal end of ulna (alone)		ICD-9-CM
813.05	Closed fracture of head of radius		ICD-9-CM
813.06	Closed fracture of neck of radius		ICD-9-CM
813.07	Other and unspecified closed fractures of proximal end of radius (alone)		ICD-9-CM
813.08	Closed fracture of radius with ulna, upper end (any part)		ICD-9-CM
813.1	Open fracture of upper end of radius and ulna		ICD-9-CM
813.10	Unspecified open fracture of upper end of forearm		ICD-9-CM
813.11	Open fracture of olecranon process of ulna		ICD-9-CM
813.12	Open fracture of coronoid process of ulna		ICD-9-CM
813.13	Open Monteggia's fracture		ICD-9-CM
813.14	Other and unspecified open fractures of proximal end of ulna (alone)		ICD-9-CM
813.15	Open fracture of head of radius		ICD-9-CM
813.16	Open fracture of neck of radius		ICD-9-CM
813.17	Other and unspecified open fractures of proximal end of radius (alone)		ICD-9-CM
813.18	Open fracture of radius with ulna, upper end (any part)		ICD-9-CM
813.2	Closed fracture of shaft of radius and ulna		ICD-9-CM
813.20	Unspecified closed fracture of shaft of radius or ulna		ICD-9-CM
813.21	Closed fracture of shaft of radius (alone)		ICD-9-CM
813.22	Closed fracture of shaft of ulna (alone)		ICD-9-CM
813.23	Closed fracture of shaft of radius with ulna		ICD-9-CM
813.3	Open fracture of shaft of radius and ulna		ICD-9-CM
813.30	Unspecified open fracture of shaft of radius or ulna		ICD-9-CM
813.31	Open fracture of shaft of radius (alone)		ICD-9-CM
813.32	Open fracture of shaft of ulna (alone)		ICD-9-CM
813.33	Open fracture of shaft of radius with ulna		ICD-9-CM
813.4	Closed fracture of lower end of radius and ulna		ICD-9-CM
813.40	Unspecified closed fracture of lower end of forearm		ICD-9-CM
813.41	Closed Colles' fracture		ICD-9-CM
813.42	Other closed fractures of distal end of radius (alone)		ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
813.43	Closed fracture of distal end of ulna (alone)		ICD-9-CM
813.44	Closed fracture of lower end of radius with ulna		ICD-9-CM
813.45	Torus fracture of radius (alone)		ICD-9-CM
813.46	Torus fracture of ulna (alone)		ICD-9-CM
813.47	Torus fracture of radius and ulna		ICD-9-CM
813.5	Open fracture of lower end of radius and ulna		ICD-9-CM
813.50	Unspecified open fracture of lower end of forearm		ICD-9-CM
813.51	Open Colles' fracture		ICD-9-CM
813.52	Other open fractures of distal end of radius (alone)		ICD-9-CM
813.53	Open fracture of distal end of ulna (alone)		ICD-9-CM
813.54	Open fracture of lower end of radius with ulna		ICD-9-CM
813.8	Closed fracture of unspecified part of radius with ulna		ICD-9-CM
813.80	Closed fracture of unspecified part of forearm		ICD-9-CM
813.81	Closed fracture of unspecified part of radius (alone)		ICD-9-CM
813.82	Closed fracture of unspecified part of ulna (alone)		ICD-9-CM
813.83	Closed fracture of unspecified part of radius with ulna		ICD-9-CM
813.9	Open fracture of unspecified part of radius with ulna		ICD-9-CM
813.90	Open fracture of unspecified part of forearm		ICD-9-CM
813.91	Open fracture of unspecified part of radius (alone)		ICD-9-CM
813.92	Open fracture of unspecified part of ulna (alone)		ICD-9-CM
813.93	Open fracture of unspecified part of radius with ulna		ICD-9-CM
818	III-defined fractures of upper limb		ICD-9-CM
818.0	III-defined closed fractures of upper limb		ICD-9-CM
818.1	III-defined open fractures of upper limb		ICD-9-CM
819	Multiple fractures involving both upper limbs, and upper limb with rib(s) and sternum		ICD-9-CM
819.0	Multiple closed fractures involving both upper limbs, and upper limb with rib(s) and sternum		ICD-9-CM
819.1	Multiple open fractures involving both upper limbs, and upper limb with rib(s) and sternum		ICD-9-CM
820	Fracture of neck of femur		ICD-9-CM
820.0	Closed transcervical fracture		ICD-9-CM
820.00	Closed fracture of unspecified intracapsular section of neck of femur		ICD-9-CM
820.01	Closed fracture of epiphysis (separation) (upper) of neck of femur		ICD-9-CM
820.02	Closed fracture of midcervical section of femur		ICD-9-CM
820.03	Closed fracture of base of neck of femur		ICD-9-CM
820.09	Other closed transcervical fracture of femur		ICD-9-CM
820.1	Open transcervical fracture		ICD-9-CM
820.10	Open fracture of unspecified intracapsular section of neck of femur		ICD-9-CM
820.11	Open fracture of epiphysis (separation) (upper) of neck of femur		ICD-9-CM
820.12	Open fracture of midcervical section of femur		ICD-9-CM
820.13	Open fracture of base of neck of femur		ICD-9-CM
820.19	Other open transcervical fracture of femur		ICD-9-CM
820.2	Closed pertrochanteric fracture of femur		ICD-9-CM

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Code	Description	Code Type	Code Category
820.20	Closed fracture of unspecified trochanteric section of femur		ICD-9-CM
820.21	Closed fracture of intertrochanteric section of femur		ICD-9-CM
820.22	Closed fracture of subtrochanteric section of femur		ICD-9-CM
820.3	Open pertrochanteric fracture of femur		ICD-9-CM
820.30	Open fracture of unspecified trochanteric section of femur		ICD-9-CM
820.31	Open fracture of intertrochanteric section of femur		ICD-9-CM
820.32	Open fracture of subtrochanteric section of femur		ICD-9-CM
820.8	Closed fracture of unspecified part of neck of femur		ICD-9-CM
820.9	Open fracture of unspecified part of neck of femur		ICD-9-CM
821	Fracture of other and unspecified parts of femur		ICD-9-CM
821.0	Closed fracture of shaft or unspecified part of femur		ICD-9-CM
821.00	Closed fracture of unspecified part of femur		ICD-9-CM
821.01	Closed fracture of shaft of femur		ICD-9-CM
821.1	Open fracture of shaft or unspecified part of femur		ICD-9-CM
821.10	Open fracture of unspecified part of femur		ICD-9-CM
821.11	Open fracture of shaft of femur		ICD-9-CM
821.2	Closed fracture of lower end of femur		ICD-9-CM
821.20	Closed fracture of unspecified part of lower end of femur		ICD-9-CM
821.21	Closed fracture of femoral condyle		ICD-9-CM
821.22	Closed fracture of lower epiphysis of femur		ICD-9-CM
821.23	Closed supracondylar fracture of femur		ICD-9-CM
821.29	Other closed fracture of lower end of femur		ICD-9-CM
821.3	Open fracture of lower end of femur		ICD-9-CM
821.30	Open fracture of unspecified part of lower end of femur		ICD-9-CM
821.31	Open fracture of femoral condyle		ICD-9-CM
821.32	Open fracture of lower epiphysis of femur		ICD-9-CM
821.33	Open supracondylar fracture of femur		ICD-9-CM
821.39	Other open fracture of lower end of femur		ICD-9-CM
822	Fracture of patella		ICD-9-CM
822.0	Closed fracture of patella		ICD-9-CM
822.1	Open fracture of patella		ICD-9-CM
823	Fracture of tibia and fibula		ICD-9-CM
823.0	Closed fracture of upper end of tibia and fibula		ICD-9-CM
823.00	Closed fracture of upper end of tibia		ICD-9-CM
823.01	Closed fracture of upper end of fibula		ICD-9-CM
823.02	Closed fracture of upper end of fibula with tibia		ICD-9-CM
823.1	Open fracture of upper end of tibia and fibula		ICD-9-CM
823.10	Open fracture of upper end of tibia		ICD-9-CM
823.11	Open fracture of upper end of fibula		ICD-9-CM
823.12	Open fracture of upper end of fibula with tibia		ICD-9-CM
823.2	Closed fracture of shaft of tibia and fibula		ICD-9-CM
823.20	Closed fracture of shaft of tibia		ICD-9-CM
823.21	Closed fracture of shaft of fibula		ICD-9-CM

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Code	Description	Code Type	Code Category
823.22	Closed fracture of shaft of fibula with tibia		ICD-9-CM
823.3	Open fracture of shaft of tibia and fibula		ICD-9-CM
823.30	Open fracture of shaft of tibia		ICD-9-CM
823.31	Open fracture of shaft of fibula		ICD-9-CM
823.32	Open fracture of shaft of fibula with tibia		ICD-9-CM
823.4	Torus fracture of tibia and fibula		ICD-9-CM
823.40	Torus fracture of tibia alone		ICD-9-CM
823.41	Torus fracture of fibula alone		ICD-9-CM
823.42	Torus fracture of fibula with tibia		ICD-9-CM
823.8	Closed fracture of unspecified part of tibia and fibula		ICD-9-CM
823.80	Closed fracture of unspecified part of tibia		ICD-9-CM
823.81	Closed fracture of unspecified part of fibula		ICD-9-CM
823.82	Closed fracture of unspecified part of fibula with tibia		ICD-9-CM
823.9	Open fracture of unspecified part of tibia and fibula		ICD-9-CM
823.90	Open fracture of unspecified part of tibia		ICD-9-CM
823.91	Open fracture of unspecified part of fibula		ICD-9-CM
823.92	Open fracture of unspecified part of fibula with tibia		ICD-9-CM
824	Fracture of ankle		ICD-9-CM
824.0	Closed fracture of medial malleolus		ICD-9-CM
824.1	Open fracture of medial malleolus		ICD-9-CM
824.2	Closed fracture of lateral malleolus		ICD-9-CM
824.3	Open fracture of lateral malleolus		ICD-9-CM
824.4	Closed bimalleolar fracture		ICD-9-CM
824.5	Open bimalleolar fracture		ICD-9-CM
824.6	Closed trimalleolar fracture		ICD-9-CM
824.7	Open trimalleolar fracture		ICD-9-CM
824.8	Unspecified closed fracture of ankle		ICD-9-CM
824.9	Unspecified open fracture of ankle		ICD-9-CM
827	Other, multiple, and ill-defined fractures of lower limb		ICD-9-CM
827.0	Other, multiple and ill-defined closed fractures of lower limb		ICD-9-CM
827.1	Other, multiple and ill-defined open fractures of lower limb		ICD-9-CM
828	Multiple fractures involving both lower limbs, lower with upper limb, and lower limb(s) with rib(s) and sternum		ICD-9-CM
828.0	Multiple closed fractures involving both lower limbs, lower with upper limb, and lower limb(s) with rib(s) and sternum		ICD-9-CM
828.1	Multiple fractures involving both lower limbs, lower with upper limb, and lower limb(s) with rib(s) and sternum, open		ICD-9-CM
829	Fracture of unspecified bones		ICD-9-CM
829.0	Closed fracture of unspecified bone		ICD-9-CM
829.1	Open fracture of unspecified bone		ICD-9-CM
860	Traumatic pneumothorax and hemothorax		ICD-9-CM
860.0	Traumatic pneumothorax without mention of open wound into thorax		ICD-9-CM
860.1	Traumatic pneumothorax with open wound into thorax		ICD-9-CM

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Code	Description	Code Type	Code Category
860.2	Traumatic hemothorax without mention of open wound into thorax		ICD-9-CM
860.3	Traumatic hemothorax with open wound into thorax		ICD-9-CM
860.4	Traumatic pneumohemothorax without mention of open wound into thorax		ICD-9-CM
860.5	Traumatic pneumohemothorax with open wound into thorax		ICD-9-CM
862.0	Diaphragm injury without mention of open wound into cavity		ICD-9-CM
862.1	Diaphragm injury with open wound into cavity		ICD-9-CM
862.8	Injury to multiple and unspecified intrathoracic organs without mention of open wound into cavity		ICD-9-CM
862.9	Injury to multiple and unspecified intrathoracic organs with open wound into cavity		ICD-9-CM
863.0	Stomach injury without mention of open wound into cavity		ICD-9-CM
863.1	Stomach injury with open wound into cavity		ICD-9-CM
863.2	Small intestine injury without mention of open wound into cavity		ICD-9-CM
863.20	Small intestine injury, unspecified site, without mention of open wound into cavity		ICD-9-CM
863.21	Duodenum injury without mention of open wound into cavity		ICD-9-CM
863.29	Other injury to small intestine without mention of open wound into cavity		ICD-9-CM
863.3	Small intestine injury with open wound into cavity		ICD-9-CM
863.30	Small intestine injury, unspecified site, with open wound into cavity		ICD-9-CM
863.31	Duodenum injury with open wound into cavity		ICD-9-CM
863.39	Other injury to small intestine with open wound into cavity		ICD-9-CM
863.4	Colon or rectal injury without mention of open wound into cavity		ICD-9-CM
863.40	Colon injury unspecified site, without mention of open wound into cavity		ICD-9-CM
863.41	Ascending (right) colon injury without mention of open wound into cavity		ICD-9-CM
863.42	Transverse colon injury without mention of open wound into cavity		ICD-9-CM
863.43	Descending (left) colon injury without mention of open wound into cavity		ICD-9-CM
863.44	Sigmoid colon injury without mention of open wound into cavity		ICD-9-CM
863.45	Rectum injury without mention of open wound into cavity		ICD-9-CM
863.46	Injury to multiple sites in colon and rectum without mention of open wound into cavity		ICD-9-CM
863.49	Other colon and rectum injury, without mention of open wound into cavity		ICD-9-CM
863.5	Injury to colon or rectum with open wound into cavity		ICD-9-CM
863.50	Colon injury, unspecified site, with open wound into cavity		ICD-9-CM
863.51	Ascending (right) colon injury with open wound into cavity		ICD-9-CM
863.52	Transverse colon injury with open wound into cavity		ICD-9-CM
863.53	Descending (left) colon injury with open wound into cavity		ICD-9-CM
863.54	Sigmoid colon injury with open wound into cavity		ICD-9-CM
863.55	Rectum injury with open wound into cavity		ICD-9-CM
863.56	Injury to multiple sites in colon and rectum with open wound into cavity		ICD-9-CM
863.59	Other injury to colon and rectum with open wound into cavity		ICD-9-CM
863.8	Injury to other and unspecified gastrointestinal sites without mention of open wound into cavity		ICD-9-CM
863.80	Gastrointestinal tract injury, unspecified site, without mention of open wound into cavity		ICD-9-CM
863.81	Pancreas head injury without mention of open wound into cavity		ICD-9-CM
863.82	Pancreas body injury without mention of open wound into cavity		ICD-9-CM

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Code	Description	Code Type	Code Category
863.83	Pancreas tail injury without mention of open wound into cavity		ICD-9-CM
863.84	Pancreas injury, multiple and unspecified sites, without mention of open wound into cavity		ICD-9-CM
863.85	Appendix injury without mention of open wound into cavity		ICD-9-CM
863.89	Injury to other and unspecified gastrointestinal sites without mention of open wound into cavity		ICD-9-CM
863.9	Injury to other and unspecified gastrointestinal sites, with open wound into cavity		ICD-9-CM
863.90	Gastrointestinal tract injury, unspecified site, with open wound into cavity		ICD-9-CM
863.91	Pancreas head injury with open wound into cavity		ICD-9-CM
863.92	Pancreas body injury with open wound into cavity		ICD-9-CM
863.93	Pancreas tail injury with open wound into cavity		ICD-9-CM
863.94	Pancreas injury, multiple and unspecified sites, with open wound into cavity		ICD-9-CM
863.95	Appendix injury with open wound into cavity		ICD-9-CM
863.99	Injury to other and unspecified gastrointestinal sites with open wound into cavity		ICD-9-CM
864.1	Liver injury with open wound into cavity		ICD-9-CM
864.10	Unspecified liver injury with open wound into cavity		ICD-9-CM
864.11	Liver hematoma and contusion with open wound into cavity		ICD-9-CM
864.12	Liver laceration, minor, with open wound into cavity		ICD-9-CM
864.13	Liver laceration, moderate, with open wound into cavity		ICD-9-CM
864.14	Liver laceration, major, with open wound into cavity		ICD-9-CM
864.15	Liver injury with open wound into cavity, unspecified laceration		ICD-9-CM
864.19	Other liver injury with open wound into cavity		ICD-9-CM
865.1	Spleen injury with open wound into cavity		ICD-9-CM
865.10	Unspecified spleen injury with open wound into cavity		ICD-9-CM
865.11	Spleen hematoma, without rupture of capsule, with open wound into cavity		ICD-9-CM
865.12	Capsular tears to spleen, without major disruption of parenchyma, with open wound into cavity	DX	ICD-9-CM
865.13	Spleen laceration extending into parenchyma, with open wound into cavity	DX	ICD-9-CM
865.14	Massive parenchyma disruption of spleen with open wound into cavity	DX	ICD-9-CM
865.19	Other spleen injury with open wound into cavity	DX	ICD-9-CM
866	Injury to kidney	DX	ICD-9-CM
866.0	Kidney injury without mention of open wound into cavity	DX	ICD-9-CM
866.00	Unspecified kidney injury without mention of open wound into cavity	DX	ICD-9-CM
866.01	Kidney hematoma without rupture of capsule or mention of open wound into cavity	DX	ICD-9-CM
866.02	Kidney laceration without mention of open wound into cavity	DX	ICD-9-CM
866.03	Complete disruption of kidney parenchyma, without mention of open wound into	DX	ICD-9-CM
866.1	Kidney injury with open wound into cavity	DX	ICD-9-CM
866.10	Unspecified kidney injury with open wound into cavity	DX	ICD-9-CM
866.11	Kidney hematoma, without rupture of capsule, with open wound into cavity	DX	ICD-9-CM
866.12	Kidney laceration with open wound into cavity	DX	ICD-9-CM
866.13	Complete disruption of kidney parenchyma, with open wound into cavity	DX	ICD-9-CM
867	Injury to pelvic organs	DX	ICD-9-CM
867.0	Bladder and urethra injury without mention of open wound into cavity	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
867.1	Bladder and urethra injury with open wound into cavity	DX	ICD-9-CM
867.2	Ureter injury without mention of open wound into cavity	DX	ICD-9-CM
867.3	Ureter injury with open wound into cavity	DX	ICD-9-CM
867.4	Uterus injury without mention of open wound into cavity	DX	ICD-9-CM
867.5	Uterus injury with open wound into cavity	DX	ICD-9-CM
867.6	Injury to other specified pelvic organs without mention of open wound into cavity	DX	ICD-9-CM
867.7	Injury to other specified pelvic organs with open wound into cavity	DX	ICD-9-CM
867.8	Injury to unspecified pelvic organ without mention of open wound into cavity	DX	ICD-9-CM
867.9	Injury to unspecified pelvic organ with open wound into cavity	DX	ICD-9-CM
873.0	Open wound of scalp, without mention of complication	DX	ICD-9-CM
873.1	Open wound of scalp, complicated	DX	ICD-9-CM
875.0	Open wound of chest (wall), without mention of complication	DX	ICD-9-CM
875.1	Open wound of chest (wall), complicated	DX	ICD-9-CM
902.4	Renal blood vessel injury	DX	ICD-9-CM
902.40	Renal vessel(s) injury, unspecified	DX	ICD-9-CM
902.41	Renal artery injury	DX	ICD-9-CM
902.42	Renal vein injury	DX	ICD-9-CM
902.49	Renal blood vessel injury, other	DX	ICD-9-CM
902.55	Uterine artery injury	DX	ICD-9-CM
902.56	Uterine vein injury	DX	ICD-9-CM
902.81	Ovarian artery injury	DX	ICD-9-CM
902.82	Ovarian vein injury	DX	ICD-9-CM
925	Crushing injury of face, scalp, and neck	DX	ICD-9-CM
925.1	Crushing injury of face and scalp	DX	ICD-9-CM
925.2	Crushing injury of neck	DX	ICD-9-CM
926	Crushing injury of trunk	DX	ICD-9-CM
926.0	Crushing injury of external genitalia	DX	ICD-9-CM
926.1	Crushing injury of other specified sites of trunk	DX	ICD-9-CM
926.11	Crushing injury of back	DX	ICD-9-CM
926.12	Crushing injury of buttock	DX	ICD-9-CM
926.19	Crushing injury of other specified sites of trunk	DX	ICD-9-CM
926.8	Crushing injury of multiple sites of trunk	DX	ICD-9-CM
926.9	Crushing injury of unspecified site of trunk	DX	ICD-9-CM
927	Crushing injury of upper limb	DX	ICD-9-CM
927.0	Crushing injury of shoulder and upper arm	DX	ICD-9-CM
927.00	Crushing injury of shoulder region	DX	ICD-9-CM
927.01	Crushing injury of scapular region	DX	ICD-9-CM
927.02	Crushing injury of axillary region	DX	ICD-9-CM
927.03	Crushing injury of upper arm	DX	ICD-9-CM
927.09	Crushing injury of multiple sites of upper arm	DX	ICD-9-CM
927.1	Crushing injury of elbow and forearm	DX	ICD-9-CM
927.10	Crushing injury of forearm	DX	ICD-9-CM
927.11	Crushing injury of elbow	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
927.2	Crushing injury of wrist and hand(s), except finger(s) alone	DX	ICD-9-CM
927.20	Crushing injury of hand(s)	DX	ICD-9-CM
927.21	Crushing injury of wrist	DX	ICD-9-CM
927.3	Crushing injury of finger(s)	DX	ICD-9-CM
927.8	Crushing injury of multiple sites of upper limb	DX	ICD-9-CM
927.9	Crushing injury of unspecified site of upper limb	DX	ICD-9-CM
928	Crushing injury of lower limb	DX	ICD-9-CM
928.0	Crushing injury of hip and thigh	DX	ICD-9-CM
928.00	Crushing injury of thigh	DX	ICD-9-CM
928.01	Crushing injury of hip	DX	ICD-9-CM
928.1	Crushing injury of knee and lower leg	DX	ICD-9-CM
928.10	Crushing injury of lower leg	DX	ICD-9-CM
928.11	Crushing injury of knee	DX	ICD-9-CM
928.2	Crushing injury of ankle and foot, excluding toe(s) alone	DX	ICD-9-CM
928.20	Crushing injury of foot	DX	ICD-9-CM
928.21	Crushing injury of ankle	DX	ICD-9-CM
928.3	Crushing injury of toe(s)	DX	ICD-9-CM
928.8	Crushing injury of multiple sites of lower limb	DX	ICD-9-CM
928.9	Crushing injury of unspecified site of lower limb	DX	ICD-9-CM
929	Crushing injury of multiple and unspecified sites	DX	ICD-9-CM
929.0	Crushing injury of multiple sites, not elsewhere classified	DX	ICD-9-CM
929.9	Crushing injury of unspecified site	DX	ICD-9-CM
958.4	Traumatic shock	DX	ICD-9-CM
958.5	Traumatic anuria	DX	ICD-9-CM
958.7	Traumatic subcutaneous emphysema	DX	ICD-9-CM
996.7	Other complications of internal prosthetic device, implant, and graft	DX	ICD-9-CM
996.70	Other complications due to unspecified device, implant, and graft	DX	ICD-9-CM
996.71	Other complications due to heart valve prosthesis	DX	ICD-9-CM
996.72	Other complications due to other cardiac device, implant, and graft	DX	ICD-9-CM
996.73	Other complications due to renal dialysis device, implant, and graft	DX	ICD-9-CM
996.74	Other complications due to other vascular device, implant, and graft	DX	ICD-9-CM
996.75	Other complications due to nervous system device, implant, and graft	DX	ICD-9-CM
996.76	Other complications due to genitourinary device, implant, and graft	DX	ICD-9-CM
996.77	Other complications due to internal joint prosthesis	DX	ICD-9-CM
996.78	Other complications due to other internal orthopedic device, implant, and graft	DX	ICD-9-CM
996.79	Other complications due to other internal prosthetic device, implant, and graft	DX	ICD-9-CM
998.11	Hemorrhage complicating a procedure	DX	ICD-9-CM
998.12	Hematoma complicating a procedure	DX	ICD-9-CM
998.2	Accidental puncture or laceration during procedure	DX	ICD-9-CM
E805	Hit by rolling stock	DX	ICD-9-CM
E805.0	Railway employee hit by rolling stock	DX	ICD-9-CM
E805.1	Passenger on railway hit by rolling stock	DX	ICD-9-CM
E805.2	Pedestrian hit by rolling stock	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
E805.3	Pedal cyclist hit by rolling stock	DX	ICD-9-CM
E805.8	Other specified person hit by rolling stock	DX	ICD-9-CM
E805.9	Unspecified person hit by rolling stock	DX	ICD-9-CM
E870	Accidental cut, puncture, perforation, or hemorrhage during medical care	DX	ICD-9-CM
E870.0	Accidental cut, puncture, perforation, or hemorrhage during surgical operation	DX	ICD-9-CM
E870.1	Accidental cut, puncture, perforation, or hemorrhage during infusion or transfusion	DX	ICD-9-CM
E870.2	Accidental cut, puncture, perforation, or hemorrhage during kidney dialysis or other perfusion	DX	ICD-9-CM
E870.3	Accidental cut, puncture, perforation, or hemorrhage during injection or vaccination	DX	ICD-9-CM
E870.4	Accidental cut, puncture, perforation, or hemorrhage during endoscopic examination	DX	ICD-9-CM
E870.5	Accidental cut, puncture, perforation, or hemorrhage during aspiration of fluid or tissue, puncture, and catheterization	DX	ICD-9-CM
E870.6	Accidental cut, puncture, perforation, or hemorrhage during heart catheterization	DX	ICD-9-CM
E870.7	Accidental cut, puncture, perforation, or hemorrhage during administration of enema	DX	ICD-9-CM
E870.8	Accidental cut, puncture, perforation, or hemorrhage during other specified medical	DX	ICD-9-CM
E870.9	Accidental cut, puncture, perforation, or hemorrhage during unspecified medical care	DX	ICD-9-CM
E881	Accidental fall on or from ladders or scaffolding	DX	ICD-9-CM
E881.0	Accidental fall from ladder	DX	ICD-9-CM
E881.1	Accidental fall from scaffolding	DX	ICD-9-CM
E882	Accidental fall from or out of building or other structure	DX	ICD-9-CM
E883	Accidental fall into hole or other opening in surface	DX	ICD-9-CM
E883.0	Accident from diving or jumping into water (swimming pool)	DX	ICD-9-CM
E883.1	Accidental fall into well	DX	ICD-9-CM
E883.2	Accidental fall into storm drain or manhole	DX	ICD-9-CM
E883.9	Accidental fall into other hole or other opening in surface	DX	ICD-9-CM
E922	Accident caused by firearm, and air gun missiles	DX	ICD-9-CM
E922.0	Accident caused by handgun	DX	ICD-9-CM
E922.1	Accident caused by shotgun (automatic)	DX	ICD-9-CM
E922.2	Accident caused by hunting rifle	DX	ICD-9-CM
E922.3	Accident caused by military firearms	DX	ICD-9-CM
E922.4	Accident caused by air gun	DX	ICD-9-CM
E922.5	Accident caused by paintball gun	DX	ICD-9-CM
E922.8	Accident caused by other specified firearm missile	DX	ICD-9-CM
E922.9	Accident caused by unspecified firearm missile	DX	ICD-9-CM
E923	Accident caused by explosive material	DX	ICD-9-CM
E923.0	Accident caused by fireworks	DX	ICD-9-CM
E923.1	Accident caused by blasting materials	DX	ICD-9-CM
E923.2	Accident caused by explosive gases	DX	ICD-9-CM
E923.8	Accident caused by other explosive materials	DX	ICD-9-CM
E923.9	Accident caused by unspecified explosive material	DX	ICD-9-CM
E955	Suicide and self-inflicted injury by firearms, air guns and explosives	DX	ICD-9-CM
E955.0	Suicide and self-inflicted injury by handgun	DX	ICD-9-CM
E955.1	Suicide and self-inflicted injury by shotgun	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
E955.2	Suicide and self-inflicted injury by hunting rifle	DX	ICD-9-CM
E955.3	Suicide and self-inflicted injury by military firearms	DX	ICD-9-CM
E955.4	Suicide and self-inflicted injury by other and unspecified firearm	DX	ICD-9-CM
E955.5	Suicide and self-inflicted injury by explosives	DX	ICD-9-CM
E955.6	Suicide and self-inflicted injury by air gun	DX	ICD-9-CM
E955.7	Suicide and self-inflicted injury by paintball gun	DX	ICD-9-CM
E955.9	Suicide and self-inflicted injury by firearms and explosives, unspecified	DX	ICD-9-CM
E960	Fight, brawl, rape	DX	ICD-9-CM
E960.0	Unarmed fight or brawl	DX	ICD-9-CM
E960.1	Rape	DX	ICD-9-CM
E965	Assault by firearms and explosives	DX	ICD-9-CM
E965.0	Assault by handgun	DX	ICD-9-CM
E965.1	Assault by shotgun	DX	ICD-9-CM
E965.2	Assault by hunting rifle	DX	ICD-9-CM
E965.3	Assault by military firearms	DX	ICD-9-CM
E965.4	Assault by other and unspecified firearm	DX	ICD-9-CM
E965.5	Assault by antipersonnel bomb	DX	ICD-9-CM
E965.6	Assault by gasoline bomb	DX	ICD-9-CM
E965.7	Assault by letter bomb	DX	ICD-9-CM
E965.8	Assault by other specified explosive	DX	ICD-9-CM
E965.9	Assault by unspecified explosive	DX	ICD-9-CM
E970	Injury due to legal intervention by firearms	DX	ICD-9-CM
E985	Injury by firearms, air guns and explosives, undetermined whether accidentally or purposely inflicted	DX	ICD-9-CM
E985.0	Injury by handgun, undetermined whether accidentally or purposely inflicted	DX	ICD-9-CM
E985.1	Injury by shotgun, undetermined whether accidentally or purposely inflicted	DX	ICD-9-CM
E985.2	Injury by hunting rifle, undetermined whether accidentally or purposely inflicted	DX	ICD-9-CM
E985.3	Injury by military firearms, undetermined whether accidentally or purposely inflicted	DX	ICD-9-CM
E985.4	Injury by other and unspecified firearm, undetermined whether accidentally or purposely inflicted	DX	ICD-9-CM
E985.5	Injury by explosives, undetermined whether accidentally or purposely inflicted	DX	ICD-9-CM
E985.6	Injury by air gun, undetermined whether accidental, or purposefully inflicted	DX	ICD-9-CM
E985.7	Injury by paintball gun, undetermined whether accidentally or purposefully inflicted	DX	ICD-9-CM
D78.01	Intraoperative hemorrhage and hematoma of the spleen complicating a procedure on the spleen	DX	ICD-10-CM
D78.02	Intraoperative hemorrhage and hematoma of the spleen complicating other procedure	DX	ICD-10-CM
D78.11	Accidental puncture and laceration of the spleen during a procedure on the spleen	DX	ICD-10-CM
D78.12	Accidental puncture and laceration of the spleen during other procedure	DX	ICD-10-CM
D78.21	Postprocedural hemorrhage of the spleen following a procedure on the spleen	DX	ICD-10-CM
D78.22	Postprocedural hemorrhage of the spleen following other procedure	DX	ICD-10-CM
D78.31	Postprocedural hematoma of the spleen following a procedure on the spleen	DX	ICD-10-CM
D78.32	Postprocedural hematoma of the spleen following other procedure	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
E36.01	Intraoperative hemorrhage and hematoma of an endocrine system organ or structure complicating an endocrine system procedure	DX	ICD-10-CM
E36.02	Intraoperative hemorrhage and hematoma of an endocrine system organ or structure complicating other procedure	DX	ICD-10-CM
E36.11	Accidental puncture and laceration of an endocrine system organ or structure during an endocrine system procedure	DX	ICD-10-CM
E36.12	Accidental puncture and laceration of an endocrine system organ or structure during other procedure	DX	ICD-10-CM
E89.810	Postprocedural hemorrhage of an endocrine system organ or structure following an endocrine system procedure	DX	ICD-10-CM
E89.811	Postprocedural hemorrhage of an endocrine system organ or structure following other procedure	DX	ICD-10-CM
E89.820	Postprocedural hematoma of an endocrine system organ or structure following an endocrine system procedure	DX	ICD-10-CM
E89.821	Postprocedural hematoma of an endocrine system organ or structure following other procedure	DX	ICD-10-CM
G97.31	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating a nervous system procedure	DX	ICD-10-CM
G97.32	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating other procedure	DX	ICD-10-CM
G97.48	Accidental puncture and laceration of other nervous system organ or structure during a nervous system procedure	DX	ICD-10-CM
G97.49	Accidental puncture and laceration of other nervous system organ or structure during other procedure	DX	ICD-10-CM
G97.51	Postprocedural hemorrhage of a nervous system organ or structure following a nervous system procedure	DX	ICD-10-CM
G97.52	Postprocedural hemorrhage of a nervous system organ or structure following other procedure	DX	ICD-10-CM
G97.61	Postprocedural hematoma of a nervous system organ or structure following a nervous system procedure	DX	ICD-10-CM
G97.62	Postprocedural hematoma of a nervous system organ or structure following other procedure	DX	ICD-10-CM
H59.111	Intraoperative hemorrhage and hematoma of right eye and adnexa complicating an ophthalmic procedure	DX	ICD-10-CM
H59.112	Intraoperative hemorrhage and hematoma of left eye and adnexa complicating an ophthalmic procedure	DX	ICD-10-CM
H59.113	Intraoperative hemorrhage and hematoma of eye and adnexa complicating an ophthalmic procedure, bilateral	DX	ICD-10-CM
H59.119	Intraoperative hemorrhage and hematoma of unspecified eye and adnexa complicating an ophthalmic procedure	DX	ICD-10-CM
H59.121	Intraoperative hemorrhage and hematoma of right eye and adnexa complicating other procedure	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
H59.122	Intraoperative hemorrhage and hematoma of left eye and adnexa complicating other procedure	DX	ICD-10-CM
H59.123	Intraoperative hemorrhage and hematoma of eye and adnexa complicating other procedure, bilateral	DX	ICD-10-CM
H59.129	Intraoperative hemorrhage and hematoma of unspecified eye and adnexa complicating other procedure	DX	ICD-10-CM
H59.211	Accidental puncture and laceration of right eye and adnexa during an ophthalmic procedure	DX	ICD-10-CM
H59.212	Accidental puncture and laceration of left eye and adnexa during an ophthalmic procedure	DX	ICD-10-CM
H59.213	Accidental puncture and laceration of eye and adnexa during an ophthalmic procedure, bilateral	DX	ICD-10-CM
H59.219	Accidental puncture and laceration of unspecified eye and adnexa during an ophthalmic procedure	DX	ICD-10-CM
H59.221	Accidental puncture and laceration of right eye and adnexa during other procedure	DX	ICD-10-CM
H59.222	Accidental puncture and laceration of left eye and adnexa during other procedure	DX	ICD-10-CM
H59.223	Accidental puncture and laceration of eye and adnexa during other procedure, bilateral	DX	ICD-10-CM
H59.229	Accidental puncture and laceration of unspecified eye and adnexa during other procedure	DX	ICD-10-CM
H59.311	Postprocedural hemorrhage of right eye and adnexa following an ophthalmic procedure	DX	ICD-10-CM
H59.312	Postprocedural hemorrhage of left eye and adnexa following an ophthalmic procedure	DX	ICD-10-CM
H59.313	Postprocedural hemorrhage of eye and adnexa following an ophthalmic procedure, bilateral	DX	ICD-10-CM
H59.319	Postprocedural hemorrhage of unspecified eye and adnexa following an ophthalmic procedure	DX	ICD-10-CM
H59.321	Postprocedural hemorrhage of right eye and adnexa following other procedure	DX	ICD-10-CM
H59.322	Postprocedural hemorrhage of left eye and adnexa following other procedure	DX	ICD-10-CM
H59.323	Postprocedural hemorrhage of eye and adnexa following other procedure, bilateral	DX	ICD-10-CM
H59.329	Postprocedural hemorrhage of unspecified eye and adnexa following other procedure	DX	ICD-10-CM
H59.331	Postprocedural hematoma of right eye and adnexa following an ophthalmic procedure	DX	ICD-10-CM
H59.332	Postprocedural hematoma of left eye and adnexa following an ophthalmic procedure	DX	ICD-10-CM
H59.333	Postprocedural hematoma of eye and adnexa following an ophthalmic procedure, bilateral	DX	ICD-10-CM
H59.339	Postprocedural hematoma of unspecified eye and adnexa following an ophthalmic procedure	DX	ICD-10-CM
H59.341	Postprocedural hematoma of right eye and adnexa following other procedure	DX	ICD-10-CM
H59.342	Postprocedural hematoma of left eye and adnexa following other procedure	DX	ICD-10-CM
H59.343	Postprocedural hematoma of eye and adnexa following other procedure, bilateral	DX	ICD-10-CM
H59.349	Postprocedural hematoma of unspecified eye and adnexa following other procedure	DX	ICD-10-CM
H95.21	Intraoperative hemorrhage and hematoma of ear and mastoid process complicating a procedure on the ear and mastoid process	DX	ICD-10-CM
H95.22	Intraoperative hemorrhage and hematoma of ear and mastoid process complicating other procedure	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
H95.31	Accidental puncture and laceration of the ear and mastoid process during a procedure on the ear and mastoid process	DX	ICD-10-CM
H95.32	Accidental puncture and laceration of the ear and mastoid process during other procedure	DX	ICD-10-CM
H95.41	Postprocedural hemorrhage of ear and mastoid process following a procedure on the ear and mastoid process	DX	ICD-10-CM
H95.42	Postprocedural hemorrhage of ear and mastoid process following other procedure	DX	ICD-10-CM
H95.51	Postprocedural hematoma of ear and mastoid process following a procedure on the ear and mastoid process	DX	ICD-10-CM
H95.52	Postprocedural hematoma of ear and mastoid process following other procedure	DX	ICD-10-CM
I97.410	Intraoperative hemorrhage and hematoma of a circulatory system organ or structure complicating a cardiac catheterization	DX	ICD-10-CM
I97.411	Intraoperative hemorrhage and hematoma of a circulatory system organ or structure complicating a cardiac bypass	DX	ICD-10-CM
I97.418	Intraoperative hemorrhage and hematoma of a circulatory system organ or structure complicating other circulatory system procedure	DX	ICD-10-CM
I97.42	Intraoperative hemorrhage and hematoma of a circulatory system organ or structure complicating other procedure	DX	ICD-10-CM
I97.51	Accidental puncture and laceration of a circulatory system organ or structure during a circulatory system procedure	DX	ICD-10-CM
I97.52	Accidental puncture and laceration of a circulatory system organ or structure during other procedure	DX	ICD-10-CM
I97.610	Postprocedural hemorrhage of a circulatory system organ or structure following a cardiac catheterization	DX	ICD-10-CM
I97.611	Postprocedural hemorrhage of a circulatory system organ or structure following cardiac bypass	DX	ICD-10-CM
I97.618	Postprocedural hemorrhage of a circulatory system organ or structure following other circulatory system procedure	DX	ICD-10-CM
I97.620	Postprocedural hemorrhage of a circulatory system organ or structure following other procedure	DX	ICD-10-CM
I97.621	Postprocedural hematoma of a circulatory system organ or structure following other procedure	DX	ICD-10-CM
I97.630	Postprocedural hematoma of a circulatory system organ or structure following a cardiac catheterization	DX	ICD-10-CM
I97.631	Postprocedural hematoma of a circulatory system organ or structure following cardiac bypass	DX	ICD-10-CM
I97.638	Postprocedural hematoma of a circulatory system organ or structure following other circulatory system procedure	DX	ICD-10-CM
J95.61	Intraoperative hemorrhage and hematoma of a respiratory system organ or structure complicating a respiratory system procedure	DX	ICD-10-CM
J95.62	Intraoperative hemorrhage and hematoma of a respiratory system organ or structure complicating other procedure	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
J95.71	Accidental puncture and laceration of a respiratory system organ or structure during a respiratory system procedure	DX	ICD-10-CM
J95.72	Accidental puncture and laceration of a respiratory system organ or structure during other procedure	DX	ICD-10-CM
J95.830	Postprocedural hemorrhage of a respiratory system organ or structure following a respiratory system procedure	DX	ICD-10-CM
J95.831	Postprocedural hemorrhage of a respiratory system organ or structure following other procedure	DX	ICD-10-CM
J95.860	Postprocedural hematoma of a respiratory system organ or structure following a respiratory system procedure	DX	ICD-10-CM
J95.861	Postprocedural hematoma of a respiratory system organ or structure following other procedure	DX	ICD-10-CM
K91.61	Intraoperative hemorrhage and hematoma of a digestive system organ or structure complicating a digestive system procedure	DX	ICD-10-CM
K91.62	Intraoperative hemorrhage and hematoma of a digestive system organ or structure complicating other procedure	DX	ICD-10-CM
K91.71	Accidental puncture and laceration of a digestive system organ or structure during a digestive system procedure	DX	ICD-10-CM
K91.72	Accidental puncture and laceration of a digestive system organ or structure during other procedure	DX	ICD-10-CM
K91.840	Postprocedural hemorrhage of a digestive system organ or structure following a digestive system procedure	DX	ICD-10-CM
K91.841	Postprocedural hemorrhage of a digestive system organ or structure following other procedure	DX	ICD-10-CM
K91.870	Postprocedural hematoma of a digestive system organ or structure following a digestive system procedure	DX	ICD-10-CM
K91.871	Postprocedural hematoma of a digestive system organ or structure following other procedure	DX	ICD-10-CM
L76.01	Intraoperative hemorrhage and hematoma of skin and subcutaneous tissue complicating a dermatologic procedure	DX	ICD-10-CM
L76.02	Intraoperative hemorrhage and hematoma of skin and subcutaneous tissue complicating other procedure	DX	ICD-10-CM
L76.11	Accidental puncture and laceration of skin and subcutaneous tissue during a dermatologic procedure	DX	ICD-10-CM
L76.12	Accidental puncture and laceration of skin and subcutaneous tissue during other procedure	DX	ICD-10-CM
L76.21	Postprocedural hemorrhage of skin and subcutaneous tissue following a dermatologic procedure	DX	ICD-10-CM
L76.22	Postprocedural hemorrhage of skin and subcutaneous tissue following other procedure	DX	ICD-10-CM
L76.31	Postprocedural hematoma of skin and subcutaneous tissue following a dermatologic procedure	DX	ICD-10-CM
L76.32	Postprocedural hematoma of skin and subcutaneous tissue following other procedure	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
M96.810	Intraoperative hemorrhage and hematoma of a musculoskeletal structure complicating a musculoskeletal system procedure	DX	ICD-10-CM
M96.811	Intraoperative hemorrhage and hematoma of a musculoskeletal structure complicating other procedure	DX	ICD-10-CM
M96.820	Accidental puncture and laceration of a musculoskeletal structure during a musculoskeletal system procedure	DX	ICD-10-CM
M96.821	Accidental puncture and laceration of a musculoskeletal structure during other procedure	DX	ICD-10-CM
M96.830	Postprocedural hemorrhage of a musculoskeletal structure following a musculoskeletal system procedure	DX	ICD-10-CM
M96.831	Postprocedural hemorrhage of a musculoskeletal structure following other procedure	DX	ICD-10-CM
M96.840	Postprocedural hematoma of a musculoskeletal structure following a musculoskeletal system procedure	DX	ICD-10-CM
M96.841	Postprocedural hematoma of a musculoskeletal structure following other procedure	DX	ICD-10-CM
N99.61	Intraoperative hemorrhage and hematoma of a genitourinary system organ or structure complicating a genitourinary system procedure	DX	ICD-10-CM
N99.62	Intraoperative hemorrhage and hematoma of a genitourinary system organ or structure complicating other procedure	DX	ICD-10-CM
N99.71	Accidental puncture and laceration of a genitourinary system organ or structure during a genitourinary system procedure	DX	ICD-10-CM
N99.72	Accidental puncture and laceration of a genitourinary system organ or structure during other procedure	DX	ICD-10-CM
N99.820	Postprocedural hemorrhage of a genitourinary system organ or structure following a genitourinary system procedure	DX	ICD-10-CM
N99.821	Postprocedural hemorrhage of a genitourinary system organ or structure following other procedure	DX	ICD-10-CM
N99.840	Postprocedural hematoma of a genitourinary system organ or structure following a genitourinary system procedure	DX	ICD-10-CM
N99.841	Postprocedural hematoma of a genitourinary system organ or structure following other procedure	DX	ICD-10-CM
S01.00XA	Unspecified open wound of scalp, initial encounter	DX	ICD-10-CM
S01.01XA	Laceration without foreign body of scalp, initial encounter	DX	ICD-10-CM
S01.02XA	Laceration with foreign body of scalp, initial encounter	DX	ICD-10-CM
S01.03XA	Puncture wound without foreign body of scalp, initial encounter	DX	ICD-10-CM
S01.04XA	Puncture wound with foreign body of scalp, initial encounter	DX	ICD-10-CM
S01.05XA	Open bite of scalp, initial encounter	DX	ICD-10-CM
S02.0XXA	Fracture of vault of skull, initial encounter for closed fracture	DX	ICD-10-CM
S02.0XXB	Fracture of vault of skull, initial encounter for open fracture	DX	ICD-10-CM
S02.101A	Fracture of base of skull, right side, initial encounter for closed fracture	DX	ICD-10-CM
S02.101B	Fracture of base of skull, right side, initial encounter for open fracture	DX	ICD-10-CM
S02.102A	Fracture of base of skull, left side, initial encounter for closed fracture	DX	ICD-10-CM
S02.102B	Fracture of base of skull, left side, initial encounter for open fracture	DX	ICD-10-CM
S02.109A	Fracture of base of skull, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S02.109B	Fracture of base of skull, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.110A	Type I occipital condyle fracture, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.110B	Type I occipital condyle fracture, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.111A	Type II occipital condyle fracture, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.111B	Type II occipital condyle fracture, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.112A	Type III occipital condyle fracture, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.112B	Type III occipital condyle fracture, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.113A	Unspecified occipital condyle fracture, initial encounter for closed fracture	DX	ICD-10-CM
S02.113B	Unspecified occipital condyle fracture, initial encounter for open fracture	DX	ICD-10-CM
S02.118A	Other fracture of occiput, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.118B	Other fracture of occiput, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.119A	Unspecified fracture of occiput, initial encounter for closed fracture	DX	ICD-10-CM
S02.119B	Unspecified fracture of occiput, initial encounter for open fracture	DX	ICD-10-CM
S02.11AA	Type I occipital condyle fracture, right side, initial encounter for closed fracture	DX	ICD-10-CM
S02.11AB	Type I occipital condyle fracture, right side, initial encounter for open fracture	DX	ICD-10-CM
S02.11BA	Type I occipital condyle fracture, left side, initial encounter for closed fracture	DX	ICD-10-CM
S02.11BB	Type I occipital condyle fracture, left side, initial encounter for open fracture	DX	ICD-10-CM
S02.11CA	Type II occipital condyle fracture, right side, initial encounter for closed fracture	DX	ICD-10-CM
S02.11CB	Type II occipital condyle fracture, right side, initial encounter for open fracture	DX	ICD-10-CM
S02.11DA	Type II occipital condyle fracture, left side, initial encounter for closed fracture	DX	ICD-10-CM
S02.11DB	Type II occipital condyle fracture, left side, initial encounter for open fracture	DX	ICD-10-CM
S02.11EA	Type III occipital condyle fracture, right side, initial encounter for closed fracture	DX	ICD-10-CM
S02.11EB	Type III occipital condyle fracture, right side, initial encounter for open fracture	DX	ICD-10-CM
S02.11FA	Type III occipital condyle fracture, left side, initial encounter for closed fracture	DX	ICD-10-CM
S02.11FB	Type III occipital condyle fracture, left side, initial encounter for open fracture	DX	ICD-10-CM
S02.11GA	Other fracture of occiput, right side, initial encounter for closed fracture	DX	ICD-10-CM
S02.11GB	Other fracture of occiput, right side, initial encounter for open fracture	DX	ICD-10-CM
S02.11HA	Other fracture of occiput, left side, initial encounter for closed fracture	DX	ICD-10-CM
S02.11HB	Other fracture of occiput, left side, initial encounter for open fracture	DX	ICD-10-CM
S02.19XA	Other fracture of base of skull, initial encounter for closed fracture	DX	ICD-10-CM
S02.19XB	Other fracture of base of skull, initial encounter for open fracture	DX	ICD-10-CM
S02.2XXA	Fracture of nasal bones, initial encounter for closed fracture	DX	ICD-10-CM
S02.2XXB	Fracture of nasal bones, initial encounter for open fracture	DX	ICD-10-CM
S02.30XA	Fracture of orbital floor, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.30XB	Fracture of orbital floor, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.31XA	Fracture of orbital floor, right side, initial encounter for closed fracture	DX	ICD-10-CM
S02.31XB	Fracture of orbital floor, right side, initial encounter for open fracture	DX	ICD-10-CM
S02.32XA	Fracture of orbital floor, left side, initial encounter for closed fracture	DX	ICD-10-CM
S02.32XB	Fracture of orbital floor, left side, initial encounter for open fracture	DX	ICD-10-CM
S02.400A	Malar fracture, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.400B	Malar fracture, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.401A	Maxillary fracture, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.401B	Maxillary fracture, unspecified side, initial encounter for open fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S02.402A	Zygomatic fracture, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.402B	Zygomatic fracture, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.40AA	Malar fracture, right side, initial encounter for closed fracture	DX	ICD-10-CM
S02.40AB	Malar fracture, right side, initial encounter for open fracture	DX	ICD-10-CM
S02.40BA	Malar fracture, left side, initial encounter for closed fracture	DX	ICD-10-CM
S02.40BB	Malar fracture, left side, initial encounter for open fracture	DX	ICD-10-CM
S02.40CA	Maxillary fracture, right side, initial encounter for closed fracture	DX	ICD-10-CM
S02.40CB	Maxillary fracture, right side, initial encounter for open fracture	DX	ICD-10-CM
S02.40DA	Maxillary fracture, left side, initial encounter for closed fracture	DX	ICD-10-CM
S02.40DB	Maxillary fracture, left side, initial encounter for open fracture	DX	ICD-10-CM
S02.40EA	Zygomatic fracture, right side, initial encounter for closed fracture	DX	ICD-10-CM
S02.40EB	Zygomatic fracture, right side, initial encounter for open fracture	DX	ICD-10-CM
S02.40FA	Zygomatic fracture, left side, initial encounter for closed fracture	DX	ICD-10-CM
S02.40FB	Zygomatic fracture, left side, initial encounter for open fracture	DX	ICD-10-CM
S02.411A	LeFort I fracture, initial encounter for closed fracture	DX	ICD-10-CM
S02.411B	LeFort I fracture, initial encounter for open fracture	DX	ICD-10-CM
S02.412A	LeFort II fracture, initial encounter for closed fracture	DX	ICD-10-CM
S02.412B	LeFort II fracture, initial encounter for open fracture	DX	ICD-10-CM
S02.413A	LeFort III fracture, initial encounter for closed fracture	DX	ICD-10-CM
S02.413B	LeFort III fracture, initial encounter for open fracture	DX	ICD-10-CM
S02.42XA	Fracture of alveolus of maxilla, initial encounter for closed fracture	DX	ICD-10-CM
S02.42XB	Fracture of alveolus of maxilla, initial encounter for open fracture	DX	ICD-10-CM
S02.600A	Fracture of unspecified part of body of mandible, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.600B	Fracture of unspecified part of body of mandible, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.601A	Fracture of unspecified part of body of right mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.601B	Fracture of unspecified part of body of right mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.602A	Fracture of unspecified part of body of left mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.602B	Fracture of unspecified part of body of left mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.609A	Fracture of mandible, unspecified, initial encounter for closed fracture	DX	ICD-10-CM
S02.609B	Fracture of mandible, unspecified, initial encounter for open fracture	DX	ICD-10-CM
S02.610A	Fracture of condylar process of mandible, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.610B	Fracture of condylar process of mandible, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.611A	Fracture of condylar process of right mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.611B	Fracture of condylar process of right mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.612A	Fracture of condylar process of left mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.612B	Fracture of condylar process of left mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.620A	Fracture of subcondylar process of mandible, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S02.620B	Fracture of subcondylar process of mandible, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.621A	Fracture of subcondylar process of right mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.621B	Fracture of subcondylar process of right mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.622A	Fracture of subcondylar process of left mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.622B	Fracture of subcondylar process of left mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.630A	Fracture of coronoid process of mandible, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.630B	Fracture of coronoid process of mandible, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.631A	Fracture of coronoid process of right mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.631B	Fracture of coronoid process of right mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.632A	Fracture of coronoid process of left mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.632B	Fracture of coronoid process of left mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.640A	Fracture of ramus of mandible, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.640B	Fracture of ramus of mandible, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.641A	Fracture of ramus of right mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.641B	Fracture of ramus of right mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.642A	Fracture of ramus of left mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.642B	Fracture of ramus of left mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.650A	Fracture of angle of mandible, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.650B	Fracture of angle of mandible, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.651A	Fracture of angle of right mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.651B	Fracture of angle of right mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.652A	Fracture of angle of left mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.652B	Fracture of angle of left mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.66XA	Fracture of symphysis of mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.66XB	Fracture of symphysis of mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.670A	Fracture of alveolus of mandible, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.670B	Fracture of alveolus of mandible, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.671A	Fracture of alveolus of right mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.671B	Fracture of alveolus of right mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.672A	Fracture of alveolus of left mandible, initial encounter for closed fracture	DX	ICD-10-CM
S02.672B	Fracture of alveolus of left mandible, initial encounter for open fracture	DX	ICD-10-CM
S02.69XA	Fracture of mandible of other specified site, initial encounter for closed fracture	DX	ICD-10-CM
S02.69XB	Fracture of mandible of other specified site, initial encounter for open fracture	DX	ICD-10-CM
S02.80XA	Fracture of other specified skull and facial bones, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S02.80XB	Fracture of other specified skull and facial bones, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S02.81XA	Fracture of other specified skull and facial bones, right side, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S02.81XB	Fracture of other specified skull and facial bones, right side, initial encounter for open fracture	DX	ICD-10-CM
S02.82XA	Fracture of other specified skull and facial bones, left side, initial encounter for closed fracture	DX	ICD-10-CM
S02.82XB	Fracture of other specified skull and facial bones, left side, initial encounter for open fracture	DX	ICD-10-CM
S02.91XA	Unspecified fracture of skull, initial encounter for closed fracture	DX	ICD-10-CM
S02.91XB	Unspecified fracture of skull, initial encounter for open fracture	DX	ICD-10-CM
S02.92XA	Unspecified fracture of facial bones, initial encounter for closed fracture	DX	ICD-10-CM
S02.92XB	Unspecified fracture of facial bones, initial encounter for open fracture	DX	ICD-10-CM
S06.330A	Contusion and laceration of cerebrum, unspecified, without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.331A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.332A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.333A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.334A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.335A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.336A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.337A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.338A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.339A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S06.360A	Traumatic hemorrhage of cerebrum, unspecified, without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.361A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.362A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.363A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 1 hours to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.364A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S06.365A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.366A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.367A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.368A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.369A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S06.4X0A	Epidural hemorrhage without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.4X1A	Epidural hemorrhage with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.4X2A	Epidural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.4X3A	Epidural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.4X4A	Epidural hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.4X5A	Epidural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.4X6A	Epidural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.4X7A	Epidural hemorrhage with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.4X8A	Epidural hemorrhage with loss of consciousness of any duration with death due to other causes prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.4X9A	Epidural hemorrhage with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S06.5X0A	Traumatic subdural hemorrhage without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.5X1A	Traumatic subdural hemorrhage with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.5X2A	Traumatic subdural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.5X3A	Traumatic subdural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.5X4A	Traumatic subdural hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.5X5A	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.5X6A	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S06.5X7A	Traumatic subdural hemorrhage with loss of consciousness of any duration with death due to brain injury before regaining consciousness, initial encounter	DX	ICD-10-CM
S06.5X8A	Traumatic subdural hemorrhage with loss of consciousness of any duration with death due to other cause before regaining consciousness, initial encounter	DX	ICD-10-CM
S06.5X9A	Traumatic subdural hemorrhage with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S06.6X0A	Traumatic subarachnoid hemorrhage without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.6X1A	Traumatic subarachnoid hemorrhage with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.6X2A	Traumatic subarachnoid hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.6X3A	Traumatic subarachnoid hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.6X4A	Traumatic subarachnoid hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.6X5A	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.6X6A	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.6X7A	Traumatic subarachnoid hemorrhage with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.6X8A	Traumatic subarachnoid hemorrhage with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.6X9A	Traumatic subarachnoid hemorrhage with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S06.890A	Other specified intracranial injury without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.891A	Other specified intracranial injury with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.892A	Other specified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.893A	Other specified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.894A	Other specified intracranial injury with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.895A	Other specified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.896A	Other specified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.897A	Other specified intracranial injury with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.898A	Other specified intracranial injury with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S06.899A	Other specified intracranial injury with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S06.9X0A	Unspecified intracranial injury without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.9X1A	Unspecified intracranial injury with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.9X2A	Unspecified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.9X3A	Unspecified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.9X4A	Unspecified intracranial injury with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.9X5A	Unspecified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.9X6A	Unspecified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.9X7A	Unspecified intracranial injury with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.9X8A	Unspecified intracranial injury with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.9X9A	Unspecified intracranial injury with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S07.0XXA	Crushing injury of face, initial encounter	DX	ICD-10-CM
S07.1XXA	Crushing injury of skull, initial encounter	DX	ICD-10-CM
S07.8XXA	Crushing injury of other parts of head, initial encounter	DX	ICD-10-CM
S07.9XXA	Crushing injury of head, part unspecified, initial encounter	DX	ICD-10-CM
S08.0XXA	Avulsion of scalp, initial encounter	DX	ICD-10-CM
S12.000A	Unspecified displaced fracture of first cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.000B	Unspecified displaced fracture of first cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.001A	Unspecified nondisplaced fracture of first cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.001B	Unspecified nondisplaced fracture of first cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.01XA	Stable burst fracture of first cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.01XB	Stable burst fracture of first cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.02XA	Unstable burst fracture of first cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.02XB	Unstable burst fracture of first cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.030A	Displaced posterior arch fracture of first cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.030B	Displaced posterior arch fracture of first cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S12.031A	Nondisplaced posterior arch fracture of first cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.031B	Nondisplaced posterior arch fracture of first cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.040A	Displaced lateral mass fracture of first cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.040B	Displaced lateral mass fracture of first cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.041A	Nondisplaced lateral mass fracture of first cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.041B	Nondisplaced lateral mass fracture of first cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.090A	Other displaced fracture of first cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.090B	Other displaced fracture of first cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.091A	Other nondisplaced fracture of first cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.091B	Other nondisplaced fracture of first cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.100A	Unspecified displaced fracture of second cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.100B	Unspecified displaced fracture of second cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.101A	Unspecified nondisplaced fracture of second cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.101B	Unspecified nondisplaced fracture of second cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.110A	Anterior displaced Type II dens fracture, initial encounter for closed fracture	DX	ICD-10-CM
S12.110B	Anterior displaced Type II dens fracture, initial encounter for open fracture	DX	ICD-10-CM
S12.111A	Posterior displaced Type II dens fracture, initial encounter for closed fracture	DX	ICD-10-CM
S12.111B	Posterior displaced Type II dens fracture, initial encounter for open fracture	DX	ICD-10-CM
S12.112A	Nondisplaced Type II dens fracture, initial encounter for closed fracture	DX	ICD-10-CM
S12.112B	Nondisplaced Type II dens fracture, initial encounter for open fracture	DX	ICD-10-CM
S12.120A	Other displaced dens fracture, initial encounter for closed fracture	DX	ICD-10-CM
S12.120B	Other displaced dens fracture, initial encounter for open fracture	DX	ICD-10-CM
S12.121A	Other nondisplaced dens fracture, initial encounter for closed fracture	DX	ICD-10-CM
S12.121B	Other nondisplaced dens fracture, initial encounter for open fracture	DX	ICD-10-CM
S12.130A	Unspecified traumatic displaced spondylolisthesis of second cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.130B	Unspecified traumatic displaced spondylolisthesis of second cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.131A	Unspecified traumatic nondisplaced spondylolisthesis of second cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.131B	Unspecified traumatic nondisplaced spondylolisthesis of second cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S12.14XA	Type III traumatic spondylolisthesis of second cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.14XB	Type III traumatic spondylolisthesis of second cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.150A	Other traumatic displaced spondylolisthesis of second cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.150B	Other traumatic displaced spondylolisthesis of second cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.151A	Other traumatic nondisplaced spondylolisthesis of second cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.151B	Other traumatic nondisplaced spondylolisthesis of second cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.190A	Other displaced fracture of second cervical vertebra, initial encounter for closed	DX	ICD-10-CM
S12.190B	Other displaced fracture of second cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.191A	Other nondisplaced fracture of second cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.191B	Other nondisplaced fracture of second cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.200A	Unspecified displaced fracture of third cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.200B	Unspecified displaced fracture of third cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.201A	Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.201B	Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.230A	Unspecified traumatic displaced spondylolisthesis of third cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.230B	Unspecified traumatic displaced spondylolisthesis of third cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.231A	Unspecified traumatic nondisplaced spondylolisthesis of third cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.231B	Unspecified traumatic nondisplaced spondylolisthesis of third cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.24XA	Type III traumatic spondylolisthesis of third cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.24XB	Type III traumatic spondylolisthesis of third cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.250A	Other traumatic displaced spondylolisthesis of third cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.250B	Other traumatic displaced spondylolisthesis of third cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S12.251A	Other traumatic nondisplaced spondylolisthesis of third cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.251B	Other traumatic nondisplaced spondylolisthesis of third cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.290A	Other displaced fracture of third cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.290B	Other displaced fracture of third cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.291A	Other nondisplaced fracture of third cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.291B	Other nondisplaced fracture of third cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.300A	Unspecified displaced fracture of fourth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.300B	Unspecified displaced fracture of fourth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.301A	Unspecified nondisplaced fracture of fourth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.301B	Unspecified nondisplaced fracture of fourth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.330A	Unspecified traumatic displaced spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.330B	Unspecified traumatic displaced spondylolisthesis of fourth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.331A	Unspecified traumatic nondisplaced spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.331B	Unspecified traumatic nondisplaced spondylolisthesis of fourth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.34XA	Type III traumatic spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.34XB	Type III traumatic spondylolisthesis of fourth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.350A	Other traumatic displaced spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.350B	Other traumatic displaced spondylolisthesis of fourth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.351A	Other traumatic nondisplaced spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.351B	Other traumatic nondisplaced spondylolisthesis of fourth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.390A	Other displaced fracture of fourth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.390B	Other displaced fracture of fourth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.391A	Other nondisplaced fracture of fourth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.391B	Other nondisplaced fracture of fourth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S12.400A	Unspecified displaced fracture of fifth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.400B	Unspecified displaced fracture of fifth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.401A	Unspecified nondisplaced fracture of fifth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.401B	Unspecified nondisplaced fracture of fifth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.430A	Unspecified traumatic displaced spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.430B	Unspecified traumatic displaced spondylolisthesis of fifth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.431A	Unspecified traumatic nondisplaced spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.431B	Unspecified traumatic nondisplaced spondylolisthesis of fifth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.44XA	Type III traumatic spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.44XB	Type III traumatic spondylolisthesis of fifth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.450A	Other traumatic displaced spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.450B	Other traumatic displaced spondylolisthesis of fifth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.451A	Other traumatic nondisplaced spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.451B	Other traumatic nondisplaced spondylolisthesis of fifth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.490A	Other displaced fracture of fifth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.490B	Other displaced fracture of fifth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.491A	Other nondisplaced fracture of fifth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.491B	Other nondisplaced fracture of fifth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.500A	Unspecified displaced fracture of sixth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.500B	Unspecified displaced fracture of sixth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.501A	Unspecified nondisplaced fracture of sixth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.501B	Unspecified nondisplaced fracture of sixth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.530A	Unspecified traumatic displaced spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S12.530B	Unspecified traumatic displaced spondylolisthesis of sixth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.531A	Unspecified traumatic nondisplaced spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.531B	Unspecified traumatic nondisplaced spondylolisthesis of sixth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.54XA	Type III traumatic spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.54XB	Type III traumatic spondylolisthesis of sixth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.550A	Other traumatic displaced spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.550B	Other traumatic displaced spondylolisthesis of sixth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.551A	Other traumatic nondisplaced spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.551B	Other traumatic nondisplaced spondylolisthesis of sixth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.590A	Other displaced fracture of sixth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.590B	Other displaced fracture of sixth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.591A	Other nondisplaced fracture of sixth cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.591B	Other nondisplaced fracture of sixth cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.600A	Unspecified displaced fracture of seventh cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.600B	Unspecified displaced fracture of seventh cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.601A	Unspecified nondisplaced fracture of seventh cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.601B	Unspecified nondisplaced fracture of seventh cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.630A	Unspecified traumatic displaced spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.630B	Unspecified traumatic displaced spondylolisthesis of seventh cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.631A	Unspecified traumatic nondisplaced spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.631B	Unspecified traumatic nondisplaced spondylolisthesis of seventh cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.64XA	Type III traumatic spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.64XB	Type III traumatic spondylolisthesis of seventh cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S12.650A	Other traumatic displaced spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.650B	Other traumatic displaced spondylolisthesis of seventh cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.651A	Other traumatic nondisplaced spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.651B	Other traumatic nondisplaced spondylolisthesis of seventh cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.690A	Other displaced fracture of seventh cervical vertebra, initial encounter for closed	DX	ICD-10-CM
S12.690B	Other displaced fracture of seventh cervical vertebra, initial encounter for open	DX	ICD-10-CM
S12.691A	Other nondisplaced fracture of seventh cervical vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S12.691B	Other nondisplaced fracture of seventh cervical vertebra, initial encounter for open fracture	DX	ICD-10-CM
S12.8XXA	Fracture of other parts of neck, initial encounter	DX	ICD-10-CM
S12.9XXA	Fracture of neck, unspecified, initial encounter	DX	ICD-10-CM
S14.101A	Unspecified injury at C1 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.102A	Unspecified injury at C2 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.103A	Unspecified injury at C3 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.104A	Unspecified injury at C4 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.105A	Unspecified injury at C5 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.106A	Unspecified injury at C6 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.107A	Unspecified injury at C7 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.109A	Unspecified injury at unspecified level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.111A	Complete lesion at C1 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.112A	Complete lesion at C2 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.113A	Complete lesion at C3 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.114A	Complete lesion at C4 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.115A	Complete lesion at C5 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.116A	Complete lesion at C6 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.117A	Complete lesion at C7 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.121A	Central cord syndrome at C1 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.122A	Central cord syndrome at C2 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.123A	Central cord syndrome at C3 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.124A	Central cord syndrome at C4 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.125A	Central cord syndrome at C5 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.126A	Central cord syndrome at C6 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.127A	Central cord syndrome at C7 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.131A	Anterior cord syndrome at C1 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.132A	Anterior cord syndrome at C2 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.133A	Anterior cord syndrome at C3 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.134A	Anterior cord syndrome at C4 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.135A	Anterior cord syndrome at C5 level of cervical spinal cord, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S14.136A	Anterior cord syndrome at C6 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.137A	Anterior cord syndrome at C7 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.151A	Other incomplete lesion at C1 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.152A	Other incomplete lesion at C2 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.153A	Other incomplete lesion at C3 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.154A	Other incomplete lesion at C4 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.155A	Other incomplete lesion at C5 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.156A	Other incomplete lesion at C6 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S14.157A	Other incomplete lesion at C7 level of cervical spinal cord, initial encounter	DX	ICD-10-CM
S17.0XXA	Crushing injury of larynx and trachea, initial encounter	DX	ICD-10-CM
S17.8XXA	Crushing injury of other specified parts of neck, initial encounter	DX	ICD-10-CM
S17.9XXA	Crushing injury of neck, part unspecified, initial encounter	DX	ICD-10-CM
S21.101A	Unspecified open wound of right front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.102A	Unspecified open wound of left front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.109A	Unspecified open wound of unspecified front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.111A	Laceration without foreign body of right front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.112A	Laceration without foreign body of left front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.119A	Laceration without foreign body of unspecified front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.121A	Laceration with foreign body of right front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.122A	Laceration with foreign body of left front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.129A	Laceration with foreign body of unspecified front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.131A	Puncture wound without foreign body of right front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.132A	Puncture wound without foreign body of left front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.139A	Puncture wound without foreign body of unspecified front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.141A	Puncture wound with foreign body of right front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.142A	Puncture wound with foreign body of left front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.149A	Puncture wound with foreign body of unspecified front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S21.151A	Open bite of right front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.152A	Open bite of left front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.159A	Open bite of unspecified front wall of thorax without penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.301A	Unspecified open wound of right front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.302A	Unspecified open wound of left front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.309A	Unspecified open wound of unspecified front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.311A	Laceration without foreign body of right front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.312A	Laceration without foreign body of left front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.319A	Laceration without foreign body of unspecified front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.321A	Laceration with foreign body of right front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.322A	Laceration with foreign body of left front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.329A	Laceration with foreign body of unspecified front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.331A	Puncture wound without foreign body of right front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.332A	Puncture wound without foreign body of left front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.339A	Puncture wound without foreign body of unspecified front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.341A	Puncture wound with foreign body of right front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.342A	Puncture wound with foreign body of left front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.349A	Puncture wound with foreign body of unspecified front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.351A	Open bite of right front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.352A	Open bite of left front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.359A	Open bite of unspecified front wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S21.401A	Unspecified open wound of right back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.402A	Unspecified open wound of left back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.409A	Unspecified open wound of unspecified back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.411A	Laceration without foreign body of right back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.412A	Laceration without foreign body of left back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.419A	Laceration without foreign body of unspecified back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.421A	Laceration with foreign body of right back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.422A	Laceration with foreign body of left back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.429A	Laceration with foreign body of unspecified back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.431A	Puncture wound without foreign body of right back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.432A	Puncture wound without foreign body of left back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.439A	Puncture wound without foreign body of unspecified back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.441A	Puncture wound with foreign body of right back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.442A	Puncture wound with foreign body of left back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.449A	Puncture wound with foreign body of unspecified back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.451A	Open bite of right back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.452A	Open bite of left back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.459A	Open bite of unspecified back wall of thorax with penetration into thoracic cavity, initial encounter	DX	ICD-10-CM
S21.90XA	Unspecified open wound of unspecified part of thorax, initial encounter	DX	ICD-10-CM
S21.91XA	Laceration without foreign body of unspecified part of thorax, initial encounter	DX	ICD-10-CM
S21.92XA	Laceration with foreign body of unspecified part of thorax, initial encounter	DX	ICD-10-CM
S21.93XA	Puncture wound without foreign body of unspecified part of thorax, initial encounter	DX	ICD-10-CM
S21.94XA	Puncture wound with foreign body of unspecified part of thorax, initial encounter	DX	ICD-10-CM
S21.95XA	Open bite of unspecified part of thorax, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S22.000A	Wedge compression fracture of unspecified thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.000B	Wedge compression fracture of unspecified thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.001A	Stable burst fracture of unspecified thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.001B	Stable burst fracture of unspecified thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.002A	Unstable burst fracture of unspecified thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.002B	Unstable burst fracture of unspecified thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.008A	Other fracture of unspecified thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.008B	Other fracture of unspecified thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.009A	Unspecified fracture of unspecified thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.009B	Unspecified fracture of unspecified thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.010A	Wedge compression fracture of first thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.010B	Wedge compression fracture of first thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.011A	Stable burst fracture of first thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.011B	Stable burst fracture of first thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.012A	Unstable burst fracture of first thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.012B	Unstable burst fracture of first thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.018A	Other fracture of first thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.018B	Other fracture of first thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.019A	Unspecified fracture of first thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.019B	Unspecified fracture of first thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.020A	Wedge compression fracture of second thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.020B	Wedge compression fracture of second thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.021A	Stable burst fracture of second thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.021B	Stable burst fracture of second thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.022A	Unstable burst fracture of second thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.022B	Unstable burst fracture of second thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.028A	Other fracture of second thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.028B	Other fracture of second thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.029A	Unspecified fracture of second thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.029B	Unspecified fracture of second thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.030A	Wedge compression fracture of third thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.030B	Wedge compression fracture of third thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.031A	Stable burst fracture of third thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S22.031B	Stable burst fracture of third thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.032A	Unstable burst fracture of third thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.032B	Unstable burst fracture of third thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.038A	Other fracture of third thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.038B	Other fracture of third thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.039A	Unspecified fracture of third thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.039B	Unspecified fracture of third thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.040A	Wedge compression fracture of fourth thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.040B	Wedge compression fracture of fourth thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.041A	Stable burst fracture of fourth thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.041B	Stable burst fracture of fourth thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.042A	Unstable burst fracture of fourth thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.042B	Unstable burst fracture of fourth thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.048A	Other fracture of fourth thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.048B	Other fracture of fourth thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.049A	Unspecified fracture of fourth thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.049B	Unspecified fracture of fourth thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.050A	Wedge compression fracture of T5-T6 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.050B	Wedge compression fracture of T5-T6 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.051A	Stable burst fracture of T5-T6 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.051B	Stable burst fracture of T5-T6 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.052A	Unstable burst fracture of T5-T6 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.052B	Unstable burst fracture of T5-T6 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.058A	Other fracture of T5-T6 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.058B	Other fracture of T5-T6 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.059A	Unspecified fracture of T5-T6 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.059B	Unspecified fracture of T5-T6 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.060A	Wedge compression fracture of T7-T8 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.060B	Wedge compression fracture of T7-T8 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.061A	Stable burst fracture of T7-T8 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.061B	Stable burst fracture of T7-T8 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.062A	Unstable burst fracture of T7-T8 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.062B	Unstable burst fracture of T7-T8 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.068A	Other fracture of T7-T8 thoracic vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.068B	Other fracture of T7-T8 thoracic vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.069A	Unspecified fracture of T7-T8 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.069B	Unspecified fracture of T7-T8 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.070A	Wedge compression fracture of T9-T10 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.070B	Wedge compression fracture of T9-T10 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.071A	Stable burst fracture of T9-T10 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.071B	Stable burst fracture of T9-T10 vertebra, initial encounter for open fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S22.072A	Unstable burst fracture of T9-T10 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.072B	Unstable burst fracture of T9-T10 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.078A	Other fracture of T9-T10 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.078B	Other fracture of T9-T10 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.079A	Unspecified fracture of T9-T10 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.079B	Unspecified fracture of T9-T10 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.080A	Wedge compression fracture of T11-T12 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.080B	Wedge compression fracture of T11-T12 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.081A	Stable burst fracture of T11-T12 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.081B	Stable burst fracture of T11-T12 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.082A	Unstable burst fracture of T11-T12 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.082B	Unstable burst fracture of T11-T12 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.088A	Other fracture of T11-T12 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.088B	Other fracture of T11-T12 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.089A	Unspecified fracture of T11-T12 vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S22.089B	Unspecified fracture of T11-T12 vertebra, initial encounter for open fracture	DX	ICD-10-CM
S22.20XA	Unspecified fracture of sternum, initial encounter for closed fracture	DX	ICD-10-CM
S22.20XB	Unspecified fracture of sternum, initial encounter for open fracture	DX	ICD-10-CM
S22.21XA	Fracture of manubrium, initial encounter for closed fracture	DX	ICD-10-CM
S22.21XB	Fracture of manubrium, initial encounter for open fracture	DX	ICD-10-CM
S22.22XA	Fracture of body of sternum, initial encounter for closed fracture	DX	ICD-10-CM
S22.22XB	Fracture of body of sternum, initial encounter for open fracture	DX	ICD-10-CM
S22.23XA	Sternal manubrial dissociation, initial encounter for closed fracture	DX	ICD-10-CM
S22.23XB	Sternal manubrial dissociation, initial encounter for open fracture	DX	ICD-10-CM
S22.24XA	Fracture of xiphoid process, initial encounter for closed fracture	DX	ICD-10-CM
S22.24XB	Fracture of xiphoid process, initial encounter for open fracture	DX	ICD-10-CM
S22.31XA	Fracture of one rib, right side, initial encounter for closed fracture	DX	ICD-10-CM
S22.31XB	Fracture of one rib, right side, initial encounter for open fracture	DX	ICD-10-CM
S22.32XA	Fracture of one rib, left side, initial encounter for closed fracture	DX	ICD-10-CM
S22.32XB	Fracture of one rib, left side, initial encounter for open fracture	DX	ICD-10-CM
S22.39XA	Fracture of one rib, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S22.39XB	Fracture of one rib, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S22.41XA	Multiple fractures of ribs, right side, initial encounter for closed fracture	DX	ICD-10-CM
S22.41XB	Multiple fractures of ribs, right side, initial encounter for open fracture	DX	ICD-10-CM
S22.42XA	Multiple fractures of ribs, left side, initial encounter for closed fracture	DX	ICD-10-CM
S22.42XB	Multiple fractures of ribs, left side, initial encounter for open fracture	DX	ICD-10-CM
S22.43XA	Multiple fractures of ribs, bilateral, initial encounter for closed fracture	DX	ICD-10-CM
S22.43XB	Multiple fractures of ribs, bilateral, initial encounter for open fracture	DX	ICD-10-CM
S22.49XA	Multiple fractures of ribs, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S22.49XB	Multiple fractures of ribs, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S22.5XXA	Flail chest, initial encounter for closed fracture	DX	ICD-10-CM
S22.5XXB	Flail chest, initial encounter for open fracture	DX	ICD-10-CM
S22.9XXA	Fracture of bony thorax, part unspecified, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S22.9XXB	Fracture of bony thorax, part unspecified, initial encounter for open fracture	DX	ICD-10-CM
S24.101A	Unspecified injury at T1 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.102A	Unspecified injury at T2-T6 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.103A	Unspecified injury at T7-T10 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.104A	Unspecified injury at T11-T12 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.109A	Unspecified injury at unspecified level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.111A	Complete lesion at T1 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.112A	Complete lesion at T2-T6 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.113A	Complete lesion at T7-T10 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.114A	Complete lesion at T11-T12 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.131A	Anterior cord syndrome at T1 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.132A	Anterior cord syndrome at T2-T6 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.133A	Anterior cord syndrome at T7-T10 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.134A	Anterior cord syndrome at T11-T12 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.151A	Other incomplete lesion at T1 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.152A	Other incomplete lesion at T2-T6 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.153A	Other incomplete lesion at T7-T10 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S24.154A	Other incomplete lesion at T11-T12 level of thoracic spinal cord, initial encounter	DX	ICD-10-CM
S27.0XXA	Traumatic pneumothorax, initial encounter	DX	ICD-10-CM
S27.1XXA	Traumatic hemothorax, initial encounter	DX	ICD-10-CM
S27.2XXA	Traumatic hemopneumothorax, initial encounter	DX	ICD-10-CM
S27.802A	Contusion of diaphragm, initial encounter	DX	ICD-10-CM
S27.803A	Laceration of diaphragm, initial encounter	DX	ICD-10-CM
S27.808A	Other injury of diaphragm, initial encounter	DX	ICD-10-CM
S27.809A	Unspecified injury of diaphragm, initial encounter	DX	ICD-10-CM
S27.9XXA	Injury of unspecified intrathoracic organ, initial encounter	DX	ICD-10-CM
S28.0XXA	Crushed chest, initial encounter	DX	ICD-10-CM
S28.1XXA	Traumatic amputation (partial) of part of thorax, except breast, initial encounter	DX	ICD-10-CM
S29.021A	Laceration of muscle and tendon of front wall of thorax, initial encounter	DX	ICD-10-CM
S29.029A	Laceration of muscle and tendon of unspecified wall of thorax, initial encounter	DX	ICD-10-CM
S31.001A	Unspecified open wound of lower back and pelvis with penetration into retroperitoneum, initial encounter	DX	ICD-10-CM
S31.609A	Unspecified open wound of abdominal wall, unspecified quadrant with penetration into peritoneal cavity, initial encounter	DX	ICD-10-CM
S32.000A	Wedge compression fracture of unspecified lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.000B	Wedge compression fracture of unspecified lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.001A	Stable burst fracture of unspecified lumbar vertebra, initial encounter for closed	DX	ICD-10-CM
S32.001B	Stable burst fracture of unspecified lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.002A	Unstable burst fracture of unspecified lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S32.002B	Unstable burst fracture of unspecified lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.008A	Other fracture of unspecified lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.008B	Other fracture of unspecified lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.009A	Unspecified fracture of unspecified lumbar vertebra, initial encounter for closed	DX	ICD-10-CM
S32.009B	Unspecified fracture of unspecified lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.010A	Wedge compression fracture of first lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.010B	Wedge compression fracture of first lumbar vertebra, initial encounter for open	DX	ICD-10-CM
S32.011A	Stable burst fracture of first lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.011B	Stable burst fracture of first lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.012A	Unstable burst fracture of first lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.012B	Unstable burst fracture of first lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.018A	Other fracture of first lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.018B	Other fracture of first lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.019A	Unspecified fracture of first lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.019B	Unspecified fracture of first lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.020A	Wedge compression fracture of second lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.020B	Wedge compression fracture of second lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.021A	Stable burst fracture of second lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.021B	Stable burst fracture of second lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.022A	Unstable burst fracture of second lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.022B	Unstable burst fracture of second lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.028A	Other fracture of second lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.028B	Other fracture of second lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.029A	Unspecified fracture of second lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.029B	Unspecified fracture of second lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.030A	Wedge compression fracture of third lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.030B	Wedge compression fracture of third lumbar vertebra, initial encounter for open	DX	ICD-10-CM
S32.031A	Stable burst fracture of third lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.031B	Stable burst fracture of third lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.032A	Unstable burst fracture of third lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.032B	Unstable burst fracture of third lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.038A	Other fracture of third lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.038B	Other fracture of third lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.039A	Unspecified fracture of third lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.039B	Unspecified fracture of third lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.040A	Wedge compression fracture of fourth lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S32.040B	Wedge compression fracture of fourth lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.041A	Stable burst fracture of fourth lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.041B	Stable burst fracture of fourth lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.042A	Unstable burst fracture of fourth lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.042B	Unstable burst fracture of fourth lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.048A	Other fracture of fourth lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.048B	Other fracture of fourth lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.049A	Unspecified fracture of fourth lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.049B	Unspecified fracture of fourth lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.050A	Wedge compression fracture of fifth lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.050B	Wedge compression fracture of fifth lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.051A	Stable burst fracture of fifth lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.051B	Stable burst fracture of fifth lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.052A	Unstable burst fracture of fifth lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.052B	Unstable burst fracture of fifth lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.058A	Other fracture of fifth lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.058B	Other fracture of fifth lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.059A	Unspecified fracture of fifth lumbar vertebra, initial encounter for closed fracture	DX	ICD-10-CM
S32.059B	Unspecified fracture of fifth lumbar vertebra, initial encounter for open fracture	DX	ICD-10-CM
S32.10XA	Unspecified fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.10XB	Unspecified fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.110A	Nondisplaced Zone I fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.110B	Nondisplaced Zone I fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.111A	Minimally displaced Zone I fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.111B	Minimally displaced Zone I fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.112A	Severely displaced Zone I fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.112B	Severely displaced Zone I fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.119A	Unspecified Zone I fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.119B	Unspecified Zone I fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.120A	Nondisplaced Zone II fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.120B	Nondisplaced Zone II fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.121A	Minimally displaced Zone II fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.121B	Minimally displaced Zone II fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.122A	Severely displaced Zone II fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.122B	Severely displaced Zone II fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.129A	Unspecified Zone II fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.129B	Unspecified Zone II fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.130A	Nondisplaced Zone III fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.130B	Nondisplaced Zone III fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.131A	Minimally displaced Zone III fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.131B	Minimally displaced Zone III fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S32.132A	Severely displaced Zone III fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.132B	Severely displaced Zone III fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.139A	Unspecified Zone III fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.139B	Unspecified Zone III fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.14XA	Type 1 fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.14XB	Type 1 fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.15XA	Type 2 fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.15XB	Type 2 fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.16XA	Type 3 fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.16XB	Type 3 fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.17XA	Type 4 fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.17XB	Type 4 fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.19XA	Other fracture of sacrum, initial encounter for closed fracture	DX	ICD-10-CM
S32.19XB	Other fracture of sacrum, initial encounter for open fracture	DX	ICD-10-CM
S32.2XXA	Fracture of coccyx, initial encounter for closed fracture	DX	ICD-10-CM
S32.2XXB	Fracture of coccyx, initial encounter for open fracture	DX	ICD-10-CM
S32.301A	Unspecified fracture of right ilium, initial encounter for closed fracture	DX	ICD-10-CM
S32.301B	Unspecified fracture of right ilium, initial encounter for open fracture	DX	ICD-10-CM
S32.302A	Unspecified fracture of left ilium, initial encounter for closed fracture	DX	ICD-10-CM
S32.302B	Unspecified fracture of left ilium, initial encounter for open fracture	DX	ICD-10-CM
S32.309A	Unspecified fracture of unspecified ilium, initial encounter for closed fracture	DX	ICD-10-CM
S32.309B	Unspecified fracture of unspecified ilium, initial encounter for open fracture	DX	ICD-10-CM
S32.311A	Displaced avulsion fracture of right ilium, initial encounter for closed fracture	DX	ICD-10-CM
S32.311B	Displaced avulsion fracture of right ilium, initial encounter for open fracture	DX	ICD-10-CM
S32.312A	Displaced avulsion fracture of left ilium, initial encounter for closed fracture	DX	ICD-10-CM
S32.312B	Displaced avulsion fracture of left ilium, initial encounter for open fracture	DX	ICD-10-CM
S32.313A	Displaced avulsion fracture of unspecified ilium, initial encounter for closed fracture	DX	ICD-10-CM
S32.313B	Displaced avulsion fracture of unspecified ilium, initial encounter for open fracture	DX	ICD-10-CM
S32.314A	Nondisplaced avulsion fracture of right ilium, initial encounter for closed fracture	DX	ICD-10-CM
S32.314B	Nondisplaced avulsion fracture of right ilium, initial encounter for open fracture	DX	ICD-10-CM
S32.315A	Nondisplaced avulsion fracture of left ilium, initial encounter for closed fracture	DX	ICD-10-CM
S32.315B	Nondisplaced avulsion fracture of left ilium, initial encounter for open fracture	DX	ICD-10-CM
S32.316A	Nondisplaced avulsion fracture of unspecified ilium, initial encounter for closed fracture	DX	ICD-10-CM
S32.316B	Nondisplaced avulsion fracture of unspecified ilium, initial encounter for open fracture	DX	ICD-10-CM
S32.391A	Other fracture of right ilium, initial encounter for closed fracture	DX	ICD-10-CM
S32.391B	Other fracture of right ilium, initial encounter for open fracture	DX	ICD-10-CM
S32.392A	Other fracture of left ilium, initial encounter for closed fracture	DX	ICD-10-CM
S32.392B	Other fracture of left ilium, initial encounter for open fracture	DX	ICD-10-CM
S32.399A	Other fracture of unspecified ilium, initial encounter for closed fracture	DX	ICD-10-CM
S32.399B	Other fracture of unspecified ilium, initial encounter for open fracture	DX	ICD-10-CM
S32.401A	Unspecified fracture of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.401B	Unspecified fracture of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.402A	Unspecified fracture of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S32.402B	Unspecified fracture of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.409A	Unspecified fracture of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.409B	Unspecified fracture of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.411A	Displaced fracture of anterior wall of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.411B	Displaced fracture of anterior wall of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.412A	Displaced fracture of anterior wall of left acetabulum, initial encounter for closed	DX	ICD-10-CM
S32.412B	Displaced fracture of anterior wall of left acetabulum, initial encounter for open	DX	ICD-10-CM
S32.413A	Displaced fracture of anterior wall of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.413B	Displaced fracture of anterior wall of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.414A	Nondisplaced fracture of anterior wall of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.414B	Nondisplaced fracture of anterior wall of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.415A	Nondisplaced fracture of anterior wall of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.415B	Nondisplaced fracture of anterior wall of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.416A	Nondisplaced fracture of anterior wall of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.416B	Nondisplaced fracture of anterior wall of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.421A	Displaced fracture of posterior wall of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.421B	Displaced fracture of posterior wall of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.422A	Displaced fracture of posterior wall of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.422B	Displaced fracture of posterior wall of left acetabulum, initial encounter for open	DX	ICD-10-CM
S32.423A	Displaced fracture of posterior wall of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.423B	Displaced fracture of posterior wall of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.424A	Nondisplaced fracture of posterior wall of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.424B	Nondisplaced fracture of posterior wall of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.425A	Nondisplaced fracture of posterior wall of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S32.425B	Nondisplaced fracture of posterior wall of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.426A	Nondisplaced fracture of posterior wall of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.426B	Nondisplaced fracture of posterior wall of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.431A	Displaced fracture of anterior column [iliopubic] of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.431B	Displaced fracture of anterior column [iliopubic] of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.432A	Displaced fracture of anterior column [iliopubic] of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.432B	Displaced fracture of anterior column [iliopubic] of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.433A	Displaced fracture of anterior column [iliopubic] of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.433B	Displaced fracture of anterior column [iliopubic] of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.434A	Nondisplaced fracture of anterior column [iliopubic] of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.434B	Nondisplaced fracture of anterior column [iliopubic] of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.435A	Nondisplaced fracture of anterior column [iliopubic] of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.435B	Nondisplaced fracture of anterior column [iliopubic] of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.436A	Nondisplaced fracture of anterior column [iliopubic] of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.436B	Nondisplaced fracture of anterior column [iliopubic] of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.441A	Displaced fracture of posterior column [ilioischial] of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.441B	Displaced fracture of posterior column [ilioischial] of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.442A	Displaced fracture of posterior column [ilioischial] of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.442B	Displaced fracture of posterior column [ilioischial] of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.443A	Displaced fracture of posterior column [ilioischial] of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.443B	Displaced fracture of posterior column [ilioischial] of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S32.444A	Nondisplaced fracture of posterior column [ilioischial] of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.444B	Nondisplaced fracture of posterior column [ilioischial] of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.445A	Nondisplaced fracture of posterior column [ilioischial] of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.445B	Nondisplaced fracture of posterior column [ilioischial] of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.446A	Nondisplaced fracture of posterior column [ilioischial] of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.446B	Nondisplaced fracture of posterior column [ilioischial] of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.451A	Displaced transverse fracture of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.451B	Displaced transverse fracture of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.452A	Displaced transverse fracture of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.452B	Displaced transverse fracture of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.453A	Displaced transverse fracture of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.453B	Displaced transverse fracture of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.454A	Nondisplaced transverse fracture of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.454B	Nondisplaced transverse fracture of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.455A	Nondisplaced transverse fracture of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.455B	Nondisplaced transverse fracture of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.456A	Nondisplaced transverse fracture of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.456B	Nondisplaced transverse fracture of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.461A	Displaced associated transverse-posterior fracture of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.461B	Displaced associated transverse-posterior fracture of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.462A	Displaced associated transverse-posterior fracture of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.462B	Displaced associated transverse-posterior fracture of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.463A	Displaced associated transverse-posterior fracture of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.463B	Displaced associated transverse-posterior fracture of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.464A	Nondisplaced associated transverse-posterior fracture of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S32.464B	Nondisplaced associated transverse-posterior fracture of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.465A	Nondisplaced associated transverse-posterior fracture of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.465B	Nondisplaced associated transverse-posterior fracture of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.466A	Nondisplaced associated transverse-posterior fracture of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.466B	Nondisplaced associated transverse-posterior fracture of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.471A	Displaced fracture of medial wall of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.471B	Displaced fracture of medial wall of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.472A	Displaced fracture of medial wall of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.472B	Displaced fracture of medial wall of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.473A	Displaced fracture of medial wall of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.473B	Displaced fracture of medial wall of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.474A	Nondisplaced fracture of medial wall of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.474B	Nondisplaced fracture of medial wall of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.475A	Nondisplaced fracture of medial wall of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.475B	Nondisplaced fracture of medial wall of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.476A	Nondisplaced fracture of medial wall of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.476B	Nondisplaced fracture of medial wall of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.481A	Displaced dome fracture of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.481B	Displaced dome fracture of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.482A	Displaced dome fracture of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.482B	Displaced dome fracture of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.483A	Displaced dome fracture of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.483B	Displaced dome fracture of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.484A	Nondisplaced dome fracture of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.484B	Nondisplaced dome fracture of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.485A	Nondisplaced dome fracture of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.485B	Nondisplaced dome fracture of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.486A	Nondisplaced dome fracture of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S32.486B	Nondisplaced dome fracture of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.491A	Other specified fracture of right acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.491B	Other specified fracture of right acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.492A	Other specified fracture of left acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.492B	Other specified fracture of left acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.499A	Other specified fracture of unspecified acetabulum, initial encounter for closed fracture	DX	ICD-10-CM
S32.499B	Other specified fracture of unspecified acetabulum, initial encounter for open fracture	DX	ICD-10-CM
S32.501A	Unspecified fracture of right pubis, initial encounter for closed fracture	DX	ICD-10-CM
S32.501B	Unspecified fracture of right pubis, initial encounter for open fracture	DX	ICD-10-CM
S32.502A	Unspecified fracture of left pubis, initial encounter for closed fracture	DX	ICD-10-CM
S32.502B	Unspecified fracture of left pubis, initial encounter for open fracture	DX	ICD-10-CM
S32.509A	Unspecified fracture of unspecified pubis, initial encounter for closed fracture	DX	ICD-10-CM
S32.509B	Unspecified fracture of unspecified pubis, initial encounter for open fracture	DX	ICD-10-CM
S32.511A	Fracture of superior rim of right pubis, initial encounter for closed fracture	DX	ICD-10-CM
S32.511B	Fracture of superior rim of right pubis, initial encounter for open fracture	DX	ICD-10-CM
S32.512A	Fracture of superior rim of left pubis, initial encounter for closed fracture	DX	ICD-10-CM
S32.512B	Fracture of superior rim of left pubis, initial encounter for open fracture	DX	ICD-10-CM
S32.519A	Fracture of superior rim of unspecified pubis, initial encounter for closed fracture	DX	ICD-10-CM
S32.519B	Fracture of superior rim of unspecified pubis, initial encounter for open fracture	DX	ICD-10-CM
S32.591A	Other specified fracture of right pubis, initial encounter for closed fracture	DX	ICD-10-CM
S32.591B	Other specified fracture of right pubis, initial encounter for open fracture	DX	ICD-10-CM
S32.592A	Other specified fracture of left pubis, initial encounter for closed fracture	DX	ICD-10-CM
S32.592B	Other specified fracture of left pubis, initial encounter for open fracture	DX	ICD-10-CM
S32.599A	Other specified fracture of unspecified pubis, initial encounter for closed fracture	DX	ICD-10-CM
S32.599B	Other specified fracture of unspecified pubis, initial encounter for open fracture	DX	ICD-10-CM
S32.601A	Unspecified fracture of right ischium, initial encounter for closed fracture	DX	ICD-10-CM
S32.601B	Unspecified fracture of right ischium, initial encounter for open fracture	DX	ICD-10-CM
S32.602A	Unspecified fracture of left ischium, initial encounter for closed fracture	DX	ICD-10-CM
S32.602B	Unspecified fracture of left ischium, initial encounter for open fracture	DX	ICD-10-CM
S32.609A	Unspecified fracture of unspecified ischium, initial encounter for closed fracture	DX	ICD-10-CM
S32.609B	Unspecified fracture of unspecified ischium, initial encounter for open fracture	DX	ICD-10-CM
S32.611A	Displaced avulsion fracture of right ischium, initial encounter for closed fracture	DX	ICD-10-CM
S32.611B	Displaced avulsion fracture of right ischium, initial encounter for open fracture	DX	ICD-10-CM
S32.612A	Displaced avulsion fracture of left ischium, initial encounter for closed fracture	DX	ICD-10-CM
S32.612B	Displaced avulsion fracture of left ischium, initial encounter for open fracture	DX	ICD-10-CM
S32.613A	Displaced avulsion fracture of unspecified ischium, initial encounter for closed fracture	DX	ICD-10-CM
S32.613B	Displaced avulsion fracture of unspecified ischium, initial encounter for open fracture	DX	ICD-10-CM
S32.614A	Nondisplaced avulsion fracture of right ischium, initial encounter for closed fracture	DX	ICD-10-CM
S32.614B	Nondisplaced avulsion fracture of right ischium, initial encounter for open fracture	DX	ICD-10-CM
S32.615A	Nondisplaced avulsion fracture of left ischium, initial encounter for closed fracture	DX	ICD-10-CM
S32.615B	Nondisplaced avulsion fracture of left ischium, initial encounter for open fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S32.616A	Nondisplaced avulsion fracture of unspecified ischium, initial encounter for closed fracture	DX	ICD-10-CM
S32.616B	Nondisplaced avulsion fracture of unspecified ischium, initial encounter for open fracture	DX	ICD-10-CM
S32.691A	Other specified fracture of right ischium, initial encounter for closed fracture	DX	ICD-10-CM
S32.691B	Other specified fracture of right ischium, initial encounter for open fracture	DX	ICD-10-CM
S32.692A	Other specified fracture of left ischium, initial encounter for closed fracture	DX	ICD-10-CM
S32.692B	Other specified fracture of left ischium, initial encounter for open fracture	DX	ICD-10-CM
S32.699A	Other specified fracture of unspecified ischium, initial encounter for closed fracture	DX	ICD-10-CM
S32.699B	Other specified fracture of unspecified ischium, initial encounter for open fracture	DX	ICD-10-CM
S32.810A	Multiple fractures of pelvis with stable disruption of pelvic ring, initial encounter for closed fracture	DX	ICD-10-CM
S32.810B	Multiple fractures of pelvis with stable disruption of pelvic ring, initial encounter for open fracture	DX	ICD-10-CM
S32.811A	Multiple fractures of pelvis with unstable disruption of pelvic ring, initial encounter for closed fracture	DX	ICD-10-CM
S32.811B	Multiple fractures of pelvis with unstable disruption of pelvic ring, initial encounter for open fracture	DX	ICD-10-CM
S32.82XA	Multiple fractures of pelvis without disruption of pelvic ring, initial encounter for closed fracture	DX	ICD-10-CM
S32.82XB	Multiple fractures of pelvis without disruption of pelvic ring, initial encounter for open fracture	DX	ICD-10-CM
S32.89XA	Fracture of other parts of pelvis, initial encounter for closed fracture	DX	ICD-10-CM
S32.89XB	Fracture of other parts of pelvis, initial encounter for open fracture	DX	ICD-10-CM
S32.9XXA	Fracture of unspecified parts of lumbosacral spine and pelvis, initial encounter for closed fracture	DX	ICD-10-CM
S32.9XXB	Fracture of unspecified parts of lumbosacral spine and pelvis, initial encounter for open fracture	DX	ICD-10-CM
S34.101A	Unspecified injury to L1 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.102A	Unspecified injury to L2 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.103A	Unspecified injury to L3 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.104A	Unspecified injury to L4 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.105A	Unspecified injury to L5 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.109A	Unspecified injury to unspecified level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.111A	Complete lesion of L1 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.112A	Complete lesion of L2 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.113A	Complete lesion of L3 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.114A	Complete lesion of L4 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.115A	Complete lesion of L5 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.119A	Complete lesion of unspecified level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.121A	Incomplete lesion of L1 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.122A	Incomplete lesion of L2 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.123A	Incomplete lesion of L3 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.124A	Incomplete lesion of L4 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S34.125A	Incomplete lesion of L5 level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.129A	Incomplete lesion of unspecified level of lumbar spinal cord, initial encounter	DX	ICD-10-CM
S34.131A	Complete lesion of sacral spinal cord, initial encounter	DX	ICD-10-CM
S34.132A	Incomplete lesion of sacral spinal cord, initial encounter	DX	ICD-10-CM
S34.139A	Unspecified injury to sacral spinal cord, initial encounter	DX	ICD-10-CM
S34.3XXA	Injury of cauda equina, initial encounter	DX	ICD-10-CM
S35.401A	Unspecified injury of right renal artery, initial encounter	DX	ICD-10-CM
S35.402A	Unspecified injury of left renal artery, initial encounter	DX	ICD-10-CM
S35.403A	Unspecified injury of unspecified renal artery, initial encounter	DX	ICD-10-CM
S35.404A	Unspecified injury of right renal vein, initial encounter	DX	ICD-10-CM
S35.405A	Unspecified injury of left renal vein, initial encounter	DX	ICD-10-CM
S35.406A	Unspecified injury of unspecified renal vein, initial encounter	DX	ICD-10-CM
S35.411A	Laceration of right renal artery, initial encounter	DX	ICD-10-CM
S35.412A	Laceration of left renal artery, initial encounter	DX	ICD-10-CM
S35.413A	Laceration of unspecified renal artery, initial encounter	DX	ICD-10-CM
S35.414A	Laceration of right renal vein, initial encounter	DX	ICD-10-CM
S35.415A	Laceration of left renal vein, initial encounter	DX	ICD-10-CM
S35.416A	Laceration of unspecified renal vein, initial encounter	DX	ICD-10-CM
S35.491A	Other specified injury of right renal artery, initial encounter	DX	ICD-10-CM
S35.492A	Other specified injury of left renal artery, initial encounter	DX	ICD-10-CM
S35.493A	Other specified injury of unspecified renal artery, initial encounter	DX	ICD-10-CM
S35.494A	Other specified injury of right renal vein, initial encounter	DX	ICD-10-CM
S35.495A	Other specified injury of left renal vein, initial encounter	DX	ICD-10-CM
S35.496A	Other specified injury of unspecified renal vein, initial encounter	DX	ICD-10-CM
S35.531A	Injury of right uterine artery, initial encounter	DX	ICD-10-CM
S35.532A	Injury of left uterine artery, initial encounter	DX	ICD-10-CM
S35.533A	Injury of unspecified uterine artery, initial encounter	DX	ICD-10-CM
S35.534A	Injury of right uterine vein, initial encounter	DX	ICD-10-CM
S35.535A	Injury of left uterine vein, initial encounter	DX	ICD-10-CM
S35.536A	Injury of unspecified uterine vein, initial encounter	DX	ICD-10-CM
S35.8X1A	Laceration of other blood vessels at abdomen, lower back and pelvis level, initial encounter	DX	ICD-10-CM
S35.8X8A	Other specified injury of other blood vessels at abdomen, lower back and pelvis level, initial encounter	DX	ICD-10-CM
S35.8X9A	Unspecified injury of other blood vessels at abdomen, lower back and pelvis level, initial encounter	DX	ICD-10-CM
S36.00XA	Unspecified injury of spleen, initial encounter	DX	ICD-10-CM
S36.020A	Minor contusion of spleen, initial encounter	DX	ICD-10-CM
S36.021A	Major contusion of spleen, initial encounter	DX	ICD-10-CM
S36.029A	Unspecified contusion of spleen, initial encounter	DX	ICD-10-CM
S36.030A	Superficial (capsular) laceration of spleen, initial encounter	DX	ICD-10-CM
S36.031A	Moderate laceration of spleen, initial encounter	DX	ICD-10-CM
S36.032A	Major laceration of spleen, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S36.09XA	Other injury of spleen, initial encounter	DX	ICD-10-CM
S36.112A	Contusion of liver, initial encounter	DX	ICD-10-CM
S36.113A	Laceration of liver, unspecified degree, initial encounter	DX	ICD-10-CM
S36.114A	Minor laceration of liver, initial encounter	DX	ICD-10-CM
S36.115A	Moderate laceration of liver, initial encounter	DX	ICD-10-CM
S36.116A	Major laceration of liver, initial encounter	DX	ICD-10-CM
S36.118A	Other injury of liver, initial encounter	DX	ICD-10-CM
S36.119A	Unspecified injury of liver, initial encounter	DX	ICD-10-CM
S36.200A	Unspecified injury of head of pancreas, initial encounter	DX	ICD-10-CM
S36.201A	Unspecified injury of body of pancreas, initial encounter	DX	ICD-10-CM
S36.202A	Unspecified injury of tail of pancreas, initial encounter	DX	ICD-10-CM
S36.209A	Unspecified injury of unspecified part of pancreas, initial encounter	DX	ICD-10-CM
S36.220A	Contusion of head of pancreas, initial encounter	DX	ICD-10-CM
S36.221A	Contusion of body of pancreas, initial encounter	DX	ICD-10-CM
S36.222A	Contusion of tail of pancreas, initial encounter	DX	ICD-10-CM
S36.229A	Contusion of unspecified part of pancreas, initial encounter	DX	ICD-10-CM
S36.230A	Laceration of head of pancreas, unspecified degree, initial encounter	DX	ICD-10-CM
S36.231A	Laceration of body of pancreas, unspecified degree, initial encounter	DX	ICD-10-CM
S36.232A	Laceration of tail of pancreas, unspecified degree, initial encounter	DX	ICD-10-CM
S36.239A	Laceration of unspecified part of pancreas, unspecified degree, initial encounter	DX	ICD-10-CM
S36.240A	Minor laceration of head of pancreas, initial encounter	DX	ICD-10-CM
S36.241A	Minor laceration of body of pancreas, initial encounter	DX	ICD-10-CM
S36.242A	Minor laceration of tail of pancreas, initial encounter	DX	ICD-10-CM
S36.249A	Minor laceration of unspecified part of pancreas, initial encounter	DX	ICD-10-CM
S36.250A	Moderate laceration of head of pancreas, initial encounter	DX	ICD-10-CM
S36.251A	Moderate laceration of body of pancreas, initial encounter	DX	ICD-10-CM
S36.252A	Moderate laceration of tail of pancreas, initial encounter	DX	ICD-10-CM
S36.259A	Moderate laceration of unspecified part of pancreas, initial encounter	DX	ICD-10-CM
S36.260A	Major laceration of head of pancreas, initial encounter	DX	ICD-10-CM
S36.261A	Major laceration of body of pancreas, initial encounter	DX	ICD-10-CM
S36.262A	Major laceration of tail of pancreas, initial encounter	DX	ICD-10-CM
S36.269A	Major laceration of unspecified part of pancreas, initial encounter	DX	ICD-10-CM
S36.290A	Other injury of head of pancreas, initial encounter	DX	ICD-10-CM
S36.291A	Other injury of body of pancreas, initial encounter	DX	ICD-10-CM
S36.292A	Other injury of tail of pancreas, initial encounter	DX	ICD-10-CM
S36.299A	Other injury of unspecified part of pancreas, initial encounter	DX	ICD-10-CM
S36.30XA	Unspecified injury of stomach, initial encounter	DX	ICD-10-CM
S36.32XA	Contusion of stomach, initial encounter	DX	ICD-10-CM
S36.33XA	Laceration of stomach, initial encounter	DX	ICD-10-CM
S36.39XA	Other injury of stomach, initial encounter	DX	ICD-10-CM
S36.400A	Unspecified injury of duodenum, initial encounter	DX	ICD-10-CM
S36.408A	Unspecified injury of other part of small intestine, initial encounter	DX	ICD-10-CM
S36.409A	Unspecified injury of unspecified part of small intestine, initial encounter	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S36.410A	Primary blast injury of duodenum, initial encounter	DX	ICD-10-CM
S36.418A	Primary blast injury of other part of small intestine, initial encounter	DX	ICD-10-CM
S36.419A	Primary blast injury of unspecified part of small intestine, initial encounter	DX	ICD-10-CM
S36.420A	Contusion of duodenum, initial encounter	DX	ICD-10-CM
S36.428A	Contusion of other part of small intestine, initial encounter	DX	ICD-10-CM
S36.429A	Contusion of unspecified part of small intestine, initial encounter	DX	ICD-10-CM
S36.430A	Laceration of duodenum, initial encounter	DX	ICD-10-CM
S36.438A	Laceration of other part of small intestine, initial encounter	DX	ICD-10-CM
S36.439A	Laceration of unspecified part of small intestine, initial encounter	DX	ICD-10-CM
S36.490A	Other injury of duodenum, initial encounter	DX	ICD-10-CM
S36.498A	Other injury of other part of small intestine, initial encounter	DX	ICD-10-CM
S36.499A	Other injury of unspecified part of small intestine, initial encounter	DX	ICD-10-CM
S36.500A	Unspecified injury of ascending [right] colon, initial encounter	DX	ICD-10-CM
S36.501A	Unspecified injury of transverse colon, initial encounter	DX	ICD-10-CM
S36.502A	Unspecified injury of descending [left] colon, initial encounter	DX	ICD-10-CM
S36.503A	Unspecified injury of sigmoid colon, initial encounter	DX	ICD-10-CM
S36.508A	Unspecified injury of other part of colon, initial encounter	DX	ICD-10-CM
S36.509A	Unspecified injury of unspecified part of colon, initial encounter	DX	ICD-10-CM
S36.510A	Primary blast injury of ascending [right] colon, initial encounter	DX	ICD-10-CM
S36.511A	Primary blast injury of transverse colon, initial encounter	DX	ICD-10-CM
S36.512A	Primary blast injury of descending [left] colon, initial encounter	DX	ICD-10-CM
S36.513A	Primary blast injury of sigmoid colon, initial encounter	DX	ICD-10-CM
S36.518A	Primary blast injury of other part of colon, initial encounter	DX	ICD-10-CM
S36.519A	Primary blast injury of unspecified part of colon, initial encounter	DX	ICD-10-CM
S36.520A	Contusion of ascending [right] colon, initial encounter	DX	ICD-10-CM
S36.521A	Contusion of transverse colon, initial encounter	DX	ICD-10-CM
S36.522A	Contusion of descending [left] colon, initial encounter	DX	ICD-10-CM
S36.523A	Contusion of sigmoid colon, initial encounter	DX	ICD-10-CM
S36.528A	Contusion of other part of colon, initial encounter	DX	ICD-10-CM
S36.529A	Contusion of unspecified part of colon, initial encounter	DX	ICD-10-CM
S36.530A	Laceration of ascending [right] colon, initial encounter	DX	ICD-10-CM
S36.531A	Laceration of transverse colon, initial encounter	DX	ICD-10-CM
S36.532A	Laceration of descending [left] colon, initial encounter	DX	ICD-10-CM
S36.533A	Laceration of sigmoid colon, initial encounter	DX	ICD-10-CM
S36.538A	Laceration of other part of colon, initial encounter	DX	ICD-10-CM
S36.539A	Laceration of unspecified part of colon, initial encounter	DX	ICD-10-CM
S36.590A	Other injury of ascending [right] colon, initial encounter	DX	ICD-10-CM
S36.591A	Other injury of transverse colon, initial encounter	DX	ICD-10-CM
S36.592A	Other injury of descending [left] colon, initial encounter	DX	ICD-10-CM
S36.593A	Other injury of sigmoid colon, initial encounter	DX	ICD-10-CM
S36.598A	Other injury of other part of colon, initial encounter	DX	ICD-10-CM
S36.599A	Other injury of unspecified part of colon, initial encounter	DX	ICD-10-CM
S36.60XA	Unspecified injury of rectum, initial encounter	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S36.61XA	Primary blast injury of rectum, initial encounter	DX	ICD-10-CM
S36.62XA	Contusion of rectum, initial encounter	DX	ICD-10-CM
S36.63XA	Laceration of rectum, initial encounter	DX	ICD-10-CM
S36.69XA	Other injury of rectum, initial encounter	DX	ICD-10-CM
S36.899A	Unspecified injury of other intra-abdominal organs, initial encounter	DX	ICD-10-CM
S36.90XA	Unspecified injury of unspecified intra-abdominal organ, initial encounter	DX	ICD-10-CM
S37.001A	Unspecified injury of right kidney, initial encounter	DX	ICD-10-CM
S37.002A	Unspecified injury of left kidney, initial encounter	DX	ICD-10-CM
S37.009A	Unspecified injury of unspecified kidney, initial encounter	DX	ICD-10-CM
S37.011A	Minor contusion of right kidney, initial encounter	DX	ICD-10-CM
S37.012A	Minor contusion of left kidney, initial encounter	DX	ICD-10-CM
S37.019A	Minor contusion of unspecified kidney, initial encounter	DX	ICD-10-CM
S37.021A	Major contusion of right kidney, initial encounter	DX	ICD-10-CM
S37.022A	Major contusion of left kidney, initial encounter	DX	ICD-10-CM
S37.029A	Major contusion of unspecified kidney, initial encounter	DX	ICD-10-CM
S37.031A	Laceration of right kidney, unspecified degree, initial encounter	DX	ICD-10-CM
S37.032A	Laceration of left kidney, unspecified degree, initial encounter	DX	ICD-10-CM
S37.039A	Laceration of unspecified kidney, unspecified degree, initial encounter	DX	ICD-10-CM
S37.041A	Minor laceration of right kidney, initial encounter	DX	ICD-10-CM
S37.042A	Minor laceration of left kidney, initial encounter	DX	ICD-10-CM
S37.049A	Minor laceration of unspecified kidney, initial encounter	DX	ICD-10-CM
S37.051A	Moderate laceration of right kidney, initial encounter	DX	ICD-10-CM
S37.052A	Moderate laceration of left kidney, initial encounter	DX	ICD-10-CM
S37.059A	Moderate laceration of unspecified kidney, initial encounter	DX	ICD-10-CM
S37.061A	Major laceration of right kidney, initial encounter	DX	ICD-10-CM
S37.062A	Major laceration of left kidney, initial encounter	DX	ICD-10-CM
S37.069A	Major laceration of unspecified kidney, initial encounter	DX	ICD-10-CM
S37.091A	Other injury of right kidney, initial encounter	DX	ICD-10-CM
S37.092A	Other injury of left kidney, initial encounter	DX	ICD-10-CM
S37.099A	Other injury of unspecified kidney, initial encounter	DX	ICD-10-CM
S37.10XA	Unspecified injury of ureter, initial encounter	DX	ICD-10-CM
S37.12XA	Contusion of ureter, initial encounter	DX	ICD-10-CM
S37.13XA	Laceration of ureter, initial encounter	DX	ICD-10-CM
S37.19XA	Other injury of ureter, initial encounter	DX	ICD-10-CM
S37.20XA	Unspecified injury of bladder, initial encounter	DX	ICD-10-CM
S37.22XA	Contusion of bladder, initial encounter	DX	ICD-10-CM
S37.23XA	Laceration of bladder, initial encounter	DX	ICD-10-CM
S37.29XA	Other injury of bladder, initial encounter	DX	ICD-10-CM
S37.30XA	Unspecified injury of urethra, initial encounter	DX	ICD-10-CM
S37.32XA	Contusion of urethra, initial encounter	DX	ICD-10-CM
S37.33XA	Laceration of urethra, initial encounter	DX	ICD-10-CM
S37.39XA	Other injury of urethra, initial encounter	DX	ICD-10-CM
S37.401A	Unspecified injury of ovary, unilateral, initial encounter	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S37.402A	Unspecified injury of ovary, bilateral, initial encounter	DX	ICD-10-CM
S37.409A	Unspecified injury of ovary, unspecified, initial encounter	DX	ICD-10-CM
S37.421A	Contusion of ovary, unilateral, initial encounter	DX	ICD-10-CM
S37.422A	Contusion of ovary, bilateral, initial encounter	DX	ICD-10-CM
S37.429A	Contusion of ovary, unspecified, initial encounter	DX	ICD-10-CM
S37.431A	Laceration of ovary, unilateral, initial encounter	DX	ICD-10-CM
S37.432A	Laceration of ovary, bilateral, initial encounter	DX	ICD-10-CM
S37.439A	Laceration of ovary, unspecified, initial encounter	DX	ICD-10-CM
S37.491A	Other injury of ovary, unilateral, initial encounter	DX	ICD-10-CM
S37.492A	Other injury of ovary, bilateral, initial encounter	DX	ICD-10-CM
S37.499A	Other injury of ovary, unspecified, initial encounter	DX	ICD-10-CM
S37.501A	Unspecified injury of fallopian tube, unilateral, initial encounter	DX	ICD-10-CM
S37.502A	Unspecified injury of fallopian tube, bilateral, initial encounter	DX	ICD-10-CM
S37.509A	Unspecified injury of fallopian tube, unspecified, initial encounter	DX	ICD-10-CM
S37.511A	Primary blast injury of fallopian tube, unilateral, initial encounter	DX	ICD-10-CM
S37.512A	Primary blast injury of fallopian tube, bilateral, initial encounter	DX	ICD-10-CM
S37.519A	Primary blast injury of fallopian tube, unspecified, initial encounter	DX	ICD-10-CM
S37.521A	Contusion of fallopian tube, unilateral, initial encounter	DX	ICD-10-CM
S37.522A	Contusion of fallopian tube, bilateral, initial encounter	DX	ICD-10-CM
S37.529A	Contusion of fallopian tube, unspecified, initial encounter	DX	ICD-10-CM
S37.531A	Laceration of fallopian tube, unilateral, initial encounter	DX	ICD-10-CM
S37.532A	Laceration of fallopian tube, bilateral, initial encounter	DX	ICD-10-CM
S37.539A	Laceration of fallopian tube, unspecified, initial encounter	DX	ICD-10-CM
S37.591A	Other injury of fallopian tube, unilateral, initial encounter	DX	ICD-10-CM
S37.592A	Other injury of fallopian tube, bilateral, initial encounter	DX	ICD-10-CM
S37.599A	Other injury of fallopian tube, unspecified, initial encounter	DX	ICD-10-CM
S37.60XA	Unspecified injury of uterus, initial encounter	DX	ICD-10-CM
S37.62XA	Contusion of uterus, initial encounter	DX	ICD-10-CM
S37.63XA	Laceration of uterus, initial encounter	DX	ICD-10-CM
S37.69XA	Other injury of uterus, initial encounter	DX	ICD-10-CM
S37.822A	Contusion of prostate, initial encounter	DX	ICD-10-CM
S37.823A	Laceration of prostate, initial encounter	DX	ICD-10-CM
S37.828A	Other injury of prostate, initial encounter	DX	ICD-10-CM
S37.829A	Unspecified injury of prostate, initial encounter	DX	ICD-10-CM
S37.892A	Contusion of other urinary and pelvic organ, initial encounter	DX	ICD-10-CM
S37.893A	Laceration of other urinary and pelvic organ, initial encounter	DX	ICD-10-CM
S37.898A	Other injury of other urinary and pelvic organ, initial encounter	DX	ICD-10-CM
S37.899A	Unspecified injury of other urinary and pelvic organ, initial encounter	DX	ICD-10-CM
S37.90XA	Unspecified injury of unspecified urinary and pelvic organ, initial encounter	DX	ICD-10-CM
S37.92XA	Contusion of unspecified urinary and pelvic organ, initial encounter	DX	ICD-10-CM
S37.93XA	Laceration of unspecified urinary and pelvic organ, initial encounter	DX	ICD-10-CM
S37.99XA	Other injury of unspecified urinary and pelvic organ, initial encounter	DX	ICD-10-CM
S38.001A	Crushing injury of unspecified external genital organs, male, initial encounter	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S38.002A	Crushing injury of unspecified external genital organs, female, initial encounter	DX	ICD-10-CM
S38.01XA	Crushing injury of penis, initial encounter	DX	ICD-10-CM
S38.02XA	Crushing injury of scrotum and testis, initial encounter	DX	ICD-10-CM
S38.03XA	Crushing injury of vulva, initial encounter	DX	ICD-10-CM
S38.1XXA	Crushing injury of abdomen, lower back, and pelvis, initial encounter	DX	ICD-10-CM
S42.001A	Fracture of unspecified part of right clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.001B	Fracture of unspecified part of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.002A	Fracture of unspecified part of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.002B	Fracture of unspecified part of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.009A	Fracture of unspecified part of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.009B	Fracture of unspecified part of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.011A	Anterior displaced fracture of sternal end of right clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.011B	Anterior displaced fracture of sternal end of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.012A	Anterior displaced fracture of sternal end of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.012B	Anterior displaced fracture of sternal end of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.013A	Anterior displaced fracture of sternal end of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.013B	Anterior displaced fracture of sternal end of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.014A	Posterior displaced fracture of sternal end of right clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.014B	Posterior displaced fracture of sternal end of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.015A	Posterior displaced fracture of sternal end of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.015B	Posterior displaced fracture of sternal end of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.016A	Posterior displaced fracture of sternal end of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.016B	Posterior displaced fracture of sternal end of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.017A	Nondisplaced fracture of sternal end of right clavicle, initial encounter for closed	DX	ICD-10-CM
S42.017B	Nondisplaced fracture of sternal end of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.018A	Nondisplaced fracture of sternal end of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.018B	Nondisplaced fracture of sternal end of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.019A	Nondisplaced fracture of sternal end of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.019B	Nondisplaced fracture of sternal end of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S42.021A	Displaced fracture of shaft of right clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.021B	Displaced fracture of shaft of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.022A	Displaced fracture of shaft of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.022B	Displaced fracture of shaft of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.023A	Displaced fracture of shaft of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.023B	Displaced fracture of shaft of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.024A	Nondisplaced fracture of shaft of right clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.024B	Nondisplaced fracture of shaft of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.025A	Nondisplaced fracture of shaft of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.025B	Nondisplaced fracture of shaft of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.026A	Nondisplaced fracture of shaft of unspecified clavicle, initial encounter for closed	DX	ICD-10-CM
S42.026B	Nondisplaced fracture of shaft of unspecified clavicle, initial encounter for open	DX	ICD-10-CM
S42.031A	Displaced fracture of lateral end of right clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.031B	Displaced fracture of lateral end of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.032A	Displaced fracture of lateral end of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.032B	Displaced fracture of lateral end of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.033A	Displaced fracture of lateral end of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.033B	Displaced fracture of lateral end of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.034A	Nondisplaced fracture of lateral end of right clavicle, initial encounter for closed	DX	ICD-10-CM
S42.034B	Nondisplaced fracture of lateral end of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.035A	Nondisplaced fracture of lateral end of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.035B	Nondisplaced fracture of lateral end of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.036A	Nondisplaced fracture of lateral end of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.036B	Nondisplaced fracture of lateral end of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.101A	Fracture of unspecified part of scapula, right shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.101B	Fracture of unspecified part of scapula, right shoulder, initial encounter for open	DX	ICD-10-CM
S42.102A	Fracture of unspecified part of scapula, left shoulder, initial encounter for closed	DX	ICD-10-CM
S42.102B	Fracture of unspecified part of scapula, left shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.109A	Fracture of unspecified part of scapula, unspecified shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.109B	Fracture of unspecified part of scapula, unspecified shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.111A	Displaced fracture of body of scapula, right shoulder, initial encounter for closed	DX	ICD-10-CM
S42.111B	Displaced fracture of body of scapula, right shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.112A	Displaced fracture of body of scapula, left shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.112B	Displaced fracture of body of scapula, left shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.113A	Displaced fracture of body of scapula, unspecified shoulder, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S42.113B	Displaced fracture of body of scapula, unspecified shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.114A	Nondisplaced fracture of body of scapula, right shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.114B	Nondisplaced fracture of body of scapula, right shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.115A	Nondisplaced fracture of body of scapula, left shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.115B	Nondisplaced fracture of body of scapula, left shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.116A	Nondisplaced fracture of body of scapula, unspecified shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.116B	Nondisplaced fracture of body of scapula, unspecified shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.121A	Displaced fracture of acromial process, right shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.121B	Displaced fracture of acromial process, right shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.122A	Displaced fracture of acromial process, left shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.122B	Displaced fracture of acromial process, left shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.123A	Displaced fracture of acromial process, unspecified shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.123B	Displaced fracture of acromial process, unspecified shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.124A	Nondisplaced fracture of acromial process, right shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.124B	Nondisplaced fracture of acromial process, right shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.125A	Nondisplaced fracture of acromial process, left shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.125B	Nondisplaced fracture of acromial process, left shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.126A	Nondisplaced fracture of acromial process, unspecified shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.126B	Nondisplaced fracture of acromial process, unspecified shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.131A	Displaced fracture of coracoid process, right shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.131B	Displaced fracture of coracoid process, right shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.132A	Displaced fracture of coracoid process, left shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.132B	Displaced fracture of coracoid process, left shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.133A	Displaced fracture of coracoid process, unspecified shoulder, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S42.133B	Displaced fracture of coracoid process, unspecified shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.134A	Nondisplaced fracture of coracoid process, right shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.134B	Nondisplaced fracture of coracoid process, right shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.135A	Nondisplaced fracture of coracoid process, left shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.135B	Nondisplaced fracture of coracoid process, left shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.136A	Nondisplaced fracture of coracoid process, unspecified shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.136B	Nondisplaced fracture of coracoid process, unspecified shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.141A	Displaced fracture of glenoid cavity of scapula, right shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.141B	Displaced fracture of glenoid cavity of scapula, right shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.142A	Displaced fracture of glenoid cavity of scapula, left shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.142B	Displaced fracture of glenoid cavity of scapula, left shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.143A	Displaced fracture of glenoid cavity of scapula, unspecified shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.143B	Displaced fracture of glenoid cavity of scapula, unspecified shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.144A	Nondisplaced fracture of glenoid cavity of scapula, right shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.144B	Nondisplaced fracture of glenoid cavity of scapula, right shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.145A	Nondisplaced fracture of glenoid cavity of scapula, left shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.145B	Nondisplaced fracture of glenoid cavity of scapula, left shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.146A	Nondisplaced fracture of glenoid cavity of scapula, unspecified shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.146B	Nondisplaced fracture of glenoid cavity of scapula, unspecified shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.151A	Displaced fracture of neck of scapula, right shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.151B	Displaced fracture of neck of scapula, right shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.152A	Displaced fracture of neck of scapula, left shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.152B	Displaced fracture of neck of scapula, left shoulder, initial encounter for open fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S42.153A	Displaced fracture of neck of scapula, unspecified shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.153B	Displaced fracture of neck of scapula, unspecified shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.154A	Nondisplaced fracture of neck of scapula, right shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.154B	Nondisplaced fracture of neck of scapula, right shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.155A	Nondisplaced fracture of neck of scapula, left shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.155B	Nondisplaced fracture of neck of scapula, left shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.156A	Nondisplaced fracture of neck of scapula, unspecified shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.156B	Nondisplaced fracture of neck of scapula, unspecified shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.191A	Fracture of other part of scapula, right shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.191B	Fracture of other part of scapula, right shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.192A	Fracture of other part of scapula, left shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.192B	Fracture of other part of scapula, left shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.199A	Fracture of other part of scapula, unspecified shoulder, initial encounter for closed fracture	DX	ICD-10-CM
S42.199B	Fracture of other part of scapula, unspecified shoulder, initial encounter for open fracture	DX	ICD-10-CM
S42.201A	Unspecified fracture of upper end of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.201B	Unspecified fracture of upper end of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.202A	Unspecified fracture of upper end of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.202B	Unspecified fracture of upper end of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.209A	Unspecified fracture of upper end of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.209B	Unspecified fracture of upper end of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.211A	Unspecified displaced fracture of surgical neck of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.211B	Unspecified displaced fracture of surgical neck of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.212A	Unspecified displaced fracture of surgical neck of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.212B	Unspecified displaced fracture of surgical neck of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.213A	Unspecified displaced fracture of surgical neck of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S42.213B	Unspecified displaced fracture of surgical neck of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.214A	Unspecified nondisplaced fracture of surgical neck of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.214B	Unspecified nondisplaced fracture of surgical neck of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.215A	Unspecified nondisplaced fracture of surgical neck of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.215B	Unspecified nondisplaced fracture of surgical neck of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.216A	Unspecified nondisplaced fracture of surgical neck of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.216B	Unspecified nondisplaced fracture of surgical neck of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.221A	2-part displaced fracture of surgical neck of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.221B	2-part displaced fracture of surgical neck of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.222A	2-part displaced fracture of surgical neck of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.222B	2-part displaced fracture of surgical neck of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.223A	2-part displaced fracture of surgical neck of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.223B	2-part displaced fracture of surgical neck of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.224A	2-part nondisplaced fracture of surgical neck of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.224B	2-part nondisplaced fracture of surgical neck of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.225A	2-part nondisplaced fracture of surgical neck of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.225B	2-part nondisplaced fracture of surgical neck of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.226A	2-part nondisplaced fracture of surgical neck of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.226B	2-part nondisplaced fracture of surgical neck of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.231A	3-part fracture of surgical neck of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.231B	3-part fracture of surgical neck of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.232A	3-part fracture of surgical neck of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.232B	3-part fracture of surgical neck of left humerus, initial encounter for open fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S42.239A	3-part fracture of surgical neck of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.239B	3-part fracture of surgical neck of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.241A	4-part fracture of surgical neck of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.241B	4-part fracture of surgical neck of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.242A	4-part fracture of surgical neck of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.242B	4-part fracture of surgical neck of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.249A	4-part fracture of surgical neck of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.249B	4-part fracture of surgical neck of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.251A	Displaced fracture of greater tuberosity of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.251B	Displaced fracture of greater tuberosity of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.252A	Displaced fracture of greater tuberosity of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.252B	Displaced fracture of greater tuberosity of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.253A	Displaced fracture of greater tuberosity of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.253B	Displaced fracture of greater tuberosity of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.254A	Nondisplaced fracture of greater tuberosity of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.254B	Nondisplaced fracture of greater tuberosity of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.255A	Nondisplaced fracture of greater tuberosity of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.255B	Nondisplaced fracture of greater tuberosity of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.256A	Nondisplaced fracture of greater tuberosity of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.256B	Nondisplaced fracture of greater tuberosity of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.261A	Displaced fracture of lesser tuberosity of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.261B	Displaced fracture of lesser tuberosity of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.262A	Displaced fracture of lesser tuberosity of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.262B	Displaced fracture of lesser tuberosity of left humerus, initial encounter for open fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S42.263A	Displaced fracture of lesser tuberosity of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.263B	Displaced fracture of lesser tuberosity of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.264A	Nondisplaced fracture of lesser tuberosity of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.264B	Nondisplaced fracture of lesser tuberosity of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.265A	Nondisplaced fracture of lesser tuberosity of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.265B	Nondisplaced fracture of lesser tuberosity of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.266A	Nondisplaced fracture of lesser tuberosity of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.266B	Nondisplaced fracture of lesser tuberosity of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.271A	Torus fracture of upper end of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.272A	Torus fracture of upper end of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.279A	Torus fracture of upper end of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.291A	Other displaced fracture of upper end of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.291B	Other displaced fracture of upper end of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.292A	Other displaced fracture of upper end of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.292B	Other displaced fracture of upper end of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.293A	Other displaced fracture of upper end of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.293B	Other displaced fracture of upper end of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.294A	Other nondisplaced fracture of upper end of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.294B	Other nondisplaced fracture of upper end of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.295A	Other nondisplaced fracture of upper end of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.295B	Other nondisplaced fracture of upper end of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.296A	Other nondisplaced fracture of upper end of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.296B	Other nondisplaced fracture of upper end of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.301A	Unspecified fracture of shaft of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S42.301B	Unspecified fracture of shaft of humerus, right arm, initial encounter for open fracture	DX	ICD-10-CM
S42.302A	Unspecified fracture of shaft of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.302B	Unspecified fracture of shaft of humerus, left arm, initial encounter for open fracture	DX	ICD-10-CM
S42.309A	Unspecified fracture of shaft of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.309B	Unspecified fracture of shaft of humerus, unspecified arm, initial encounter for open fracture	DX	ICD-10-CM
S42.311A	Greenstick fracture of shaft of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.312A	Greenstick fracture of shaft of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.319A	Greenstick fracture of shaft of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.321A	Displaced transverse fracture of shaft of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.321B	Displaced transverse fracture of shaft of humerus, right arm, initial encounter for open fracture	DX	ICD-10-CM
S42.322A	Displaced transverse fracture of shaft of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.322B	Displaced transverse fracture of shaft of humerus, left arm, initial encounter for open fracture	DX	ICD-10-CM
S42.323A	Displaced transverse fracture of shaft of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.323B	Displaced transverse fracture of shaft of humerus, unspecified arm, initial encounter for open fracture	DX	ICD-10-CM
S42.324A	Nondisplaced transverse fracture of shaft of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.324B	Nondisplaced transverse fracture of shaft of humerus, right arm, initial encounter for open fracture	DX	ICD-10-CM
S42.325A	Nondisplaced transverse fracture of shaft of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.325B	Nondisplaced transverse fracture of shaft of humerus, left arm, initial encounter for open fracture	DX	ICD-10-CM
S42.326A	Nondisplaced transverse fracture of shaft of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.326B	Nondisplaced transverse fracture of shaft of humerus, unspecified arm, initial encounter for open fracture	DX	ICD-10-CM
S42.331A	Displaced oblique fracture of shaft of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.331B	Displaced oblique fracture of shaft of humerus, right arm, initial encounter for open fracture	DX	ICD-10-CM
S42.332A	Displaced oblique fracture of shaft of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.332B	Displaced oblique fracture of shaft of humerus, left arm, initial encounter for open fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S42.333A	Displaced oblique fracture of shaft of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.333B	Displaced oblique fracture of shaft of humerus, unspecified arm, initial encounter for open fracture	DX	ICD-10-CM
S42.334A	Nondisplaced oblique fracture of shaft of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.334B	Nondisplaced oblique fracture of shaft of humerus, right arm, initial encounter for open fracture	DX	ICD-10-CM
S42.335A	Nondisplaced oblique fracture of shaft of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.335B	Nondisplaced oblique fracture of shaft of humerus, left arm, initial encounter for open fracture	DX	ICD-10-CM
S42.336A	Nondisplaced oblique fracture of shaft of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.336B	Nondisplaced oblique fracture of shaft of humerus, unspecified arm, initial encounter for open fracture	DX	ICD-10-CM
S42.341A	Displaced spiral fracture of shaft of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.341B	Displaced spiral fracture of shaft of humerus, right arm, initial encounter for open fracture	DX	ICD-10-CM
S42.342A	Displaced spiral fracture of shaft of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.342B	Displaced spiral fracture of shaft of humerus, left arm, initial encounter for open fracture	DX	ICD-10-CM
S42.343A	Displaced spiral fracture of shaft of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.343B	Displaced spiral fracture of shaft of humerus, unspecified arm, initial encounter for open fracture	DX	ICD-10-CM
S42.344A	Nondisplaced spiral fracture of shaft of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.344B	Nondisplaced spiral fracture of shaft of humerus, right arm, initial encounter for open fracture	DX	ICD-10-CM
S42.345A	Nondisplaced spiral fracture of shaft of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.345B	Nondisplaced spiral fracture of shaft of humerus, left arm, initial encounter for open fracture	DX	ICD-10-CM
S42.346A	Nondisplaced spiral fracture of shaft of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.346B	Nondisplaced spiral fracture of shaft of humerus, unspecified arm, initial encounter for open fracture	DX	ICD-10-CM
S42.351A	Displaced comminuted fracture of shaft of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.351B	Displaced comminuted fracture of shaft of humerus, right arm, initial encounter for open fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S42.352A	Displaced comminuted fracture of shaft of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.352B	Displaced comminuted fracture of shaft of humerus, left arm, initial encounter for open fracture	DX	ICD-10-CM
S42.353A	Displaced comminuted fracture of shaft of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.353B	Displaced comminuted fracture of shaft of humerus, unspecified arm, initial encounter for open fracture	DX	ICD-10-CM
S42.354A	Nondisplaced comminuted fracture of shaft of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.354B	Nondisplaced comminuted fracture of shaft of humerus, right arm, initial encounter for open fracture	DX	ICD-10-CM
S42.355A	Nondisplaced comminuted fracture of shaft of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.355B	Nondisplaced comminuted fracture of shaft of humerus, left arm, initial encounter for open fracture	DX	ICD-10-CM
S42.356A	Nondisplaced comminuted fracture of shaft of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.356B	Nondisplaced comminuted fracture of shaft of humerus, unspecified arm, initial encounter for open fracture	DX	ICD-10-CM
S42.361A	Displaced segmental fracture of shaft of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.361B	Displaced segmental fracture of shaft of humerus, right arm, initial encounter for open fracture	DX	ICD-10-CM
S42.362A	Displaced segmental fracture of shaft of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.362B	Displaced segmental fracture of shaft of humerus, left arm, initial encounter for open fracture	DX	ICD-10-CM
S42.363A	Displaced segmental fracture of shaft of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.363B	Displaced segmental fracture of shaft of humerus, unspecified arm, initial encounter for open fracture	DX	ICD-10-CM
S42.364A	Nondisplaced segmental fracture of shaft of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.364B	Nondisplaced segmental fracture of shaft of humerus, right arm, initial encounter for open fracture	DX	ICD-10-CM
S42.365A	Nondisplaced segmental fracture of shaft of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S42.365B	Nondisplaced segmental fracture of shaft of humerus, left arm, initial encounter for open fracture	DX	ICD-10-CM
S42.366A	Nondisplaced segmental fracture of shaft of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S42.366B	Nondisplaced segmental fracture of shaft of humerus, unspecified arm, initial encounter for open fracture	DX	ICD-10-CM
S42.391A	Other fracture of shaft of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.391B	Other fracture of shaft of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.392A	Other fracture of shaft of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.392B	Other fracture of shaft of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.399A	Other fracture of shaft of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.399B	Other fracture of shaft of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.401A	Unspecified fracture of lower end of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.401B	Unspecified fracture of lower end of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.402A	Unspecified fracture of lower end of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.402B	Unspecified fracture of lower end of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.409A	Unspecified fracture of lower end of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.409B	Unspecified fracture of lower end of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.411A	Displaced simple supracondylar fracture without intercondylar fracture of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.411B	Displaced simple supracondylar fracture without intercondylar fracture of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.412A	Displaced simple supracondylar fracture without intercondylar fracture of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.412B	Displaced simple supracondylar fracture without intercondylar fracture of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.413A	Displaced simple supracondylar fracture without intercondylar fracture of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.413B	Displaced simple supracondylar fracture without intercondylar fracture of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.414A	Nondisplaced simple supracondylar fracture without intercondylar fracture of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.414B	Nondisplaced simple supracondylar fracture without intercondylar fracture of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.415A	Nondisplaced simple supracondylar fracture without intercondylar fracture of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.415B	Nondisplaced simple supracondylar fracture without intercondylar fracture of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.416A	Nondisplaced simple supracondylar fracture without intercondylar fracture of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.416B	Nondisplaced simple supracondylar fracture without intercondylar fracture of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.421A	Displaced comminuted supracondylar fracture without intercondylar fracture of right humerus, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S42.421B	Displaced comminuted supracondylar fracture without intercondylar fracture of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.422A	Displaced comminuted supracondylar fracture without intercondylar fracture of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.422B	Displaced comminuted supracondylar fracture without intercondylar fracture of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.423A	Displaced comminuted supracondylar fracture without intercondylar fracture of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.423B	Displaced comminuted supracondylar fracture without intercondylar fracture of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.424A	Nondisplaced comminuted supracondylar fracture without intercondylar fracture of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.424B	Nondisplaced comminuted supracondylar fracture without intercondylar fracture of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.425A	Nondisplaced comminuted supracondylar fracture without intercondylar fracture of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.425B	Nondisplaced comminuted supracondylar fracture without intercondylar fracture of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.426A	Nondisplaced comminuted supracondylar fracture without intercondylar fracture of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.426B	Nondisplaced comminuted supracondylar fracture without intercondylar fracture of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.431A	Displaced fracture (avulsion) of lateral epicondyle of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.431B	Displaced fracture (avulsion) of lateral epicondyle of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.432A	Displaced fracture (avulsion) of lateral epicondyle of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.432B	Displaced fracture (avulsion) of lateral epicondyle of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.433A	Displaced fracture (avulsion) of lateral epicondyle of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.433B	Displaced fracture (avulsion) of lateral epicondyle of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.434A	Nondisplaced fracture (avulsion) of lateral epicondyle of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.434B	Nondisplaced fracture (avulsion) of lateral epicondyle of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.435A	Nondisplaced fracture (avulsion) of lateral epicondyle of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.435B	Nondisplaced fracture (avulsion) of lateral epicondyle of left humerus, initial encounter for open fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S42.436A	Nondisplaced fracture (avulsion) of lateral epicondyle of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.436B	Nondisplaced fracture (avulsion) of lateral epicondyle of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.441A	Displaced fracture (avulsion) of medial epicondyle of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.441B	Displaced fracture (avulsion) of medial epicondyle of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.442A	Displaced fracture (avulsion) of medial epicondyle of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.442B	Displaced fracture (avulsion) of medial epicondyle of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.443A	Displaced fracture (avulsion) of medial epicondyle of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.443B	Displaced fracture (avulsion) of medial epicondyle of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.444A	Nondisplaced fracture (avulsion) of medial epicondyle of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.444B	Nondisplaced fracture (avulsion) of medial epicondyle of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.445A	Nondisplaced fracture (avulsion) of medial epicondyle of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.445B	Nondisplaced fracture (avulsion) of medial epicondyle of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.446A	Nondisplaced fracture (avulsion) of medial epicondyle of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.446B	Nondisplaced fracture (avulsion) of medial epicondyle of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.447A	Incarcerated fracture (avulsion) of medial epicondyle of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.447B	Incarcerated fracture (avulsion) of medial epicondyle of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.448A	Incarcerated fracture (avulsion) of medial epicondyle of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.448B	Incarcerated fracture (avulsion) of medial epicondyle of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.449A	Incarcerated fracture (avulsion) of medial epicondyle of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.449B	Incarcerated fracture (avulsion) of medial epicondyle of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.451A	Displaced fracture of lateral condyle of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.451B	Displaced fracture of lateral condyle of right humerus, initial encounter for open	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S42.452A	Displaced fracture of lateral condyle of left humerus, initial encounter for closed	DX	ICD-10-CM
S42.452B	Displaced fracture of lateral condyle of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.453A	Displaced fracture of lateral condyle of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.453B	Displaced fracture of lateral condyle of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.454A	Nondisplaced fracture of lateral condyle of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.454B	Nondisplaced fracture of lateral condyle of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.455A	Nondisplaced fracture of lateral condyle of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.455B	Nondisplaced fracture of lateral condyle of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.456A	Nondisplaced fracture of lateral condyle of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.456B	Nondisplaced fracture of lateral condyle of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.461A	Displaced fracture of medial condyle of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.461B	Displaced fracture of medial condyle of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.462A	Displaced fracture of medial condyle of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.462B	Displaced fracture of medial condyle of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.463A	Displaced fracture of medial condyle of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.463B	Displaced fracture of medial condyle of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.464A	Nondisplaced fracture of medial condyle of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.464B	Nondisplaced fracture of medial condyle of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.465A	Nondisplaced fracture of medial condyle of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.465B	Nondisplaced fracture of medial condyle of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.466A	Nondisplaced fracture of medial condyle of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.466B	Nondisplaced fracture of medial condyle of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.471A	Displaced transcondylar fracture of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.471B	Displaced transcondylar fracture of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.472A	Displaced transcondylar fracture of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.472B	Displaced transcondylar fracture of left humerus, initial encounter for open fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S42.473A	Displaced transcondylar fracture of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.473B	Displaced transcondylar fracture of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.474A	Nondisplaced transcondylar fracture of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.474B	Nondisplaced transcondylar fracture of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.475A	Nondisplaced transcondylar fracture of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.475B	Nondisplaced transcondylar fracture of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.476A	Nondisplaced transcondylar fracture of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.476B	Nondisplaced transcondylar fracture of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.481A	Torus fracture of lower end of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.482A	Torus fracture of lower end of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.489A	Torus fracture of lower end of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.491A	Other displaced fracture of lower end of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.491B	Other displaced fracture of lower end of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.492A	Other displaced fracture of lower end of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.492B	Other displaced fracture of lower end of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.493A	Other displaced fracture of lower end of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.493B	Other displaced fracture of lower end of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.494A	Other nondisplaced fracture of lower end of right humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.494B	Other nondisplaced fracture of lower end of right humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.495A	Other nondisplaced fracture of lower end of left humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.495B	Other nondisplaced fracture of lower end of left humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.496A	Other nondisplaced fracture of lower end of unspecified humerus, initial encounter for closed fracture	DX	ICD-10-CM
S42.496B	Other nondisplaced fracture of lower end of unspecified humerus, initial encounter for open fracture	DX	ICD-10-CM
S42.90XA	Fracture of unspecified shoulder girdle, part unspecified, initial encounter for closed fracture	DX	ICD-10-CM
S42.90XB	Fracture of unspecified shoulder girdle, part unspecified, initial encounter for open fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S42.91XA	Fracture of right shoulder girdle, part unspecified, initial encounter for closed fracture	DX	ICD-10-CM
S42.91XB	Fracture of right shoulder girdle, part unspecified, initial encounter for open fracture	DX	ICD-10-CM
S42.92XA	Fracture of left shoulder girdle, part unspecified, initial encounter for closed fracture	DX	ICD-10-CM
S42.92XB	Fracture of left shoulder girdle, part unspecified, initial encounter for open fracture	DX	ICD-10-CM
S47.1XXA	Crushing injury of right shoulder and upper arm, initial encounter	DX	ICD-10-CM
S47.2XXA	Crushing injury of left shoulder and upper arm, initial encounter	DX	ICD-10-CM
S47.9XXA	Crushing injury of shoulder and upper arm, unspecified arm, initial encounter	DX	ICD-10-CM
S49.001A	Unspecified physeal fracture of upper end of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.002A	Unspecified physeal fracture of upper end of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.009A	Unspecified physeal fracture of upper end of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.011A	Salter-Harris Type I physeal fracture of upper end of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.012A	Salter-Harris Type I physeal fracture of upper end of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.019A	Salter-Harris Type I physeal fracture of upper end of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.021A	Salter-Harris Type II physeal fracture of upper end of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.022A	Salter-Harris Type II physeal fracture of upper end of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.029A	Salter-Harris Type II physeal fracture of upper end of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.031A	Salter-Harris Type III physeal fracture of upper end of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.032A	Salter-Harris Type III physeal fracture of upper end of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.039A	Salter-Harris Type III physeal fracture of upper end of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.041A	Salter-Harris Type IV physeal fracture of upper end of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.042A	Salter-Harris Type IV physeal fracture of upper end of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.049A	Salter-Harris Type IV physeal fracture of upper end of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.091A	Other physeal fracture of upper end of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.092A	Other physeal fracture of upper end of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.099A	Other physeal fracture of upper end of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S49.101A	Unspecified physeal fracture of lower end of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.102A	Unspecified physeal fracture of lower end of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.109A	Unspecified physeal fracture of lower end of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.111A	Salter-Harris Type I physeal fracture of lower end of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.112A	Salter-Harris Type I physeal fracture of lower end of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.119A	Salter-Harris Type I physeal fracture of lower end of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.121A	Salter-Harris Type II physeal fracture of lower end of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.122A	Salter-Harris Type II physeal fracture of lower end of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.129A	Salter-Harris Type II physeal fracture of lower end of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.131A	Salter-Harris Type III physeal fracture of lower end of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.132A	Salter-Harris Type III physeal fracture of lower end of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.139A	Salter-Harris Type III physeal fracture of lower end of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.141A	Salter-Harris Type IV physeal fracture of lower end of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.142A	Salter-Harris Type IV physeal fracture of lower end of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.149A	Salter-Harris Type IV physeal fracture of lower end of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.191A	Other physeal fracture of lower end of humerus, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.192A	Other physeal fracture of lower end of humerus, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S49.199A	Other physeal fracture of lower end of humerus, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.001A	Unspecified fracture of upper end of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.001B	Unspecified fracture of upper end of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.001C	Unspecified fracture of upper end of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.002A	Unspecified fracture of upper end of left ulna, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.002B	Unspecified fracture of upper end of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.002C	Unspecified fracture of upper end of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.009A	Unspecified fracture of upper end of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.009B	Unspecified fracture of upper end of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.009C	Unspecified fracture of upper end of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.011A	Torus fracture of upper end of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.012A	Torus fracture of upper end of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.019A	Torus fracture of upper end of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.021A	Displaced fracture of olecranon process without intraarticular extension of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.021B	Displaced fracture of olecranon process without intraarticular extension of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.021C	Displaced fracture of olecranon process without intraarticular extension of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.022A	Displaced fracture of olecranon process without intraarticular extension of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.022B	Displaced fracture of olecranon process without intraarticular extension of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.022C	Displaced fracture of olecranon process without intraarticular extension of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.023A	Displaced fracture of olecranon process without intraarticular extension of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.023B	Displaced fracture of olecranon process without intraarticular extension of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.023C	Displaced fracture of olecranon process without intraarticular extension of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.024A	Nondisplaced fracture of olecranon process without intraarticular extension of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.024B	Nondisplaced fracture of olecranon process without intraarticular extension of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.024C	Nondisplaced fracture of olecranon process without intraarticular extension of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.025A	Nondisplaced fracture of olecranon process without intraarticular extension of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.025B	Nondisplaced fracture of olecranon process without intraarticular extension of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.025C	Nondisplaced fracture of olecranon process without intraarticular extension of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.026A	Nondisplaced fracture of olecranon process without intraarticular extension of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.026B	Nondisplaced fracture of olecranon process without intraarticular extension of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.026C	Nondisplaced fracture of olecranon process without intraarticular extension of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.031A	Displaced fracture of olecranon process with intraarticular extension of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.031B	Displaced fracture of olecranon process with intraarticular extension of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.031C	Displaced fracture of olecranon process with intraarticular extension of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.032A	Displaced fracture of olecranon process with intraarticular extension of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.032B	Displaced fracture of olecranon process with intraarticular extension of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.032C	Displaced fracture of olecranon process with intraarticular extension of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.033A	Displaced fracture of olecranon process with intraarticular extension of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.033B	Displaced fracture of olecranon process with intraarticular extension of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.033C	Displaced fracture of olecranon process with intraarticular extension of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.034A	Nondisplaced fracture of olecranon process with intraarticular extension of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.034B	Nondisplaced fracture of olecranon process with intraarticular extension of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.034C	Nondisplaced fracture of olecranon process with intraarticular extension of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.035A	Nondisplaced fracture of olecranon process with intraarticular extension of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.035B	Nondisplaced fracture of olecranon process with intraarticular extension of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.035C	Nondisplaced fracture of olecranon process with intraarticular extension of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.036A	Nondisplaced fracture of olecranon process with intraarticular extension of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.036B	Nondisplaced fracture of olecranon process with intraarticular extension of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.036C	Nondisplaced fracture of olecranon process with intraarticular extension of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.041A	Displaced fracture of coronoid process of right ulna, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S52.041B	Displaced fracture of coronoid process of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.041C	Displaced fracture of coronoid process of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.042A	Displaced fracture of coronoid process of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.042B	Displaced fracture of coronoid process of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.042C	Displaced fracture of coronoid process of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.043A	Displaced fracture of coronoid process of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.043B	Displaced fracture of coronoid process of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.043C	Displaced fracture of coronoid process of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.044A	Nondisplaced fracture of coronoid process of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.044B	Nondisplaced fracture of coronoid process of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.044C	Nondisplaced fracture of coronoid process of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.045A	Nondisplaced fracture of coronoid process of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.045B	Nondisplaced fracture of coronoid process of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.045C	Nondisplaced fracture of coronoid process of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.046A	Nondisplaced fracture of coronoid process of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.046B	Nondisplaced fracture of coronoid process of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.046C	Nondisplaced fracture of coronoid process of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.091A	Other fracture of upper end of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.091B	Other fracture of upper end of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.091C	Other fracture of upper end of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.092A	Other fracture of upper end of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.092B	Other fracture of upper end of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.092C	Other fracture of upper end of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.099A	Other fracture of upper end of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.099B	Other fracture of upper end of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.099C	Other fracture of upper end of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.101A	Unspecified fracture of upper end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.101B	Unspecified fracture of upper end of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.101C	Unspecified fracture of upper end of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.102A	Unspecified fracture of upper end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.102B	Unspecified fracture of upper end of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.102C	Unspecified fracture of upper end of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.109A	Unspecified fracture of upper end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.109B	Unspecified fracture of upper end of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.109C	Unspecified fracture of upper end of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.111A	Torus fracture of upper end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.112A	Torus fracture of upper end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.119A	Torus fracture of upper end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.121A	Displaced fracture of head of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.121B	Displaced fracture of head of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.121C	Displaced fracture of head of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.122A	Displaced fracture of head of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.122B	Displaced fracture of head of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.122C	Displaced fracture of head of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.123A	Displaced fracture of head of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.123B	Displaced fracture of head of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.123C	Displaced fracture of head of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.124A	Nondisplaced fracture of head of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.124B	Nondisplaced fracture of head of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.124C	Nondisplaced fracture of head of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.125A	Nondisplaced fracture of head of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.125B	Nondisplaced fracture of head of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.125C	Nondisplaced fracture of head of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.126A	Nondisplaced fracture of head of unspecified radius, initial encounter for closed	DX	ICD-10-CM
S52.126B	Nondisplaced fracture of head of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.126C	Nondisplaced fracture of head of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.131A	Displaced fracture of neck of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.131B	Displaced fracture of neck of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.131C	Displaced fracture of neck of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.132A	Displaced fracture of neck of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.132B	Displaced fracture of neck of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.132C	Displaced fracture of neck of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.133A	Displaced fracture of neck of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.133B	Displaced fracture of neck of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.133C	Displaced fracture of neck of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.134A	Nondisplaced fracture of neck of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.134B	Nondisplaced fracture of neck of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.134C	Nondisplaced fracture of neck of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.135A	Nondisplaced fracture of neck of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.135B	Nondisplaced fracture of neck of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.135C	Nondisplaced fracture of neck of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.136A	Nondisplaced fracture of neck of unspecified radius, initial encounter for closed	DX	ICD-10-CM
S52.136B	Nondisplaced fracture of neck of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.136C	Nondisplaced fracture of neck of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.181A	Other fracture of upper end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.181B	Other fracture of upper end of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.181C	Other fracture of upper end of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.182A	Other fracture of upper end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.182B	Other fracture of upper end of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.182C	Other fracture of upper end of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.189A	Other fracture of upper end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.189B	Other fracture of upper end of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.189C	Other fracture of upper end of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.201A	Unspecified fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.201B	Unspecified fracture of shaft of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.201C	Unspecified fracture of shaft of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.202A	Unspecified fracture of shaft of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.202B	Unspecified fracture of shaft of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.202C	Unspecified fracture of shaft of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.209A	Unspecified fracture of shaft of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.209B	Unspecified fracture of shaft of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.209C	Unspecified fracture of shaft of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.211A	Greenstick fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.212A	Greenstick fracture of shaft of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.219A	Greenstick fracture of shaft of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.221A	Displaced transverse fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.221B	Displaced transverse fracture of shaft of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.221C	Displaced transverse fracture of shaft of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.222A	Displaced transverse fracture of shaft of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.222B	Displaced transverse fracture of shaft of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.222C	Displaced transverse fracture of shaft of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.223A	Displaced transverse fracture of shaft of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.223B	Displaced transverse fracture of shaft of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.223C	Displaced transverse fracture of shaft of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.224A	Nondisplaced transverse fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.224B	Nondisplaced transverse fracture of shaft of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.224C	Nondisplaced transverse fracture of shaft of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.225A	Nondisplaced transverse fracture of shaft of left ulna, initial encounter for closed	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.225B	Nondisplaced transverse fracture of shaft of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.225C	Nondisplaced transverse fracture of shaft of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.226A	Nondisplaced transverse fracture of shaft of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.226B	Nondisplaced transverse fracture of shaft of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.226C	Nondisplaced transverse fracture of shaft of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.231A	Displaced oblique fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.231B	Displaced oblique fracture of shaft of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.231C	Displaced oblique fracture of shaft of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.232A	Displaced oblique fracture of shaft of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.232B	Displaced oblique fracture of shaft of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.232C	Displaced oblique fracture of shaft of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.233A	Displaced oblique fracture of shaft of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.233B	Displaced oblique fracture of shaft of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.233C	Displaced oblique fracture of shaft of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.234A	Nondisplaced oblique fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.234B	Nondisplaced oblique fracture of shaft of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.234C	Nondisplaced oblique fracture of shaft of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.235A	Nondisplaced oblique fracture of shaft of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.235B	Nondisplaced oblique fracture of shaft of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.235C	Nondisplaced oblique fracture of shaft of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.236A	Nondisplaced oblique fracture of shaft of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.236B	Nondisplaced oblique fracture of shaft of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.236C	Nondisplaced oblique fracture of shaft of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.241A	Displaced spiral fracture of shaft of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.241B	Displaced spiral fracture of shaft of ulna, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.241C	Displaced spiral fracture of shaft of ulna, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.242A	Displaced spiral fracture of shaft of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.242B	Displaced spiral fracture of shaft of ulna, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.242C	Displaced spiral fracture of shaft of ulna, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.243A	Displaced spiral fracture of shaft of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.243B	Displaced spiral fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.243C	Displaced spiral fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.244A	Nondisplaced spiral fracture of shaft of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.244B	Nondisplaced spiral fracture of shaft of ulna, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.244C	Nondisplaced spiral fracture of shaft of ulna, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.245A	Nondisplaced spiral fracture of shaft of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.245B	Nondisplaced spiral fracture of shaft of ulna, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.245C	Nondisplaced spiral fracture of shaft of ulna, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.246A	Nondisplaced spiral fracture of shaft of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.246B	Nondisplaced spiral fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.246C	Nondisplaced spiral fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.251A	Displaced comminuted fracture of shaft of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.251B	Displaced comminuted fracture of shaft of ulna, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.251C	Displaced comminuted fracture of shaft of ulna, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.252A	Displaced comminuted fracture of shaft of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.252B	Displaced comminuted fracture of shaft of ulna, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S52.252C	Displaced comminuted fracture of shaft of ulna, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.253A	Displaced comminuted fracture of shaft of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.253B	Displaced comminuted fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.253C	Displaced comminuted fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.254A	Nondisplaced comminuted fracture of shaft of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.254B	Nondisplaced comminuted fracture of shaft of ulna, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.254C	Nondisplaced comminuted fracture of shaft of ulna, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.255A	Nondisplaced comminuted fracture of shaft of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.255B	Nondisplaced comminuted fracture of shaft of ulna, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.255C	Nondisplaced comminuted fracture of shaft of ulna, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.256A	Nondisplaced comminuted fracture of shaft of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.256B	Nondisplaced comminuted fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.256C	Nondisplaced comminuted fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.261A	Displaced segmental fracture of shaft of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.261B	Displaced segmental fracture of shaft of ulna, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.261C	Displaced segmental fracture of shaft of ulna, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.262A	Displaced segmental fracture of shaft of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.262B	Displaced segmental fracture of shaft of ulna, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.262C	Displaced segmental fracture of shaft of ulna, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.263A	Displaced segmental fracture of shaft of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.263B	Displaced segmental fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S52.263C	Displaced segmental fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.264A	Nondisplaced segmental fracture of shaft of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.264B	Nondisplaced segmental fracture of shaft of ulna, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.264C	Nondisplaced segmental fracture of shaft of ulna, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.265A	Nondisplaced segmental fracture of shaft of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.265B	Nondisplaced segmental fracture of shaft of ulna, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.265C	Nondisplaced segmental fracture of shaft of ulna, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.266A	Nondisplaced segmental fracture of shaft of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.266B	Nondisplaced segmental fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.266C	Nondisplaced segmental fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.271A	Monteggia's fracture of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.271B	Monteggia's fracture of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.271C	Monteggia's fracture of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.272A	Monteggia's fracture of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.272B	Monteggia's fracture of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.272C	Monteggia's fracture of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.279A	Monteggia's fracture of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.279B	Monteggia's fracture of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.279C	Monteggia's fracture of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.281A	Bent bone of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.281B	Bent bone of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.281C	Bent bone of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.282A	Bent bone of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.282B	Bent bone of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.282C	Bent bone of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.283A	Bent bone of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.283B	Bent bone of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.283C	Bent bone of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.291A	Other fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.291B	Other fracture of shaft of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.291C	Other fracture of shaft of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S52.292A	Other fracture of shaft of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.292B	Other fracture of shaft of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.292C	Other fracture of shaft of left ulna, initial encounter for open fracture type IIIA, IIIB, or	DX	ICD-10-CM
S52.299A	Other fracture of shaft of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.299B	Other fracture of shaft of unspecified ulna, initial encounter for open fracture type I or	DX	ICD-10-CM
S52.299C	Other fracture of shaft of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.301A	Unspecified fracture of shaft of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.301B	Unspecified fracture of shaft of right radius, initial encounter for open fracture type I or	DX	ICD-10-CM
S52.301C	Unspecified fracture of shaft of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.302A	Unspecified fracture of shaft of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.302B	Unspecified fracture of shaft of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.302C	Unspecified fracture of shaft of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.309A	Unspecified fracture of shaft of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.309B	Unspecified fracture of shaft of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.309C	Unspecified fracture of shaft of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.311A	Greenstick fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.312A	Greenstick fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.319A	Greenstick fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.321A	Displaced transverse fracture of shaft of right radius, initial encounter for closed	DX	ICD-10-CM
S52.321B	Displaced transverse fracture of shaft of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.321C	Displaced transverse fracture of shaft of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.322A	Displaced transverse fracture of shaft of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.322B	Displaced transverse fracture of shaft of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.322C	Displaced transverse fracture of shaft of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.323A	Displaced transverse fracture of shaft of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.323B	Displaced transverse fracture of shaft of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.323C	Displaced transverse fracture of shaft of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.324A	Nondisplaced transverse fracture of shaft of right radius, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.324B	Nondisplaced transverse fracture of shaft of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.324C	Nondisplaced transverse fracture of shaft of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.325A	Nondisplaced transverse fracture of shaft of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.325B	Nondisplaced transverse fracture of shaft of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.325C	Nondisplaced transverse fracture of shaft of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.326A	Nondisplaced transverse fracture of shaft of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.326B	Nondisplaced transverse fracture of shaft of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.326C	Nondisplaced transverse fracture of shaft of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.331A	Displaced oblique fracture of shaft of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.331B	Displaced oblique fracture of shaft of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.331C	Displaced oblique fracture of shaft of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.332A	Displaced oblique fracture of shaft of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.332B	Displaced oblique fracture of shaft of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.332C	Displaced oblique fracture of shaft of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.333A	Displaced oblique fracture of shaft of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.333B	Displaced oblique fracture of shaft of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.333C	Displaced oblique fracture of shaft of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.334A	Nondisplaced oblique fracture of shaft of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.334B	Nondisplaced oblique fracture of shaft of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.334C	Nondisplaced oblique fracture of shaft of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.335A	Nondisplaced oblique fracture of shaft of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.335B	Nondisplaced oblique fracture of shaft of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.335C	Nondisplaced oblique fracture of shaft of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.336A	Nondisplaced oblique fracture of shaft of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.336B	Nondisplaced oblique fracture of shaft of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.336C	Nondisplaced oblique fracture of shaft of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.341A	Displaced spiral fracture of shaft of radius, right arm, initial encounter for closed	DX	ICD-10-CM
S52.341B	Displaced spiral fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.341C	Displaced spiral fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.342A	Displaced spiral fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.342B	Displaced spiral fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.342C	Displaced spiral fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.343A	Displaced spiral fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.343B	Displaced spiral fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.343C	Displaced spiral fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.344A	Nondisplaced spiral fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.344B	Nondisplaced spiral fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.344C	Nondisplaced spiral fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.345A	Nondisplaced spiral fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.345B	Nondisplaced spiral fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.345C	Nondisplaced spiral fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.346A	Nondisplaced spiral fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.346B	Nondisplaced spiral fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.346C	Nondisplaced spiral fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.351A	Displaced comminuted fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.351B	Displaced comminuted fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.351C	Displaced comminuted fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.352A	Displaced comminuted fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.352B	Displaced comminuted fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.352C	Displaced comminuted fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.353A	Displaced comminuted fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.353B	Displaced comminuted fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.353C	Displaced comminuted fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.354A	Nondisplaced comminuted fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.354B	Nondisplaced comminuted fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.354C	Nondisplaced comminuted fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.355A	Nondisplaced comminuted fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.355B	Nondisplaced comminuted fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.355C	Nondisplaced comminuted fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.356A	Nondisplaced comminuted fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.356B	Nondisplaced comminuted fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.356C	Nondisplaced comminuted fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.361A	Displaced segmental fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.361B	Displaced segmental fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.361C	Displaced segmental fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.362A	Displaced segmental fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S52.362B	Displaced segmental fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.362C	Displaced segmental fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.363A	Displaced segmental fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.363B	Displaced segmental fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.363C	Displaced segmental fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.364A	Nondisplaced segmental fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.364B	Nondisplaced segmental fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.364C	Nondisplaced segmental fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.365A	Nondisplaced segmental fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.365B	Nondisplaced segmental fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.365C	Nondisplaced segmental fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.366A	Nondisplaced segmental fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.366B	Nondisplaced segmental fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.366C	Nondisplaced segmental fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.371A	Galeazzi's fracture of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.371B	Galeazzi's fracture of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.371C	Galeazzi's fracture of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.372A	Galeazzi's fracture of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.372B	Galeazzi's fracture of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.372C	Galeazzi's fracture of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.379A	Galeazzi's fracture of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.379B	Galeazzi's fracture of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.379C	Galeazzi's fracture of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.381A	Bent bone of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.381B	Bent bone of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.381C	Bent bone of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.382A	Bent bone of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.382B	Bent bone of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.382C	Bent bone of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.389A	Bent bone of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.389B	Bent bone of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.389C	Bent bone of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.391A	Other fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.391B	Other fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.391C	Other fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.392A	Other fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.392B	Other fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.392C	Other fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.399A	Other fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.399B	Other fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.399C	Other fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.501A	Unspecified fracture of the lower end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.501B	Unspecified fracture of the lower end of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.501C	Unspecified fracture of the lower end of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.502A	Unspecified fracture of the lower end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.502B	Unspecified fracture of the lower end of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.502C	Unspecified fracture of the lower end of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.509A	Unspecified fracture of the lower end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.509B	Unspecified fracture of the lower end of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.509C	Unspecified fracture of the lower end of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.511A	Displaced fracture of right radial styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.511B	Displaced fracture of right radial styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.511C	Displaced fracture of right radial styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.512A	Displaced fracture of left radial styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.512B	Displaced fracture of left radial styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.512C	Displaced fracture of left radial styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.513A	Displaced fracture of unspecified radial styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.513B	Displaced fracture of unspecified radial styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.513C	Displaced fracture of unspecified radial styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.514A	Nondisplaced fracture of right radial styloid process, initial encounter for closed	DX	ICD-10-CM
S52.514B	Nondisplaced fracture of right radial styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.514C	Nondisplaced fracture of right radial styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.515A	Nondisplaced fracture of left radial styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.515B	Nondisplaced fracture of left radial styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.515C	Nondisplaced fracture of left radial styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.516A	Nondisplaced fracture of unspecified radial styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.516B	Nondisplaced fracture of unspecified radial styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.516C	Nondisplaced fracture of unspecified radial styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.521A	Torus fracture of lower end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.522A	Torus fracture of lower end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.529A	Torus fracture of lower end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.531A	Colles' fracture of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.531B	Colles' fracture of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.531C	Colles' fracture of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.532A	Colles' fracture of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.532B	Colles' fracture of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.532C	Colles' fracture of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.539A	Colles' fracture of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.539B	Colles' fracture of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.539C	Colles' fracture of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.541A	Smith's fracture of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.541B	Smith's fracture of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.541C	Smith's fracture of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.542A	Smith's fracture of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.542B	Smith's fracture of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.542C	Smith's fracture of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.549A	Smith's fracture of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.549B	Smith's fracture of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S52.549C	Smith's fracture of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.551A	Other extraarticular fracture of lower end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.551B	Other extraarticular fracture of lower end of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.551C	Other extraarticular fracture of lower end of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.552A	Other extraarticular fracture of lower end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.552B	Other extraarticular fracture of lower end of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.552C	Other extraarticular fracture of lower end of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.559A	Other extraarticular fracture of lower end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.559B	Other extraarticular fracture of lower end of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.559C	Other extraarticular fracture of lower end of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.561A	Barton's fracture of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.561B	Barton's fracture of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.561C	Barton's fracture of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.562A	Barton's fracture of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.562B	Barton's fracture of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.562C	Barton's fracture of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.569A	Barton's fracture of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.569B	Barton's fracture of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.569C	Barton's fracture of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.571A	Other intraarticular fracture of lower end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.571B	Other intraarticular fracture of lower end of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.571C	Other intraarticular fracture of lower end of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.572A	Other intraarticular fracture of lower end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.572B	Other intraarticular fracture of lower end of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.572C	Other intraarticular fracture of lower end of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.579A	Other intraarticular fracture of lower end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.579B	Other intraarticular fracture of lower end of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.579C	Other intraarticular fracture of lower end of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.591A	Other fractures of lower end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.591B	Other fractures of lower end of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.591C	Other fractures of lower end of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.592A	Other fractures of lower end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.592B	Other fractures of lower end of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.592C	Other fractures of lower end of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.599A	Other fractures of lower end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.599B	Other fractures of lower end of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.599C	Other fractures of lower end of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.601A	Unspecified fracture of lower end of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.601B	Unspecified fracture of lower end of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.601C	Unspecified fracture of lower end of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.602A	Unspecified fracture of lower end of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.602B	Unspecified fracture of lower end of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.602C	Unspecified fracture of lower end of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.609A	Unspecified fracture of lower end of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.609B	Unspecified fracture of lower end of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.609C	Unspecified fracture of lower end of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.611A	Displaced fracture of right ulna styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.611B	Displaced fracture of right ulna styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.611C	Displaced fracture of right ulna styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.612A	Displaced fracture of left ulna styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.612B	Displaced fracture of left ulna styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.612C	Displaced fracture of left ulna styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.613A	Displaced fracture of unspecified ulna styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.613B	Displaced fracture of unspecified ulna styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.613C	Displaced fracture of unspecified ulna styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.614A	Nondisplaced fracture of right ulna styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.614B	Nondisplaced fracture of right ulna styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.614C	Nondisplaced fracture of right ulna styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.615A	Nondisplaced fracture of left ulna styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.615B	Nondisplaced fracture of left ulna styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.615C	Nondisplaced fracture of left ulna styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.616A	Nondisplaced fracture of unspecified ulna styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.616B	Nondisplaced fracture of unspecified ulna styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.616C	Nondisplaced fracture of unspecified ulna styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.621A	Torus fracture of lower end of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.622A	Torus fracture of lower end of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.629A	Torus fracture of lower end of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.691A	Other fracture of lower end of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.691B	Other fracture of lower end of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.691C	Other fracture of lower end of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.692A	Other fracture of lower end of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.692B	Other fracture of lower end of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.692C	Other fracture of lower end of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.699A	Other fracture of lower end of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.699B	Other fracture of lower end of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.699C	Other fracture of lower end of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.90XA	Unspecified fracture of unspecified forearm, initial encounter for closed fracture	DX	ICD-10-CM
S52.90XB	Unspecified fracture of unspecified forearm, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S52.90XC	Unspecified fracture of unspecified forearm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.91XA	Unspecified fracture of right forearm, initial encounter for closed fracture	DX	ICD-10-CM
S52.91XB	Unspecified fracture of right forearm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.91XC	Unspecified fracture of right forearm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.92XA	Unspecified fracture of left forearm, initial encounter for closed fracture	DX	ICD-10-CM
S52.92XB	Unspecified fracture of left forearm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.92XC	Unspecified fracture of left forearm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S57.00XA	Crushing injury of unspecified elbow, initial encounter	DX	ICD-10-CM
S57.01XA	Crushing injury of right elbow, initial encounter	DX	ICD-10-CM
S57.02XA	Crushing injury of left elbow, initial encounter	DX	ICD-10-CM
S57.80XA	Crushing injury of unspecified forearm, initial encounter	DX	ICD-10-CM
S57.81XA	Crushing injury of right forearm, initial encounter	DX	ICD-10-CM
S57.82XA	Crushing injury of left forearm, initial encounter	DX	ICD-10-CM
S59.001A	Unspecified physeal fracture of lower end of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.002A	Unspecified physeal fracture of lower end of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.009A	Unspecified physeal fracture of lower end of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.011A	Salter-Harris Type I physeal fracture of lower end of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.012A	Salter-Harris Type I physeal fracture of lower end of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.019A	Salter-Harris Type I physeal fracture of lower end of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.021A	Salter-Harris Type II physeal fracture of lower end of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.022A	Salter-Harris Type II physeal fracture of lower end of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.029A	Salter-Harris Type II physeal fracture of lower end of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.031A	Salter-Harris Type III physeal fracture of lower end of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.032A	Salter-Harris Type III physeal fracture of lower end of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.039A	Salter-Harris Type III physeal fracture of lower end of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.041A	Salter-Harris Type IV physeal fracture of lower end of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S59.042A	Salter-Harris Type IV physeal fracture of lower end of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.049A	Salter-Harris Type IV physeal fracture of lower end of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.091A	Other physeal fracture of lower end of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.092A	Other physeal fracture of lower end of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.099A	Other physeal fracture of lower end of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.101A	Unspecified physeal fracture of upper end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.102A	Unspecified physeal fracture of upper end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.109A	Unspecified physeal fracture of upper end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.111A	Salter-Harris Type I physeal fracture of upper end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.112A	Salter-Harris Type I physeal fracture of upper end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.119A	Salter-Harris Type I physeal fracture of upper end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.121A	Salter-Harris Type II physeal fracture of upper end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.122A	Salter-Harris Type II physeal fracture of upper end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.129A	Salter-Harris Type II physeal fracture of upper end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.131A	Salter-Harris Type III physeal fracture of upper end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.132A	Salter-Harris Type III physeal fracture of upper end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.139A	Salter-Harris Type III physeal fracture of upper end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.141A	Salter-Harris Type IV physeal fracture of upper end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.142A	Salter-Harris Type IV physeal fracture of upper end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.149A	Salter-Harris Type IV physeal fracture of upper end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.191A	Other physeal fracture of upper end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.192A	Other physeal fracture of upper end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S59.199A	Other physeal fracture of upper end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.201A	Unspecified physeal fracture of lower end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.202A	Unspecified physeal fracture of lower end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.209A	Unspecified physeal fracture of lower end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.211A	Salter-Harris Type I physeal fracture of lower end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.212A	Salter-Harris Type I physeal fracture of lower end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.219A	Salter-Harris Type I physeal fracture of lower end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.221A	Salter-Harris Type II physeal fracture of lower end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.222A	Salter-Harris Type II physeal fracture of lower end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.229A	Salter-Harris Type II physeal fracture of lower end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.231A	Salter-Harris Type III physeal fracture of lower end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.232A	Salter-Harris Type III physeal fracture of lower end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.239A	Salter-Harris Type III physeal fracture of lower end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.241A	Salter-Harris Type IV physeal fracture of lower end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.242A	Salter-Harris Type IV physeal fracture of lower end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.249A	Salter-Harris Type IV physeal fracture of lower end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.291A	Other physeal fracture of lower end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.292A	Other physeal fracture of lower end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.299A	Other physeal fracture of lower end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S62.90XA	Unspecified fracture of unspecified wrist and hand, initial encounter for closed fracture	DX	ICD-10-CM
S62.90XB	Unspecified fracture of unspecified wrist and hand, initial encounter for open fracture	DX	ICD-10-CM
S67.00XA	Crushing injury of unspecified thumb, initial encounter	DX	ICD-10-CM
S67.01XA	Crushing injury of right thumb, initial encounter	DX	ICD-10-CM
S67.02XA	Crushing injury of left thumb, initial encounter	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S67.10XA	Crushing injury of unspecified finger(s), initial encounter	DX	ICD-10-CM
S67.190A	Crushing injury of right index finger, initial encounter	DX	ICD-10-CM
S67.191A	Crushing injury of left index finger, initial encounter	DX	ICD-10-CM
S67.192A	Crushing injury of right middle finger, initial encounter	DX	ICD-10-CM
S67.193A	Crushing injury of left middle finger, initial encounter	DX	ICD-10-CM
S67.194A	Crushing injury of right ring finger, initial encounter	DX	ICD-10-CM
S67.195A	Crushing injury of left ring finger, initial encounter	DX	ICD-10-CM
S67.196A	Crushing injury of right little finger, initial encounter	DX	ICD-10-CM
S67.197A	Crushing injury of left little finger, initial encounter	DX	ICD-10-CM
S67.198A	Crushing injury of other finger, initial encounter	DX	ICD-10-CM
S67.20XA	Crushing injury of unspecified hand, initial encounter	DX	ICD-10-CM
S67.21XA	Crushing injury of right hand, initial encounter	DX	ICD-10-CM
S67.22XA	Crushing injury of left hand, initial encounter	DX	ICD-10-CM
S67.30XA	Crushing injury of unspecified wrist, initial encounter	DX	ICD-10-CM
S67.31XA	Crushing injury of right wrist, initial encounter	DX	ICD-10-CM
S67.32XA	Crushing injury of left wrist, initial encounter	DX	ICD-10-CM
S67.40XA	Crushing injury of unspecified wrist and hand, initial encounter	DX	ICD-10-CM
S67.41XA	Crushing injury of right wrist and hand, initial encounter	DX	ICD-10-CM
S67.42XA	Crushing injury of left wrist and hand, initial encounter	DX	ICD-10-CM
S67.90XA	Crushing injury of unspecified part(s) of unspecified wrist, hand and fingers, initial encounter	DX	ICD-10-CM
S67.91XA	Crushing injury of unspecified part(s) of right wrist, hand and fingers, initial encounter	DX	ICD-10-CM
S67.92XA	Crushing injury of unspecified part(s) of left wrist, hand and fingers, initial encounter	DX	ICD-10-CM
S72.001A	Fracture of unspecified part of neck of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.001B	Fracture of unspecified part of neck of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.001C	Fracture of unspecified part of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.002A	Fracture of unspecified part of neck of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.002B	Fracture of unspecified part of neck of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.002C	Fracture of unspecified part of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.009A	Fracture of unspecified part of neck of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.009B	Fracture of unspecified part of neck of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.009C	Fracture of unspecified part of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.011A	Unspecified intracapsular fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.011B	Unspecified intracapsular fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.011C	Unspecified intracapsular fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.012A	Unspecified intracapsular fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.012B	Unspecified intracapsular fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.012C	Unspecified intracapsular fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.019A	Unspecified intracapsular fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.019B	Unspecified intracapsular fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.019C	Unspecified intracapsular fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.021A	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.021B	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.021C	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.022A	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.022B	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.022C	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.023A	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.023B	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.023C	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.024A	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.024B	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.024C	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.025A	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.025B	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.025C	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.026A	Nondisplaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.026B	Nondisplaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.026C	Nondisplaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.031A	Displaced midcervical fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.031B	Displaced midcervical fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.031C	Displaced midcervical fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.032A	Displaced midcervical fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.032B	Displaced midcervical fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.032C	Displaced midcervical fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.033A	Displaced midcervical fracture of unspecified femur, initial encounter for closed	DX	ICD-10-CM
S72.033B	Displaced midcervical fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.033C	Displaced midcervical fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.034A	Nondisplaced midcervical fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.034B	Nondisplaced midcervical fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.034C	Nondisplaced midcervical fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.035A	Nondisplaced midcervical fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.035B	Nondisplaced midcervical fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.035C	Nondisplaced midcervical fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.036A	Nondisplaced midcervical fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.036B	Nondisplaced midcervical fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.036C	Nondisplaced midcervical fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.041A	Displaced fracture of base of neck of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.041B	Displaced fracture of base of neck of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.041C	Displaced fracture of base of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.042A	Displaced fracture of base of neck of left femur, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.042B	Displaced fracture of base of neck of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.042C	Displaced fracture of base of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.043A	Displaced fracture of base of neck of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.043B	Displaced fracture of base of neck of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.043C	Displaced fracture of base of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.044A	Nondisplaced fracture of base of neck of right femur, initial encounter for closed	DX	ICD-10-CM
S72.044B	Nondisplaced fracture of base of neck of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.044C	Nondisplaced fracture of base of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.045A	Nondisplaced fracture of base of neck of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.045B	Nondisplaced fracture of base of neck of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.045C	Nondisplaced fracture of base of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.046A	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.046B	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.046C	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.051A	Unspecified fracture of head of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.051B	Unspecified fracture of head of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.051C	Unspecified fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.052A	Unspecified fracture of head of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.052B	Unspecified fracture of head of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.052C	Unspecified fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.059A	Unspecified fracture of head of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.059B	Unspecified fracture of head of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.059C	Unspecified fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.061A	Displaced articular fracture of head of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.061B	Displaced articular fracture of head of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.061C	Displaced articular fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.062A	Displaced articular fracture of head of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.062B	Displaced articular fracture of head of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.062C	Displaced articular fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.063A	Displaced articular fracture of head of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.063B	Displaced articular fracture of head of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.063C	Displaced articular fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.064A	Nondisplaced articular fracture of head of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.064B	Nondisplaced articular fracture of head of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.064C	Nondisplaced articular fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.065A	Nondisplaced articular fracture of head of left femur, initial encounter for closed	DX	ICD-10-CM
S72.065B	Nondisplaced articular fracture of head of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.065C	Nondisplaced articular fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.066A	Nondisplaced articular fracture of head of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.066B	Nondisplaced articular fracture of head of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.066C	Nondisplaced articular fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.091A	Other fracture of head and neck of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.091B	Other fracture of head and neck of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.091C	Other fracture of head and neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.092A	Other fracture of head and neck of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.092B	Other fracture of head and neck of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.092C	Other fracture of head and neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.099A	Other fracture of head and neck of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.099B	Other fracture of head and neck of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.099C	Other fracture of head and neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.101A	Unspecified trochanteric fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.101B	Unspecified trochanteric fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.101C	Unspecified trochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.102A	Unspecified trochanteric fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.102B	Unspecified trochanteric fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.102C	Unspecified trochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.109A	Unspecified trochanteric fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.109B	Unspecified trochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.109C	Unspecified trochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.111A	Displaced fracture of greater trochanter of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.111B	Displaced fracture of greater trochanter of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.111C	Displaced fracture of greater trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.112A	Displaced fracture of greater trochanter of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.112B	Displaced fracture of greater trochanter of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.112C	Displaced fracture of greater trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.113A	Displaced fracture of greater trochanter of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.113B	Displaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.113C	Displaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.114A	Nondisplaced fracture of greater trochanter of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.114B	Nondisplaced fracture of greater trochanter of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.114C	Nondisplaced fracture of greater trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.115A	Nondisplaced fracture of greater trochanter of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.115B	Nondisplaced fracture of greater trochanter of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.115C	Nondisplaced fracture of greater trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.116A	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.116B	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.116C	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.121A	Displaced fracture of lesser trochanter of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.121B	Displaced fracture of lesser trochanter of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.121C	Displaced fracture of lesser trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.122A	Displaced fracture of lesser trochanter of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.122B	Displaced fracture of lesser trochanter of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.122C	Displaced fracture of lesser trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.123A	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.123B	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.123C	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.124A	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.124B	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.124C	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.125A	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.125B	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.125C	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.126A	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.126B	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.126C	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.131A	Displaced apophyseal fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.131B	Displaced apophyseal fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.131C	Displaced apophyseal fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.132A	Displaced apophyseal fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.132B	Displaced apophyseal fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.132C	Displaced apophyseal fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.133A	Displaced apophyseal fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.133B	Displaced apophyseal fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.133C	Displaced apophyseal fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.134A	Nondisplaced apophyseal fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.134B	Nondisplaced apophyseal fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.134C	Nondisplaced apophyseal fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.135A	Nondisplaced apophyseal fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.135B	Nondisplaced apophyseal fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.135C	Nondisplaced apophyseal fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.136A	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.136B	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.136C	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.141A	Displaced intertrochanteric fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.141B	Displaced intertrochanteric fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.141C	Displaced intertrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.142A	Displaced intertrochanteric fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.142B	Displaced intertrochanteric fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.142C	Displaced intertrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.143A	Displaced intertrochanteric fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.143B	Displaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.143C	Displaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.144A	Nondisplaced intertrochanteric fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.144B	Nondisplaced intertrochanteric fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.144C	Nondisplaced intertrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.145A	Nondisplaced intertrochanteric fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.145B	Nondisplaced intertrochanteric fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.145C	Nondisplaced intertrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.146A	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.146B	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.146C	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.21XA	Displaced subtrochanteric fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.21XB	Displaced subtrochanteric fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.21XC	Displaced subtrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.22XA	Displaced subtrochanteric fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.22XB	Displaced subtrochanteric fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.22XC	Displaced subtrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.23XA	Displaced subtrochanteric fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.23XB	Displaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.23XC	Displaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.24XA	Nondisplaced subtrochanteric fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S72.24XB	Nondisplaced subtrochanteric fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.24XC	Nondisplaced subtrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.25XA	Nondisplaced subtrochanteric fracture of left femur, initial encounter for closed	DX	ICD-10-CM
S72.25XB	Nondisplaced subtrochanteric fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.25XC	Nondisplaced subtrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.26XA	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.26XB	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.26XC	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.301A	Unspecified fracture of shaft of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.301B	Unspecified fracture of shaft of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.301C	Unspecified fracture of shaft of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.302A	Unspecified fracture of shaft of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.302B	Unspecified fracture of shaft of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.302C	Unspecified fracture of shaft of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.309A	Unspecified fracture of shaft of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.309B	Unspecified fracture of shaft of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.309C	Unspecified fracture of shaft of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.321A	Displaced transverse fracture of shaft of right femur, initial encounter for closed	DX	ICD-10-CM
S72.321B	Displaced transverse fracture of shaft of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.321C	Displaced transverse fracture of shaft of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.322A	Displaced transverse fracture of shaft of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.322B	Displaced transverse fracture of shaft of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.322C	Displaced transverse fracture of shaft of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.323A	Displaced transverse fracture of shaft of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.323B	Displaced transverse fracture of shaft of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S72.323C	Displaced transverse fracture of shaft of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.324A	Nondisplaced transverse fracture of shaft of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.324B	Nondisplaced transverse fracture of shaft of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.324C	Nondisplaced transverse fracture of shaft of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.325A	Nondisplaced transverse fracture of shaft of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.325B	Nondisplaced transverse fracture of shaft of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.325C	Nondisplaced transverse fracture of shaft of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.326A	Nondisplaced transverse fracture of shaft of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.326B	Nondisplaced transverse fracture of shaft of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.326C	Nondisplaced transverse fracture of shaft of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.331A	Displaced oblique fracture of shaft of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.331B	Displaced oblique fracture of shaft of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.331C	Displaced oblique fracture of shaft of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.332A	Displaced oblique fracture of shaft of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.332B	Displaced oblique fracture of shaft of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.332C	Displaced oblique fracture of shaft of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.333A	Displaced oblique fracture of shaft of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.333B	Displaced oblique fracture of shaft of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.333C	Displaced oblique fracture of shaft of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.334A	Nondisplaced oblique fracture of shaft of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.334B	Nondisplaced oblique fracture of shaft of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.334C	Nondisplaced oblique fracture of shaft of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.335A	Nondisplaced oblique fracture of shaft of left femur, initial encounter for closed	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.335B	Nondisplaced oblique fracture of shaft of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.335C	Nondisplaced oblique fracture of shaft of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.336A	Nondisplaced oblique fracture of shaft of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.336B	Nondisplaced oblique fracture of shaft of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.336C	Nondisplaced oblique fracture of shaft of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.341A	Displaced spiral fracture of shaft of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.341B	Displaced spiral fracture of shaft of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.341C	Displaced spiral fracture of shaft of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.342A	Displaced spiral fracture of shaft of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.342B	Displaced spiral fracture of shaft of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.342C	Displaced spiral fracture of shaft of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.343A	Displaced spiral fracture of shaft of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.343B	Displaced spiral fracture of shaft of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.343C	Displaced spiral fracture of shaft of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.344A	Nondisplaced spiral fracture of shaft of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.344B	Nondisplaced spiral fracture of shaft of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.344C	Nondisplaced spiral fracture of shaft of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.345A	Nondisplaced spiral fracture of shaft of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.345B	Nondisplaced spiral fracture of shaft of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.345C	Nondisplaced spiral fracture of shaft of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.346A	Nondisplaced spiral fracture of shaft of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.346B	Nondisplaced spiral fracture of shaft of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.346C	Nondisplaced spiral fracture of shaft of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.351A	Displaced comminuted fracture of shaft of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.351B	Displaced comminuted fracture of shaft of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.351C	Displaced comminuted fracture of shaft of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.352A	Displaced comminuted fracture of shaft of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.352B	Displaced comminuted fracture of shaft of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.352C	Displaced comminuted fracture of shaft of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.353A	Displaced comminuted fracture of shaft of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.353B	Displaced comminuted fracture of shaft of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.353C	Displaced comminuted fracture of shaft of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.354A	Nondisplaced comminuted fracture of shaft of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.354B	Nondisplaced comminuted fracture of shaft of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.354C	Nondisplaced comminuted fracture of shaft of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.355A	Nondisplaced comminuted fracture of shaft of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.355B	Nondisplaced comminuted fracture of shaft of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.355C	Nondisplaced comminuted fracture of shaft of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.356A	Nondisplaced comminuted fracture of shaft of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.356B	Nondisplaced comminuted fracture of shaft of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.356C	Nondisplaced comminuted fracture of shaft of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.361A	Displaced segmental fracture of shaft of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.361B	Displaced segmental fracture of shaft of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.361C	Displaced segmental fracture of shaft of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.362A	Displaced segmental fracture of shaft of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.362B	Displaced segmental fracture of shaft of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.362C	Displaced segmental fracture of shaft of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.363A	Displaced segmental fracture of shaft of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.363B	Displaced segmental fracture of shaft of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.363C	Displaced segmental fracture of shaft of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.364A	Nondisplaced segmental fracture of shaft of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.364B	Nondisplaced segmental fracture of shaft of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.364C	Nondisplaced segmental fracture of shaft of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.365A	Nondisplaced segmental fracture of shaft of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.365B	Nondisplaced segmental fracture of shaft of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.365C	Nondisplaced segmental fracture of shaft of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.366A	Nondisplaced segmental fracture of shaft of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.366B	Nondisplaced segmental fracture of shaft of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.366C	Nondisplaced segmental fracture of shaft of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.391A	Other fracture of shaft of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.391B	Other fracture of shaft of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.391C	Other fracture of shaft of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.392A	Other fracture of shaft of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.392B	Other fracture of shaft of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.392C	Other fracture of shaft of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.399A	Other fracture of shaft of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.399B	Other fracture of shaft of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.399C	Other fracture of shaft of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.401A	Unspecified fracture of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.401B	Unspecified fracture of lower end of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S72.401C	Unspecified fracture of lower end of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.402A	Unspecified fracture of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.402B	Unspecified fracture of lower end of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.402C	Unspecified fracture of lower end of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.409A	Unspecified fracture of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.409B	Unspecified fracture of lower end of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.409C	Unspecified fracture of lower end of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.411A	Displaced unspecified condyle fracture of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.411B	Displaced unspecified condyle fracture of lower end of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.411C	Displaced unspecified condyle fracture of lower end of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.412A	Displaced unspecified condyle fracture of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.412B	Displaced unspecified condyle fracture of lower end of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.412C	Displaced unspecified condyle fracture of lower end of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.413A	Displaced unspecified condyle fracture of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.413B	Displaced unspecified condyle fracture of lower end of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.413C	Displaced unspecified condyle fracture of lower end of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.414A	Nondisplaced unspecified condyle fracture of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.414B	Nondisplaced unspecified condyle fracture of lower end of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.414C	Nondisplaced unspecified condyle fracture of lower end of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.415A	Nondisplaced unspecified condyle fracture of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.415B	Nondisplaced unspecified condyle fracture of lower end of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.415C	Nondisplaced unspecified condyle fracture of lower end of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.416A	Nondisplaced unspecified condyle fracture of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.416B	Nondisplaced unspecified condyle fracture of lower end of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.416C	Nondisplaced unspecified condyle fracture of lower end of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.421A	Displaced fracture of lateral condyle of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.421B	Displaced fracture of lateral condyle of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.421C	Displaced fracture of lateral condyle of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.422A	Displaced fracture of lateral condyle of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.422B	Displaced fracture of lateral condyle of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.422C	Displaced fracture of lateral condyle of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.423A	Displaced fracture of lateral condyle of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.423B	Displaced fracture of lateral condyle of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.423C	Displaced fracture of lateral condyle of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.424A	Nondisplaced fracture of lateral condyle of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.424B	Nondisplaced fracture of lateral condyle of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.424C	Nondisplaced fracture of lateral condyle of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.425A	Nondisplaced fracture of lateral condyle of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.425B	Nondisplaced fracture of lateral condyle of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.425C	Nondisplaced fracture of lateral condyle of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.426A	Nondisplaced fracture of lateral condyle of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.426B	Nondisplaced fracture of lateral condyle of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.426C	Nondisplaced fracture of lateral condyle of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.431A	Displaced fracture of medial condyle of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.431B	Displaced fracture of medial condyle of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.431C	Displaced fracture of medial condyle of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.432A	Displaced fracture of medial condyle of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.432B	Displaced fracture of medial condyle of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.432C	Displaced fracture of medial condyle of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.433A	Displaced fracture of medial condyle of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.433B	Displaced fracture of medial condyle of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.433C	Displaced fracture of medial condyle of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.434A	Nondisplaced fracture of medial condyle of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.434B	Nondisplaced fracture of medial condyle of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.434C	Nondisplaced fracture of medial condyle of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.435A	Nondisplaced fracture of medial condyle of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.435B	Nondisplaced fracture of medial condyle of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.435C	Nondisplaced fracture of medial condyle of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.436A	Nondisplaced fracture of medial condyle of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.436B	Nondisplaced fracture of medial condyle of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.436C	Nondisplaced fracture of medial condyle of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.441A	Displaced fracture of lower epiphysis (separation) of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.441B	Displaced fracture of lower epiphysis (separation) of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.441C	Displaced fracture of lower epiphysis (separation) of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.442A	Displaced fracture of lower epiphysis (separation) of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.442B	Displaced fracture of lower epiphysis (separation) of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.442C	Displaced fracture of lower epiphysis (separation) of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.443A	Displaced fracture of lower epiphysis (separation) of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.443B	Displaced fracture of lower epiphysis (separation) of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.443C	Displaced fracture of lower epiphysis (separation) of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.444A	Nondisplaced fracture of lower epiphysis (separation) of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.444B	Nondisplaced fracture of lower epiphysis (separation) of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.444C	Nondisplaced fracture of lower epiphysis (separation) of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.445A	Nondisplaced fracture of lower epiphysis (separation) of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.445B	Nondisplaced fracture of lower epiphysis (separation) of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.445C	Nondisplaced fracture of lower epiphysis (separation) of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.446A	Nondisplaced fracture of lower epiphysis (separation) of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.446B	Nondisplaced fracture of lower epiphysis (separation) of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.446C	Nondisplaced fracture of lower epiphysis (separation) of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.451A	Displaced supracondylar fracture without intracondylar extension of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.451B	Displaced supracondylar fracture without intracondylar extension of lower end of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.451C	Displaced supracondylar fracture without intracondylar extension of lower end of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.452A	Displaced supracondylar fracture without intracondylar extension of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.452B	Displaced supracondylar fracture without intracondylar extension of lower end of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.452C	Displaced supracondylar fracture without intracondylar extension of lower end of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.453A	Displaced supracondylar fracture without intracondylar extension of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.453B	Displaced supracondylar fracture without intracondylar extension of lower end of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.453C	Displaced supracondylar fracture without intracondylar extension of lower end of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S72.454A	Nondisplaced supracondylar fracture without intracondylar extension of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.454B	Nondisplaced supracondylar fracture without intracondylar extension of lower end of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.454C	Nondisplaced supracondylar fracture without intracondylar extension of lower end of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.455A	Nondisplaced supracondylar fracture without intracondylar extension of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.455B	Nondisplaced supracondylar fracture without intracondylar extension of lower end of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.455C	Nondisplaced supracondylar fracture without intracondylar extension of lower end of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.456A	Nondisplaced supracondylar fracture without intracondylar extension of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.456B	Nondisplaced supracondylar fracture without intracondylar extension of lower end of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.456C	Nondisplaced supracondylar fracture without intracondylar extension of lower end of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.461A	Displaced supracondylar fracture with intracondylar extension of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.461B	Displaced supracondylar fracture with intracondylar extension of lower end of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.461C	Displaced supracondylar fracture with intracondylar extension of lower end of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.462A	Displaced supracondylar fracture with intracondylar extension of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.462B	Displaced supracondylar fracture with intracondylar extension of lower end of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.462C	Displaced supracondylar fracture with intracondylar extension of lower end of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.463A	Displaced supracondylar fracture with intracondylar extension of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.463B	Displaced supracondylar fracture with intracondylar extension of lower end of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.463C	Displaced supracondylar fracture with intracondylar extension of lower end of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.464A	Nondisplaced supracondylar fracture with intracondylar extension of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.464B	Nondisplaced supracondylar fracture with intracondylar extension of lower end of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.464C	Nondisplaced supracondylar fracture with intracondylar extension of lower end of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S72.465A	Nondisplaced supracondylar fracture with intracondylar extension of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.465B	Nondisplaced supracondylar fracture with intracondylar extension of lower end of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.465C	Nondisplaced supracondylar fracture with intracondylar extension of lower end of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.466A	Nondisplaced supracondylar fracture with intracondylar extension of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.466B	Nondisplaced supracondylar fracture with intracondylar extension of lower end of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.466C	Nondisplaced supracondylar fracture with intracondylar extension of lower end of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.471A	Torus fracture of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.472A	Torus fracture of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.479A	Torus fracture of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.491A	Other fracture of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.491B	Other fracture of lower end of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.491C	Other fracture of lower end of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.492A	Other fracture of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.492B	Other fracture of lower end of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.492C	Other fracture of lower end of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.499A	Other fracture of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.499B	Other fracture of lower end of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.499C	Other fracture of lower end of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.8X1A	Other fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.8X1B	Other fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.8X1C	Other fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.8X2A	Other fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.8X2B	Other fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.8X2C	Other fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.8X9A	Other fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.8X9B	Other fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.8X9C	Other fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.90XA	Unspecified fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.90XB	Unspecified fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.90XC	Unspecified fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S72.90XE	Unspecified fracture of unspecified femur, subsequent encounter for open fracture type I or II with routine healing	DX	ICD-10-CM
S72.91XA	Unspecified fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.91XB	Unspecified fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.91XC	Unspecified fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.91XE	Unspecified fracture of right femur, subsequent encounter for open fracture type I or II with routine healing	DX	ICD-10-CM
S72.92XA	Unspecified fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.92XB	Unspecified fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.92XC	Unspecified fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.92XE	Unspecified fracture of left femur, subsequent encounter for open fracture type I or II with routine healing	DX	ICD-10-CM
S77.00XA	Crushing injury of unspecified hip, initial encounter	DX	ICD-10-CM
S77.01XA	Crushing injury of right hip, initial encounter	DX	ICD-10-CM
S77.02XA	Crushing injury of left hip, initial encounter	DX	ICD-10-CM
S77.10XA	Crushing injury of unspecified thigh, initial encounter	DX	ICD-10-CM
S77.11XA	Crushing injury of right thigh, initial encounter	DX	ICD-10-CM
S77.12XA	Crushing injury of left thigh, initial encounter	DX	ICD-10-CM
S77.20XA	Crushing injury of unspecified hip with thigh, initial encounter	DX	ICD-10-CM
S77.21XA	Crushing injury of right hip with thigh, initial encounter	DX	ICD-10-CM
S77.22XA	Crushing injury of left hip with thigh, initial encounter	DX	ICD-10-CM
S79.001A	Unspecified physeal fracture of upper end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.002A	Unspecified physeal fracture of upper end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.009A	Unspecified physeal fracture of upper end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.011A	Salter-Harris Type I physeal fracture of upper end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.012A	Salter-Harris Type I physeal fracture of upper end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.019A	Salter-Harris Type I physeal fracture of upper end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.091A	Other physeal fracture of upper end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.092A	Other physeal fracture of upper end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.099A	Other physeal fracture of upper end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.101A	Unspecified physeal fracture of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.102A	Unspecified physeal fracture of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S79.109A	Unspecified physeal fracture of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.111A	Salter-Harris Type I physeal fracture of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.112A	Salter-Harris Type I physeal fracture of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.119A	Salter-Harris Type I physeal fracture of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.121A	Salter-Harris Type II physeal fracture of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.122A	Salter-Harris Type II physeal fracture of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.129A	Salter-Harris Type II physeal fracture of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.131A	Salter-Harris Type III physeal fracture of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.132A	Salter-Harris Type III physeal fracture of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.139A	Salter-Harris Type III physeal fracture of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.141A	Salter-Harris Type IV physeal fracture of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.142A	Salter-Harris Type IV physeal fracture of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.149A	Salter-Harris Type IV physeal fracture of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.191A	Other physeal fracture of lower end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.192A	Other physeal fracture of lower end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.199A	Other physeal fracture of lower end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S82.001A	Unspecified fracture of right patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.001B	Unspecified fracture of right patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.001C	Unspecified fracture of right patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.002A	Unspecified fracture of left patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.002B	Unspecified fracture of left patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.002C	Unspecified fracture of left patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.009A	Unspecified fracture of unspecified patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.009B	Unspecified fracture of unspecified patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.009C	Unspecified fracture of unspecified patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.011A	Displaced osteochondral fracture of right patella, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.011B	Displaced osteochondral fracture of right patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.011C	Displaced osteochondral fracture of right patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.012A	Displaced osteochondral fracture of left patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.012B	Displaced osteochondral fracture of left patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.012C	Displaced osteochondral fracture of left patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.013A	Displaced osteochondral fracture of unspecified patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.013B	Displaced osteochondral fracture of unspecified patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.013C	Displaced osteochondral fracture of unspecified patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.014A	Nondisplaced osteochondral fracture of right patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.014B	Nondisplaced osteochondral fracture of right patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.014C	Nondisplaced osteochondral fracture of right patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.015A	Nondisplaced osteochondral fracture of left patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.015B	Nondisplaced osteochondral fracture of left patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.015C	Nondisplaced osteochondral fracture of left patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.016A	Nondisplaced osteochondral fracture of unspecified patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.016B	Nondisplaced osteochondral fracture of unspecified patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.016C	Nondisplaced osteochondral fracture of unspecified patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.021A	Displaced longitudinal fracture of right patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.021B	Displaced longitudinal fracture of right patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.021C	Displaced longitudinal fracture of right patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.022A	Displaced longitudinal fracture of left patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.022B	Displaced longitudinal fracture of left patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.022C	Displaced longitudinal fracture of left patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.023A	Displaced longitudinal fracture of unspecified patella, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.023B	Displaced longitudinal fracture of unspecified patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.023C	Displaced longitudinal fracture of unspecified patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.024A	Nondisplaced longitudinal fracture of right patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.024B	Nondisplaced longitudinal fracture of right patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.024C	Nondisplaced longitudinal fracture of right patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.025A	Nondisplaced longitudinal fracture of left patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.025B	Nondisplaced longitudinal fracture of left patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.025C	Nondisplaced longitudinal fracture of left patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.026A	Nondisplaced longitudinal fracture of unspecified patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.026B	Nondisplaced longitudinal fracture of unspecified patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.026C	Nondisplaced longitudinal fracture of unspecified patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.031A	Displaced transverse fracture of right patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.031B	Displaced transverse fracture of right patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.031C	Displaced transverse fracture of right patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.032A	Displaced transverse fracture of left patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.032B	Displaced transverse fracture of left patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.032C	Displaced transverse fracture of left patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.033A	Displaced transverse fracture of unspecified patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.033B	Displaced transverse fracture of unspecified patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.033C	Displaced transverse fracture of unspecified patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.034A	Nondisplaced transverse fracture of right patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.034B	Nondisplaced transverse fracture of right patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.034C	Nondisplaced transverse fracture of right patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.035A	Nondisplaced transverse fracture of left patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.035B	Nondisplaced transverse fracture of left patella, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.035C	Nondisplaced transverse fracture of left patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.036A	Nondisplaced transverse fracture of unspecified patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.036B	Nondisplaced transverse fracture of unspecified patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.036C	Nondisplaced transverse fracture of unspecified patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.041A	Displaced comminuted fracture of right patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.041B	Displaced comminuted fracture of right patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.041C	Displaced comminuted fracture of right patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.042A	Displaced comminuted fracture of left patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.042B	Displaced comminuted fracture of left patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.042C	Displaced comminuted fracture of left patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.043A	Displaced comminuted fracture of unspecified patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.043B	Displaced comminuted fracture of unspecified patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.043C	Displaced comminuted fracture of unspecified patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.044A	Nondisplaced comminuted fracture of right patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.044B	Nondisplaced comminuted fracture of right patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.044C	Nondisplaced comminuted fracture of right patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.045A	Nondisplaced comminuted fracture of left patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.045B	Nondisplaced comminuted fracture of left patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.045C	Nondisplaced comminuted fracture of left patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.046A	Nondisplaced comminuted fracture of unspecified patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.046B	Nondisplaced comminuted fracture of unspecified patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.046C	Nondisplaced comminuted fracture of unspecified patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.091A	Other fracture of right patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.091B	Other fracture of right patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.091C	Other fracture of right patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.092A	Other fracture of left patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.092B	Other fracture of left patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.092C	Other fracture of left patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.099A	Other fracture of unspecified patella, initial encounter for closed fracture	DX	ICD-10-CM
S82.099B	Other fracture of unspecified patella, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.099C	Other fracture of unspecified patella, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.101A	Unspecified fracture of upper end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.101B	Unspecified fracture of upper end of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.101C	Unspecified fracture of upper end of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.102A	Unspecified fracture of upper end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.102B	Unspecified fracture of upper end of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.102C	Unspecified fracture of upper end of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.109A	Unspecified fracture of upper end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.109B	Unspecified fracture of upper end of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.109C	Unspecified fracture of upper end of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.111A	Displaced fracture of right tibial spine, initial encounter for closed fracture	DX	ICD-10-CM
S82.111B	Displaced fracture of right tibial spine, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.111C	Displaced fracture of right tibial spine, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.112A	Displaced fracture of left tibial spine, initial encounter for closed fracture	DX	ICD-10-CM
S82.112B	Displaced fracture of left tibial spine, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.112C	Displaced fracture of left tibial spine, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.113A	Displaced fracture of unspecified tibial spine, initial encounter for closed fracture	DX	ICD-10-CM
S82.113B	Displaced fracture of unspecified tibial spine, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.113C	Displaced fracture of unspecified tibial spine, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.114A	Nondisplaced fracture of right tibial spine, initial encounter for closed fracture	DX	ICD-10-CM
S82.114B	Nondisplaced fracture of right tibial spine, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.114C	Nondisplaced fracture of right tibial spine, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.115A	Nondisplaced fracture of left tibial spine, initial encounter for closed fracture	DX	ICD-10-CM
S82.115B	Nondisplaced fracture of left tibial spine, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.115C	Nondisplaced fracture of left tibial spine, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.116A	Nondisplaced fracture of unspecified tibial spine, initial encounter for closed fracture	DX	ICD-10-CM
S82.116B	Nondisplaced fracture of unspecified tibial spine, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.116C	Nondisplaced fracture of unspecified tibial spine, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.121A	Displaced fracture of lateral condyle of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.121B	Displaced fracture of lateral condyle of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.121C	Displaced fracture of lateral condyle of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.122A	Displaced fracture of lateral condyle of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.122B	Displaced fracture of lateral condyle of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.122C	Displaced fracture of lateral condyle of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.123A	Displaced fracture of lateral condyle of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.123B	Displaced fracture of lateral condyle of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.123C	Displaced fracture of lateral condyle of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.124A	Nondisplaced fracture of lateral condyle of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.124B	Nondisplaced fracture of lateral condyle of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.124C	Nondisplaced fracture of lateral condyle of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.125A	Nondisplaced fracture of lateral condyle of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.125B	Nondisplaced fracture of lateral condyle of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.125C	Nondisplaced fracture of lateral condyle of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.126A	Nondisplaced fracture of lateral condyle of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.126B	Nondisplaced fracture of lateral condyle of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.126C	Nondisplaced fracture of lateral condyle of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.131A	Displaced fracture of medial condyle of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.131B	Displaced fracture of medial condyle of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.131C	Displaced fracture of medial condyle of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.132A	Displaced fracture of medial condyle of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.132B	Displaced fracture of medial condyle of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.132C	Displaced fracture of medial condyle of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.133A	Displaced fracture of medial condyle of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.133B	Displaced fracture of medial condyle of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.133C	Displaced fracture of medial condyle of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.134A	Nondisplaced fracture of medial condyle of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.134B	Nondisplaced fracture of medial condyle of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.134C	Nondisplaced fracture of medial condyle of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.135A	Nondisplaced fracture of medial condyle of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.135B	Nondisplaced fracture of medial condyle of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.135C	Nondisplaced fracture of medial condyle of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.136A	Nondisplaced fracture of medial condyle of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.136B	Nondisplaced fracture of medial condyle of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.136C	Nondisplaced fracture of medial condyle of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.141A	Displaced bicondylar fracture of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.141B	Displaced bicondylar fracture of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.141C	Displaced bicondylar fracture of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.142A	Displaced bicondylar fracture of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.142B	Displaced bicondylar fracture of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.142C	Displaced bicondylar fracture of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.143A	Displaced bicondylar fracture of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.143B	Displaced bicondylar fracture of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.143C	Displaced bicondylar fracture of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.144A	Nondisplaced bicondylar fracture of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.144B	Nondisplaced bicondylar fracture of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.144C	Nondisplaced bicondylar fracture of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.145A	Nondisplaced bicondylar fracture of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.145B	Nondisplaced bicondylar fracture of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.145C	Nondisplaced bicondylar fracture of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.146A	Nondisplaced bicondylar fracture of unspecified tibia, initial encounter for closed	DX	ICD-10-CM
S82.146B	Nondisplaced bicondylar fracture of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.146C	Nondisplaced bicondylar fracture of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.151A	Displaced fracture of right tibial tuberosity, initial encounter for closed fracture	DX	ICD-10-CM
S82.151B	Displaced fracture of right tibial tuberosity, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.151C	Displaced fracture of right tibial tuberosity, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.152A	Displaced fracture of left tibial tuberosity, initial encounter for closed fracture	DX	ICD-10-CM
S82.152B	Displaced fracture of left tibial tuberosity, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.152C	Displaced fracture of left tibial tuberosity, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.153A	Displaced fracture of unspecified tibial tuberosity, initial encounter for closed fracture	DX	ICD-10-CM
S82.153B	Displaced fracture of unspecified tibial tuberosity, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.153C	Displaced fracture of unspecified tibial tuberosity, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.154A	Nondisplaced fracture of right tibial tuberosity, initial encounter for closed fracture	DX	ICD-10-CM
S82.154B	Nondisplaced fracture of right tibial tuberosity, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.154C	Nondisplaced fracture of right tibial tuberosity, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.155A	Nondisplaced fracture of left tibial tuberosity, initial encounter for closed fracture	DX	ICD-10-CM
S82.155B	Nondisplaced fracture of left tibial tuberosity, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.155C	Nondisplaced fracture of left tibial tuberosity, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.156A	Nondisplaced fracture of unspecified tibial tuberosity, initial encounter for closed fracture	DX	ICD-10-CM
S82.156B	Nondisplaced fracture of unspecified tibial tuberosity, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.156C	Nondisplaced fracture of unspecified tibial tuberosity, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.161A	Torus fracture of upper end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.162A	Torus fracture of upper end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.169A	Torus fracture of upper end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.191A	Other fracture of upper end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.191B	Other fracture of upper end of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.191C	Other fracture of upper end of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.192A	Other fracture of upper end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.192B	Other fracture of upper end of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.192C	Other fracture of upper end of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.199A	Other fracture of upper end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.199B	Other fracture of upper end of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.199C	Other fracture of upper end of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.201A	Unspecified fracture of shaft of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.201B	Unspecified fracture of shaft of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.201C	Unspecified fracture of shaft of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.202A	Unspecified fracture of shaft of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.202B	Unspecified fracture of shaft of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.202C	Unspecified fracture of shaft of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.209A	Unspecified fracture of shaft of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.209B	Unspecified fracture of shaft of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.209C	Unspecified fracture of shaft of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.221A	Displaced transverse fracture of shaft of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.221B	Displaced transverse fracture of shaft of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.221C	Displaced transverse fracture of shaft of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.222A	Displaced transverse fracture of shaft of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.222B	Displaced transverse fracture of shaft of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.222C	Displaced transverse fracture of shaft of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.223A	Displaced transverse fracture of shaft of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.223B	Displaced transverse fracture of shaft of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.223C	Displaced transverse fracture of shaft of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.224A	Nondisplaced transverse fracture of shaft of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.224B	Nondisplaced transverse fracture of shaft of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.224C	Nondisplaced transverse fracture of shaft of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.225A	Nondisplaced transverse fracture of shaft of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.225B	Nondisplaced transverse fracture of shaft of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.225C	Nondisplaced transverse fracture of shaft of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.226A	Nondisplaced transverse fracture of shaft of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.226B	Nondisplaced transverse fracture of shaft of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.226C	Nondisplaced transverse fracture of shaft of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.231A	Displaced oblique fracture of shaft of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.231B	Displaced oblique fracture of shaft of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.231C	Displaced oblique fracture of shaft of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.232A	Displaced oblique fracture of shaft of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.232B	Displaced oblique fracture of shaft of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.232C	Displaced oblique fracture of shaft of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.233A	Displaced oblique fracture of shaft of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.233B	Displaced oblique fracture of shaft of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.233C	Displaced oblique fracture of shaft of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.234A	Nondisplaced oblique fracture of shaft of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.234B	Nondisplaced oblique fracture of shaft of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.234C	Nondisplaced oblique fracture of shaft of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.235A	Nondisplaced oblique fracture of shaft of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.235B	Nondisplaced oblique fracture of shaft of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.235C	Nondisplaced oblique fracture of shaft of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.236A	Nondisplaced oblique fracture of shaft of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.236B	Nondisplaced oblique fracture of shaft of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.236C	Nondisplaced oblique fracture of shaft of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.241A	Displaced spiral fracture of shaft of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.241B	Displaced spiral fracture of shaft of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.241C	Displaced spiral fracture of shaft of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.242A	Displaced spiral fracture of shaft of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.242B	Displaced spiral fracture of shaft of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.242C	Displaced spiral fracture of shaft of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.243A	Displaced spiral fracture of shaft of unspecified tibia, initial encounter for closed	DX	ICD-10-CM
S82.243B	Displaced spiral fracture of shaft of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.243C	Displaced spiral fracture of shaft of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.244A	Nondisplaced spiral fracture of shaft of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.244B	Nondisplaced spiral fracture of shaft of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.244C	Nondisplaced spiral fracture of shaft of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.245A	Nondisplaced spiral fracture of shaft of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.245B	Nondisplaced spiral fracture of shaft of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.245C	Nondisplaced spiral fracture of shaft of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.246A	Nondisplaced spiral fracture of shaft of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.246B	Nondisplaced spiral fracture of shaft of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.246C	Nondisplaced spiral fracture of shaft of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.251A	Displaced comminuted fracture of shaft of right tibia, initial encounter for closed	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.251B	Displaced comminuted fracture of shaft of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.251C	Displaced comminuted fracture of shaft of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.252A	Displaced comminuted fracture of shaft of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.252B	Displaced comminuted fracture of shaft of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.252C	Displaced comminuted fracture of shaft of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.253A	Displaced comminuted fracture of shaft of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.253B	Displaced comminuted fracture of shaft of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.253C	Displaced comminuted fracture of shaft of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.254A	Nondisplaced comminuted fracture of shaft of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.254B	Nondisplaced comminuted fracture of shaft of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.254C	Nondisplaced comminuted fracture of shaft of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.255A	Nondisplaced comminuted fracture of shaft of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.255B	Nondisplaced comminuted fracture of shaft of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.255C	Nondisplaced comminuted fracture of shaft of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.256A	Nondisplaced comminuted fracture of shaft of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.256B	Nondisplaced comminuted fracture of shaft of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.256C	Nondisplaced comminuted fracture of shaft of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.261A	Displaced segmental fracture of shaft of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.261B	Displaced segmental fracture of shaft of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.261C	Displaced segmental fracture of shaft of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.262A	Displaced segmental fracture of shaft of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.262B	Displaced segmental fracture of shaft of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.262C	Displaced segmental fracture of shaft of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.263A	Displaced segmental fracture of shaft of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.263B	Displaced segmental fracture of shaft of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.263C	Displaced segmental fracture of shaft of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.264A	Nondisplaced segmental fracture of shaft of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.264B	Nondisplaced segmental fracture of shaft of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.264C	Nondisplaced segmental fracture of shaft of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.265A	Nondisplaced segmental fracture of shaft of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.265B	Nondisplaced segmental fracture of shaft of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.265C	Nondisplaced segmental fracture of shaft of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.266A	Nondisplaced segmental fracture of shaft of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.266B	Nondisplaced segmental fracture of shaft of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.266C	Nondisplaced segmental fracture of shaft of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.291A	Other fracture of shaft of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.291B	Other fracture of shaft of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.291C	Other fracture of shaft of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.292A	Other fracture of shaft of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.292B	Other fracture of shaft of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.292C	Other fracture of shaft of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.299A	Other fracture of shaft of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.299B	Other fracture of shaft of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.299C	Other fracture of shaft of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.301A	Unspecified fracture of lower end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.301B	Unspecified fracture of lower end of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.301C	Unspecified fracture of lower end of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.302A	Unspecified fracture of lower end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.302B	Unspecified fracture of lower end of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.302C	Unspecified fracture of lower end of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.309A	Unspecified fracture of lower end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.309B	Unspecified fracture of lower end of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.309C	Unspecified fracture of lower end of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.311A	Torus fracture of lower end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.312A	Torus fracture of lower end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.319A	Torus fracture of lower end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.391A	Other fracture of lower end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.391B	Other fracture of lower end of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.391C	Other fracture of lower end of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.392A	Other fracture of lower end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.392B	Other fracture of lower end of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.392C	Other fracture of lower end of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.399A	Other fracture of lower end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.399B	Other fracture of lower end of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.399C	Other fracture of lower end of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.401A	Unspecified fracture of shaft of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.401B	Unspecified fracture of shaft of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.401C	Unspecified fracture of shaft of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.402A	Unspecified fracture of shaft of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.402B	Unspecified fracture of shaft of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.402C	Unspecified fracture of shaft of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.409A	Unspecified fracture of shaft of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.409B	Unspecified fracture of shaft of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.409C	Unspecified fracture of shaft of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.421A	Displaced transverse fracture of shaft of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.421B	Displaced transverse fracture of shaft of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.421C	Displaced transverse fracture of shaft of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.422A	Displaced transverse fracture of shaft of left fibula, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.422B	Displaced transverse fracture of shaft of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.422C	Displaced transverse fracture of shaft of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.423A	Displaced transverse fracture of shaft of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.423B	Displaced transverse fracture of shaft of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.423C	Displaced transverse fracture of shaft of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.424A	Nondisplaced transverse fracture of shaft of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.424B	Nondisplaced transverse fracture of shaft of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.424C	Nondisplaced transverse fracture of shaft of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.425A	Nondisplaced transverse fracture of shaft of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.425B	Nondisplaced transverse fracture of shaft of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.425C	Nondisplaced transverse fracture of shaft of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.426A	Nondisplaced transverse fracture of shaft of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.426B	Nondisplaced transverse fracture of shaft of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.426C	Nondisplaced transverse fracture of shaft of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.431A	Displaced oblique fracture of shaft of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.431B	Displaced oblique fracture of shaft of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.431C	Displaced oblique fracture of shaft of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.432A	Displaced oblique fracture of shaft of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.432B	Displaced oblique fracture of shaft of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.432C	Displaced oblique fracture of shaft of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.433A	Displaced oblique fracture of shaft of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.433B	Displaced oblique fracture of shaft of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.433C	Displaced oblique fracture of shaft of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.434A	Nondisplaced oblique fracture of shaft of right fibula, initial encounter for closed	DX	ICD-10-CM
S82.434B	Nondisplaced oblique fracture of shaft of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.434C	Nondisplaced oblique fracture of shaft of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.435A	Nondisplaced oblique fracture of shaft of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.435B	Nondisplaced oblique fracture of shaft of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.435C	Nondisplaced oblique fracture of shaft of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.436A	Nondisplaced oblique fracture of shaft of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.436B	Nondisplaced oblique fracture of shaft of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.436C	Nondisplaced oblique fracture of shaft of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.441A	Displaced spiral fracture of shaft of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.441B	Displaced spiral fracture of shaft of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.441C	Displaced spiral fracture of shaft of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.442A	Displaced spiral fracture of shaft of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.442B	Displaced spiral fracture of shaft of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.442C	Displaced spiral fracture of shaft of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.443A	Displaced spiral fracture of shaft of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.443B	Displaced spiral fracture of shaft of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.443C	Displaced spiral fracture of shaft of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.444A	Nondisplaced spiral fracture of shaft of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.444B	Nondisplaced spiral fracture of shaft of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.444C	Nondisplaced spiral fracture of shaft of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.445A	Nondisplaced spiral fracture of shaft of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.445B	Nondisplaced spiral fracture of shaft of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.445C	Nondisplaced spiral fracture of shaft of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.446A	Nondisplaced spiral fracture of shaft of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.446B	Nondisplaced spiral fracture of shaft of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.446C	Nondisplaced spiral fracture of shaft of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.451A	Displaced comminuted fracture of shaft of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.451B	Displaced comminuted fracture of shaft of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.451C	Displaced comminuted fracture of shaft of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.452A	Displaced comminuted fracture of shaft of left fibula, initial encounter for closed	DX	ICD-10-CM
S82.452B	Displaced comminuted fracture of shaft of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.452C	Displaced comminuted fracture of shaft of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.453A	Displaced comminuted fracture of shaft of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.453B	Displaced comminuted fracture of shaft of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.453C	Displaced comminuted fracture of shaft of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.454A	Nondisplaced comminuted fracture of shaft of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.454B	Nondisplaced comminuted fracture of shaft of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.454C	Nondisplaced comminuted fracture of shaft of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.455A	Nondisplaced comminuted fracture of shaft of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.455B	Nondisplaced comminuted fracture of shaft of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.455C	Nondisplaced comminuted fracture of shaft of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.456A	Nondisplaced comminuted fracture of shaft of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.456B	Nondisplaced comminuted fracture of shaft of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.456C	Nondisplaced comminuted fracture of shaft of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.461A	Displaced segmental fracture of shaft of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.461B	Displaced segmental fracture of shaft of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.461C	Displaced segmental fracture of shaft of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.462A	Displaced segmental fracture of shaft of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.462B	Displaced segmental fracture of shaft of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.462C	Displaced segmental fracture of shaft of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.463A	Displaced segmental fracture of shaft of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.463B	Displaced segmental fracture of shaft of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.463C	Displaced segmental fracture of shaft of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.464A	Nondisplaced segmental fracture of shaft of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.464B	Nondisplaced segmental fracture of shaft of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.464C	Nondisplaced segmental fracture of shaft of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.465A	Nondisplaced segmental fracture of shaft of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.465B	Nondisplaced segmental fracture of shaft of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.465C	Nondisplaced segmental fracture of shaft of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.466A	Nondisplaced segmental fracture of shaft of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.466B	Nondisplaced segmental fracture of shaft of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.466C	Nondisplaced segmental fracture of shaft of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.491A	Other fracture of shaft of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.491B	Other fracture of shaft of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.491C	Other fracture of shaft of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.492A	Other fracture of shaft of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.492B	Other fracture of shaft of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.492C	Other fracture of shaft of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.499A	Other fracture of shaft of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.499B	Other fracture of shaft of unspecified fibula, initial encounter for open fracture type I or	DX	ICD-10-CM
S82.499C	Other fracture of shaft of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.51XA	Displaced fracture of medial malleolus of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.51XB	Displaced fracture of medial malleolus of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.51XC	Displaced fracture of medial malleolus of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.52XA	Displaced fracture of medial malleolus of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.52XB	Displaced fracture of medial malleolus of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.52XC	Displaced fracture of medial malleolus of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.53XA	Displaced fracture of medial malleolus of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.53XB	Displaced fracture of medial malleolus of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.53XC	Displaced fracture of medial malleolus of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.54XA	Nondisplaced fracture of medial malleolus of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.54XB	Nondisplaced fracture of medial malleolus of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.54XC	Nondisplaced fracture of medial malleolus of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.55XA	Nondisplaced fracture of medial malleolus of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.55XB	Nondisplaced fracture of medial malleolus of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.55XC	Nondisplaced fracture of medial malleolus of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.56XA	Nondisplaced fracture of medial malleolus of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.56XB	Nondisplaced fracture of medial malleolus of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.56XC	Nondisplaced fracture of medial malleolus of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.61XA	Displaced fracture of lateral malleolus of right fibula, initial encounter for closed	DX	ICD-10-CM
S82.61XB	Displaced fracture of lateral malleolus of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.61XC	Displaced fracture of lateral malleolus of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.62XA	Displaced fracture of lateral malleolus of left fibula, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.62XB	Displaced fracture of lateral malleolus of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.62XC	Displaced fracture of lateral malleolus of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.63XA	Displaced fracture of lateral malleolus of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.63XB	Displaced fracture of lateral malleolus of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.63XC	Displaced fracture of lateral malleolus of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.64XA	Nondisplaced fracture of lateral malleolus of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.64XB	Nondisplaced fracture of lateral malleolus of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.64XC	Nondisplaced fracture of lateral malleolus of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.65XA	Nondisplaced fracture of lateral malleolus of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.65XB	Nondisplaced fracture of lateral malleolus of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.65XC	Nondisplaced fracture of lateral malleolus of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.66XA	Nondisplaced fracture of lateral malleolus of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.66XB	Nondisplaced fracture of lateral malleolus of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.66XC	Nondisplaced fracture of lateral malleolus of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.811A	Torus fracture of upper end of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.812A	Torus fracture of upper end of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.819A	Torus fracture of upper end of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.821A	Torus fracture of lower end of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.822A	Torus fracture of lower end of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.829A	Torus fracture of lower end of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.831A	Other fracture of upper and lower end of right fibula, initial encounter for closed	DX	ICD-10-CM
S82.831B	Other fracture of upper and lower end of right fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.831C	Other fracture of upper and lower end of right fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.832A	Other fracture of upper and lower end of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.832B	Other fracture of upper and lower end of left fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.832C	Other fracture of upper and lower end of left fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.839A	Other fracture of upper and lower end of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S82.839B	Other fracture of upper and lower end of unspecified fibula, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.839C	Other fracture of upper and lower end of unspecified fibula, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.841A	Displaced bimalleolar fracture of right lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.841B	Displaced bimalleolar fracture of right lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.841C	Displaced bimalleolar fracture of right lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.842A	Displaced bimalleolar fracture of left lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.842B	Displaced bimalleolar fracture of left lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.842C	Displaced bimalleolar fracture of left lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.843A	Displaced bimalleolar fracture of unspecified lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.843B	Displaced bimalleolar fracture of unspecified lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.843C	Displaced bimalleolar fracture of unspecified lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.844A	Nondisplaced bimalleolar fracture of right lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.844B	Nondisplaced bimalleolar fracture of right lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.844C	Nondisplaced bimalleolar fracture of right lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.845A	Nondisplaced bimalleolar fracture of left lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.845B	Nondisplaced bimalleolar fracture of left lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.845C	Nondisplaced bimalleolar fracture of left lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.846A	Nondisplaced bimalleolar fracture of unspecified lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.846B	Nondisplaced bimalleolar fracture of unspecified lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.846C	Nondisplaced bimalleolar fracture of unspecified lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.851A	Displaced trimalleolar fracture of right lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.851B	Displaced trimalleolar fracture of right lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S82.851C	Displaced trimalleolar fracture of right lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.852A	Displaced trimalleolar fracture of left lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.852B	Displaced trimalleolar fracture of left lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.852C	Displaced trimalleolar fracture of left lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.853A	Displaced trimalleolar fracture of unspecified lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.853B	Displaced trimalleolar fracture of unspecified lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.853C	Displaced trimalleolar fracture of unspecified lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.854A	Nondisplaced trimalleolar fracture of right lower leg, initial encounter for closed	DX	ICD-10-CM
S82.854B	Nondisplaced trimalleolar fracture of right lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.854C	Nondisplaced trimalleolar fracture of right lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.855A	Nondisplaced trimalleolar fracture of left lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.855B	Nondisplaced trimalleolar fracture of left lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.855C	Nondisplaced trimalleolar fracture of left lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.856A	Nondisplaced trimalleolar fracture of unspecified lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.856B	Nondisplaced trimalleolar fracture of unspecified lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.856C	Nondisplaced trimalleolar fracture of unspecified lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.861A	Displaced Maisonneuve's fracture of right leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.861B	Displaced Maisonneuve's fracture of right leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.861C	Displaced Maisonneuve's fracture of right leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.862A	Displaced Maisonneuve's fracture of left leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.862B	Displaced Maisonneuve's fracture of left leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.862C	Displaced Maisonneuve's fracture of left leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.863A	Displaced Maisonneuve's fracture of unspecified leg, initial encounter for closed	DX	ICD-10-CM
S82.863B	Displaced Maisonneuve's fracture of unspecified leg, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.863C	Displaced Maisonneuve's fracture of unspecified leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.864A	Nondisplaced Maisonneuve's fracture of right leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.864B	Nondisplaced Maisonneuve's fracture of right leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.864C	Nondisplaced Maisonneuve's fracture of right leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.865A	Nondisplaced Maisonneuve's fracture of left leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.865B	Nondisplaced Maisonneuve's fracture of left leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.865C	Nondisplaced Maisonneuve's fracture of left leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.866A	Nondisplaced Maisonneuve's fracture of unspecified leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.866B	Nondisplaced Maisonneuve's fracture of unspecified leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.866C	Nondisplaced Maisonneuve's fracture of unspecified leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.871A	Displaced pilon fracture of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.871B	Displaced pilon fracture of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.871C	Displaced pilon fracture of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.872A	Displaced pilon fracture of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.872B	Displaced pilon fracture of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.872C	Displaced pilon fracture of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.873A	Displaced pilon fracture of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.873B	Displaced pilon fracture of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.873C	Displaced pilon fracture of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.874A	Nondisplaced pilon fracture of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.874B	Nondisplaced pilon fracture of right tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.874C	Nondisplaced pilon fracture of right tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.875A	Nondisplaced pilon fracture of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.875B	Nondisplaced pilon fracture of left tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.875C	Nondisplaced pilon fracture of left tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.876A	Nondisplaced pilon fracture of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S82.876B	Nondisplaced pilon fracture of unspecified tibia, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.876C	Nondisplaced pilon fracture of unspecified tibia, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S82.891A	Other fracture of right lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.891B	Other fracture of right lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.891C	Other fracture of right lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.892A	Other fracture of left lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.892B	Other fracture of left lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.892C	Other fracture of left lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.899A	Other fracture of unspecified lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.899B	Other fracture of unspecified lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.899C	Other fracture of unspecified lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.90XA	Unspecified fracture of unspecified lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.90XB	Unspecified fracture of unspecified lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.90XC	Unspecified fracture of unspecified lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.91XA	Unspecified fracture of right lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.91XB	Unspecified fracture of right lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.91XC	Unspecified fracture of right lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S82.92XA	Unspecified fracture of left lower leg, initial encounter for closed fracture	DX	ICD-10-CM
S82.92XB	Unspecified fracture of left lower leg, initial encounter for open fracture type I or II	DX	ICD-10-CM
S82.92XC	Unspecified fracture of left lower leg, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S87.00XA	Crushing injury of unspecified knee, initial encounter	DX	ICD-10-CM
S87.01XA	Crushing injury of right knee, initial encounter	DX	ICD-10-CM
S87.02XA	Crushing injury of left knee, initial encounter	DX	ICD-10-CM
S87.80XA	Crushing injury of unspecified lower leg, initial encounter	DX	ICD-10-CM
S87.81XA	Crushing injury of right lower leg, initial encounter	DX	ICD-10-CM
S87.82XA	Crushing injury of left lower leg, initial encounter	DX	ICD-10-CM
S89.001A	Unspecified physeal fracture of upper end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.002A	Unspecified physeal fracture of upper end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.009A	Unspecified physeal fracture of upper end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.011A	Salter-Harris Type I physeal fracture of upper end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.012A	Salter-Harris Type I physeal fracture of upper end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.019A	Salter-Harris Type I physeal fracture of upper end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.021A	Salter-Harris Type II physeal fracture of upper end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S89.022A	Salter-Harris Type II physeal fracture of upper end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.029A	Salter-Harris Type II physeal fracture of upper end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.031A	Salter-Harris Type III physeal fracture of upper end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.032A	Salter-Harris Type III physeal fracture of upper end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.039A	Salter-Harris Type III physeal fracture of upper end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.041A	Salter-Harris Type IV physeal fracture of upper end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.042A	Salter-Harris Type IV physeal fracture of upper end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.049A	Salter-Harris Type IV physeal fracture of upper end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.091A	Other physeal fracture of upper end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.092A	Other physeal fracture of upper end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.099A	Other physeal fracture of upper end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.101A	Unspecified physeal fracture of lower end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.102A	Unspecified physeal fracture of lower end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.109A	Unspecified physeal fracture of lower end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.111A	Salter-Harris Type I physeal fracture of lower end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.112A	Salter-Harris Type I physeal fracture of lower end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.119A	Salter-Harris Type I physeal fracture of lower end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.121A	Salter-Harris Type II physeal fracture of lower end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.122A	Salter-Harris Type II physeal fracture of lower end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.129A	Salter-Harris Type II physeal fracture of lower end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.131A	Salter-Harris Type III physeal fracture of lower end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.132A	Salter-Harris Type III physeal fracture of lower end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
S89.139A	Salter-Harris Type III physeal fracture of lower end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.141A	Salter-Harris Type IV physeal fracture of lower end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.142A	Salter-Harris Type IV physeal fracture of lower end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.149A	Salter-Harris Type IV physeal fracture of lower end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.191A	Other physeal fracture of lower end of right tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.192A	Other physeal fracture of lower end of left tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.199A	Other physeal fracture of lower end of unspecified tibia, initial encounter for closed fracture	DX	ICD-10-CM
S89.201A	Unspecified physeal fracture of upper end of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.202A	Unspecified physeal fracture of upper end of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.209A	Unspecified physeal fracture of upper end of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.211A	Salter-Harris Type I physeal fracture of upper end of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.212A	Salter-Harris Type I physeal fracture of upper end of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.219A	Salter-Harris Type I physeal fracture of upper end of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.221A	Salter-Harris Type II physeal fracture of upper end of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.222A	Salter-Harris Type II physeal fracture of upper end of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.229A	Salter-Harris Type II physeal fracture of upper end of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.291A	Other physeal fracture of upper end of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.292A	Other physeal fracture of upper end of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.299A	Other physeal fracture of upper end of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.301A	Unspecified physeal fracture of lower end of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.302A	Unspecified physeal fracture of lower end of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.309A	Unspecified physeal fracture of lower end of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.311A	Salter-Harris Type I physeal fracture of lower end of right fibula, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S89.312A	Salter-Harris Type I physeal fracture of lower end of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.319A	Salter-Harris Type I physeal fracture of lower end of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.321A	Salter-Harris Type II physeal fracture of lower end of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.322A	Salter-Harris Type II physeal fracture of lower end of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.329A	Salter-Harris Type II physeal fracture of lower end of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.391A	Other physeal fracture of lower end of right fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.392A	Other physeal fracture of lower end of left fibula, initial encounter for closed fracture	DX	ICD-10-CM
S89.399A	Other physeal fracture of lower end of unspecified fibula, initial encounter for closed fracture	DX	ICD-10-CM
S97.00XA	Crushing injury of unspecified ankle, initial encounter	DX	ICD-10-CM
S97.01XA	Crushing injury of right ankle, initial encounter	DX	ICD-10-CM
S97.02XA	Crushing injury of left ankle, initial encounter	DX	ICD-10-CM
S97.101A	Crushing injury of unspecified right toe(s), initial encounter	DX	ICD-10-CM
S97.102A	Crushing injury of unspecified left toe(s), initial encounter	DX	ICD-10-CM
S97.109A	Crushing injury of unspecified toe(s), initial encounter	DX	ICD-10-CM
S97.111A	Crushing injury of right great toe, initial encounter	DX	ICD-10-CM
S97.112A	Crushing injury of left great toe, initial encounter	DX	ICD-10-CM
S97.119A	Crushing injury of unspecified great toe, initial encounter	DX	ICD-10-CM
S97.121A	Crushing injury of right lesser toe(s), initial encounter	DX	ICD-10-CM
S97.122A	Crushing injury of left lesser toe(s), initial encounter	DX	ICD-10-CM
S97.129A	Crushing injury of unspecified lesser toe(s), initial encounter	DX	ICD-10-CM
S97.80XA	Crushing injury of unspecified foot, initial encounter	DX	ICD-10-CM
S97.81XA	Crushing injury of right foot, initial encounter	DX	ICD-10-CM
S97.82XA	Crushing injury of left foot, initial encounter	DX	ICD-10-CM
T14.8XXA	Other injury of unspecified body region, initial encounter	DX	ICD-10-CM
T79.4XXA	Traumatic shock, initial encounter	DX	ICD-10-CM
T79.5XXA	Traumatic anuria, initial encounter	DX	ICD-10-CM
T79.7XXA	Traumatic subcutaneous emphysema, initial encounter	DX	ICD-10-CM
T82.817A	Embolism due to cardiac prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.818A	Embolism due to vascular prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.827A	Fibrosis due to cardiac prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.828A	Fibrosis due to vascular prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.837A	Hemorrhage due to cardiac prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.838A	Hemorrhage due to vascular prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.847A	Pain due to cardiac prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.848A	Pain due to vascular prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.855A	Stenosis of coronary artery stent, initial encounter	DX	ICD-10-CM
T82.856A	Stenosis of peripheral vascular stent, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
T82.857A	Stenosis of other cardiac prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.858A	Stenosis of other vascular prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.867A	Thrombosis due to cardiac prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.868A	Thrombosis due to vascular prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.897A	Other specified complication of cardiac prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.898A	Other specified complication of vascular prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.9XXA	Unspecified complication of cardiac and vascular prosthetic device, implant and graft, initial encounter	DX	ICD-10-CM
T83.81XA	Embolism due to genitourinary prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T83.82XA	Fibrosis due to genitourinary prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T83.83XA	Hemorrhage due to genitourinary prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T83.84XA	Pain due to genitourinary prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T83.85XA	Stenosis due to genitourinary prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T83.86XA	Thrombosis due to genitourinary prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T83.89XA	Other specified complication of genitourinary prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T83.9XXA	Unspecified complication of genitourinary prosthetic device, implant and graft, initial encounter	DX	ICD-10-CM
T84.81XA	Embolism due to internal orthopedic prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T84.82XA	Fibrosis due to internal orthopedic prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T84.83XA	Hemorrhage due to internal orthopedic prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T84.84XA	Pain due to internal orthopedic prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T84.85XA	Stenosis due to internal orthopedic prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T84.86XA	Thrombosis due to internal orthopedic prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T84.89XA	Other specified complication of internal orthopedic prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T84.9XXA	Unspecified complication of internal orthopedic prosthetic device, implant and graft, initial encounter	DX	ICD-10-CM
T85.810A	Embolism due to nervous system prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T85.818A	Embolism due to other internal prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T85.820A	Fibrosis due to nervous system prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T85.828A	Fibrosis due to other internal prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
T85.830A	Hemorrhage due to nervous system prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T85.838A	Hemorrhage due to other internal prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T85.840A	Pain due to nervous system prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T85.848A	Pain due to other internal prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T85.850A	Stenosis due to nervous system prosthetic devices, implants and grafts, initial	DX	ICD-10-CM
T85.858A	Stenosis due to other internal prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T85.860A	Thrombosis due to nervous system prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T85.868A	Thrombosis due to other internal prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T85.890A	Other specified complication of nervous system prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T85.898A	Other specified complication of other internal prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T85.9XXA	Unspecified complication of internal prosthetic device, implant and graft, initial encounter	DX	ICD-10-CM
T86.848	Other complications of corneal transplant	DX	ICD-10-CM
T86.849	Unspecified complication of corneal transplant	DX	ICD-10-CM
T88.8XXA	Other specified complications of surgical and medical care, not elsewhere classified, initial encounter	DX	ICD-10-CM
V05.00XA	Pedestrian on foot injured in collision with railway train or railway vehicle in nontraffic accident, initial encounter	DX	ICD-10-CM
V05.00XD	Pedestrian on foot injured in collision with railway train or railway vehicle in nontraffic accident, subsequent encounter	DX	ICD-10-CM
V05.01XA	Pedestrian on roller-skates injured in collision with railway train or railway vehicle in nontraffic accident, initial encounter	DX	ICD-10-CM
V05.01XD	Pedestrian on roller-skates injured in collision with railway train or railway vehicle in nontraffic accident, subsequent encounter	DX	ICD-10-CM
V05.02XA	Pedestrian on skateboard injured in collision with railway train or railway vehicle in nontraffic accident, initial encounter	DX	ICD-10-CM
V05.02XD	Pedestrian on skateboard injured in collision with railway train or railway vehicle in nontraffic accident, subsequent encounter	DX	ICD-10-CM
V05.09XA	Pedestrian with other conveyance injured in collision with railway train or railway vehicle in nontraffic accident, initial encounter	DX	ICD-10-CM
V05.09XD	Pedestrian with other conveyance injured in collision with railway train or railway vehicle in nontraffic accident, subsequent encounter	DX	ICD-10-CM
V15.2XXA	Unspecified pedal cyclist injured in collision with railway train or railway vehicle in nontraffic accident, initial encounter	DX	ICD-10-CM
V81.2XXA	Occupant of railway train or railway vehicle injured in collision with or hit by rolling stock, initial encounter	DX	ICD-10-CM
W11.XXXA	Fall on and from ladder, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
W11.XXXD	Fall on and from ladder, subsequent encounter	DX	ICD-10-CM
W12.XXXA	Fall on and from scaffolding, initial encounter	DX	ICD-10-CM
W12.XXXD	Fall on and from scaffolding, subsequent encounter	DX	ICD-10-CM
W13.0XXA	Fall from, out of or through balcony, initial encounter	DX	ICD-10-CM
W13.0XXD	Fall from, out of or through balcony, subsequent encounter	DX	ICD-10-CM
W13.1XXA	Fall from, out of or through bridge, initial encounter	DX	ICD-10-CM
W13.1XXD	Fall from, out of or through bridge, subsequent encounter	DX	ICD-10-CM
W13.2XXA	Fall from, out of or through roof, initial encounter	DX	ICD-10-CM
W13.2XXD	Fall from, out of or through roof, subsequent encounter	DX	ICD-10-CM
W13.3XXA	Fall through floor, initial encounter	DX	ICD-10-CM
W13.3XXD	Fall through floor, subsequent encounter	DX	ICD-10-CM
W13.4XXA	Fall from, out of or through window, initial encounter	DX	ICD-10-CM
W13.4XXD	Fall from, out of or through window, subsequent encounter	DX	ICD-10-CM
W13.8XXA	Fall from, out of or through other building or structure, initial encounter	DX	ICD-10-CM
W13.8XXD	Fall from, out of or through other building or structure, subsequent encounter	DX	ICD-10-CM
W13.9XXA	Fall from, out of or through building, not otherwise specified, initial encounter	DX	ICD-10-CM
W13.9XXD	Fall from, out of or through building, not otherwise specified, subsequent encounter	DX	ICD-10-CM
W16.011A	Fall into swimming pool striking water surface causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.011D	Fall into swimming pool striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.012A	Fall into swimming pool striking water surface causing other injury, initial encounter	DX	ICD-10-CM
W16.012D	Fall into swimming pool striking water surface causing other injury, subsequent encounter	DX	ICD-10-CM
W16.021A	Fall into swimming pool striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.021D	Fall into swimming pool striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.022A	Fall into swimming pool striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.022D	Fall into swimming pool striking bottom causing other injury, subsequent encounter	DX	ICD-10-CM
W16.031A	Fall into swimming pool striking wall causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.031D	Fall into swimming pool striking wall causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.032A	Fall into swimming pool striking wall causing other injury, initial encounter	DX	ICD-10-CM
W16.032D	Fall into swimming pool striking wall causing other injury, subsequent encounter	DX	ICD-10-CM
W16.111A	Fall into natural body of water striking water surface causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.111D	Fall into natural body of water striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.112A	Fall into natural body of water striking water surface causing other injury, initial encounter	DX	ICD-10-CM
W16.112D	Fall into natural body of water striking water surface causing other injury, subsequent encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
W16.121A	Fall into natural body of water striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.121D	Fall into natural body of water striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.122A	Fall into natural body of water striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.122D	Fall into natural body of water striking bottom causing other injury, subsequent encounter	DX	ICD-10-CM
W16.131A	Fall into natural body of water striking side causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.131D	Fall into natural body of water striking side causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.132A	Fall into natural body of water striking side causing other injury, initial encounter	DX	ICD-10-CM
W16.132D	Fall into natural body of water striking side causing other injury, subsequent encounter	DX	ICD-10-CM
W16.211A	Fall in (into) filled bathtub causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.211D	Fall in (into) filled bathtub causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.212A	Fall in (into) filled bathtub causing other injury, initial encounter	DX	ICD-10-CM
W16.212D	Fall in (into) filled bathtub causing other injury, subsequent encounter	DX	ICD-10-CM
W16.221A	Fall in (into) bucket of water causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.221D	Fall in (into) bucket of water causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.222A	Fall in (into) bucket of water causing other injury, initial encounter	DX	ICD-10-CM
W16.222D	Fall in (into) bucket of water causing other injury, subsequent encounter	DX	ICD-10-CM
W16.311A	Fall into other water striking water surface causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.311D	Fall into other water striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.312A	Fall into other water striking water surface causing other injury, initial encounter	DX	ICD-10-CM
W16.312D	Fall into other water striking water surface causing other injury, subsequent encounter	DX	ICD-10-CM
W16.321A	Fall into other water striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.321D	Fall into other water striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.322A	Fall into other water striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.322D	Fall into other water striking bottom causing other injury, subsequent encounter	DX	ICD-10-CM
W16.331A	Fall into other water striking wall causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.331D	Fall into other water striking wall causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.332A	Fall into other water striking wall causing other injury, initial encounter	DX	ICD-10-CM
W16.332D	Fall into other water striking wall causing other injury, subsequent encounter	DX	ICD-10-CM
W16.41XA	Fall into unspecified water causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.41XD	Fall into unspecified water causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.42XA	Fall into unspecified water causing other injury, initial encounter	DX	ICD-10-CM
W16.42XD	Fall into unspecified water causing other injury, subsequent encounter	DX	ICD-10-CM
W16.511A	Jumping or diving into swimming pool striking water surface causing drowning and submersion, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
W16.511D	Jumping or diving into swimming pool striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.512A	Jumping or diving into swimming pool striking water surface causing other injury, initial encounter	DX	ICD-10-CM
W16.512D	Jumping or diving into swimming pool striking water surface causing other injury, subsequent encounter	DX	ICD-10-CM
W16.521A	Jumping or diving into swimming pool striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.521D	Jumping or diving into swimming pool striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.522A	Jumping or diving into swimming pool striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.522D	Jumping or diving into swimming pool striking bottom causing other injury, subsequent encounter	DX	ICD-10-CM
W16.531A	Jumping or diving into swimming pool striking wall causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.531D	Jumping or diving into swimming pool striking wall causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.532A	Jumping or diving into swimming pool striking wall causing other injury, initial encounter	DX	ICD-10-CM
W16.532D	Jumping or diving into swimming pool striking wall causing other injury, subsequent encounter	DX	ICD-10-CM
W16.611A	Jumping or diving into natural body of water striking water surface causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.611D	Jumping or diving into natural body of water striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.612A	Jumping or diving into natural body of water striking water surface causing other injury, initial encounter	DX	ICD-10-CM
W16.612D	Jumping or diving into natural body of water striking water surface causing other injury, subsequent encounter	DX	ICD-10-CM
W16.621A	Jumping or diving into natural body of water striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.621D	Jumping or diving into natural body of water striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.622A	Jumping or diving into natural body of water striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.622D	Jumping or diving into natural body of water striking bottom causing other injury, subsequent encounter	DX	ICD-10-CM
W16.711A	Jumping or diving from boat striking water surface causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.711D	Jumping or diving from boat striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.712A	Jumping or diving from boat striking water surface causing other injury, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
W16.712D	Jumping or diving from boat striking water surface causing other injury, subsequent encounter	DX	ICD-10-CM
W16.721A	Jumping or diving from boat striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.721D	Jumping or diving from boat striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.722A	Jumping or diving from boat striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.722D	Jumping or diving from boat striking bottom causing other injury, subsequent encounter	DX	ICD-10-CM
W16.811A	Jumping or diving into other water striking water surface causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.811D	Jumping or diving into other water striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.812A	Jumping or diving into other water striking water surface causing other injury, initial encounter	DX	ICD-10-CM
W16.812D	Jumping or diving into other water striking water surface causing other injury, subsequent encounter	DX	ICD-10-CM
W16.821A	Jumping or diving into other water striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.821D	Jumping or diving into other water striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.822A	Jumping or diving into other water striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.822D	Jumping or diving into other water striking bottom causing other injury, subsequent encounter	DX	ICD-10-CM
W16.831A	Jumping or diving into other water striking wall causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.831D	Jumping or diving into other water striking wall causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.832A	Jumping or diving into other water striking wall causing other injury, initial encounter	DX	ICD-10-CM
W16.832D	Jumping or diving into other water striking wall causing other injury, subsequent encounter	DX	ICD-10-CM
W16.91XA	Jumping or diving into unspecified water causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.91XD	Jumping or diving into unspecified water causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.92XA	Jumping or diving into unspecified water causing other injury, initial encounter	DX	ICD-10-CM
W16.92XD	Jumping or diving into unspecified water causing other injury, subsequent encounter	DX	ICD-10-CM
W17.0XXA	Fall into well, initial encounter	DX	ICD-10-CM
W17.0XXD	Fall into well, subsequent encounter	DX	ICD-10-CM
W17.1XXA	Fall into storm drain or manhole, initial encounter	DX	ICD-10-CM
W17.1XXD	Fall into storm drain or manhole, subsequent encounter	DX	ICD-10-CM
W17.2XXA	Fall into hole, initial encounter	DX	ICD-10-CM
W17.2XXD	Fall into hole, subsequent encounter	DX	ICD-10-CM
W17.3XXA	Fall into empty swimming pool, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
W17.3XXD	Fall into empty swimming pool, subsequent encounter	DX	ICD-10-CM
W17.4XXA	Fall from dock, initial encounter	DX	ICD-10-CM
W17.4XXD	Fall from dock, subsequent encounter	DX	ICD-10-CM
W32.0XXA	Accidental handgun discharge, initial encounter	DX	ICD-10-CM
W32.0XXD	Accidental handgun discharge, subsequent encounter	DX	ICD-10-CM
W32.1XXA	Accidental handgun malfunction, initial encounter	DX	ICD-10-CM
W32.1XXD	Accidental handgun malfunction, subsequent encounter	DX	ICD-10-CM
W33.00XA	Accidental discharge of unspecified larger firearm, initial encounter	DX	ICD-10-CM
W33.00XD	Accidental discharge of unspecified larger firearm, subsequent encounter	DX	ICD-10-CM
W33.01XA	Accidental discharge of shotgun, initial encounter	DX	ICD-10-CM
W33.01XD	Accidental discharge of shotgun, subsequent encounter	DX	ICD-10-CM
W33.02XA	Accidental discharge of hunting rifle, initial encounter	DX	ICD-10-CM
W33.02XD	Accidental discharge of hunting rifle, subsequent encounter	DX	ICD-10-CM
W33.03XA	Accidental discharge of machine gun, initial encounter	DX	ICD-10-CM
W33.03XD	Accidental discharge of machine gun, subsequent encounter	DX	ICD-10-CM
W33.09XA	Accidental discharge of other larger firearm, initial encounter	DX	ICD-10-CM
W33.09XD	Accidental discharge of other larger firearm, subsequent encounter	DX	ICD-10-CM
W33.10XA	Accidental malfunction of unspecified larger firearm, initial encounter	DX	ICD-10-CM
W33.10XD	Accidental malfunction of unspecified larger firearm, subsequent encounter	DX	ICD-10-CM
W33.11XA	Accidental malfunction of shotgun, initial encounter	DX	ICD-10-CM
W33.11XD	Accidental malfunction of shotgun, subsequent encounter	DX	ICD-10-CM
W33.12XA	Accidental malfunction of hunting rifle, initial encounter	DX	ICD-10-CM
W33.12XD	Accidental malfunction of hunting rifle, subsequent encounter	DX	ICD-10-CM
W33.13XA	Accidental malfunction of machine gun, initial encounter	DX	ICD-10-CM
W33.13XD	Accidental malfunction of machine gun, subsequent encounter	DX	ICD-10-CM
W33.19XA	Accidental malfunction of other larger firearm, initial encounter	DX	ICD-10-CM
W33.19XD	Accidental malfunction of other larger firearm, subsequent encounter	DX	ICD-10-CM
W34.00XA	Accidental discharge from unspecified firearms or gun, initial encounter	DX	ICD-10-CM
W34.00XD	Accidental discharge from unspecified firearms or gun, subsequent encounter	DX	ICD-10-CM
W34.010A	Accidental discharge of airgun, initial encounter	DX	ICD-10-CM
W34.010D	Accidental discharge of airgun, subsequent encounter	DX	ICD-10-CM
W34.011A	Accidental discharge of paintball gun, initial encounter	DX	ICD-10-CM
W34.011D	Accidental discharge of paintball gun, subsequent encounter	DX	ICD-10-CM
W34.018A	Accidental discharge of other gas, air or spring-operated gun, initial encounter	DX	ICD-10-CM
W34.018D	Accidental discharge of other gas, air or spring-operated gun, subsequent encounter	DX	ICD-10-CM
W34.09XA	Accidental discharge from other specified firearms, initial encounter	DX	ICD-10-CM
W34.09XD	Accidental discharge from other specified firearms, subsequent encounter	DX	ICD-10-CM
W34.10XA	Accidental malfunction from unspecified firearms or gun, initial encounter	DX	ICD-10-CM
W34.10XD	Accidental malfunction from unspecified firearms or gun, subsequent encounter	DX	ICD-10-CM
W34.110A	Accidental malfunction of airgun, initial encounter	DX	ICD-10-CM
W34.110D	Accidental malfunction of airgun, subsequent encounter	DX	ICD-10-CM
W34.111A	Accidental malfunction of paintball gun, initial encounter	DX	ICD-10-CM
W34.111D	Accidental malfunction of paintball gun, subsequent encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
W34.118A	Accidental malfunction of other gas, air or spring-operated gun, initial encounter	DX	ICD-10-CM
W34.118D	Accidental malfunction of other gas, air or spring-operated gun, subsequent encounter	DX	ICD-10-CM
W34.19XA	Accidental malfunction from other specified firearms, initial encounter	DX	ICD-10-CM
W34.19XD	Accidental malfunction from other specified firearms, subsequent encounter	DX	ICD-10-CM
W39.XXXA	Discharge of firework, initial encounter	DX	ICD-10-CM
W39.XXXD	Discharge of firework, subsequent encounter	DX	ICD-10-CM
W40.0XXA	Explosion of blasting material, initial encounter	DX	ICD-10-CM
W40.0XXD	Explosion of blasting material, subsequent encounter	DX	ICD-10-CM
W40.1XXA	Explosion of explosive gases, initial encounter	DX	ICD-10-CM
W40.1XXD	Explosion of explosive gases, subsequent encounter	DX	ICD-10-CM
W40.8XXA	Explosion of other specified explosive materials, initial encounter	DX	ICD-10-CM
W40.8XXD	Explosion of other specified explosive materials, subsequent encounter	DX	ICD-10-CM
W40.9XXA	Explosion of unspecified explosive materials, initial encounter	DX	ICD-10-CM
W40.9XXD	Explosion of unspecified explosive materials, subsequent encounter	DX	ICD-10-CM
X72.XXXA	Intentional self-harm by handgun discharge, initial encounter	DX	ICD-10-CM
X72.XXXD	Intentional self-harm by handgun discharge, subsequent encounter	DX	ICD-10-CM
X73.0XXA	Intentional self-harm by shotgun discharge, initial encounter	DX	ICD-10-CM
X73.0XXD	Intentional self-harm by shotgun discharge, subsequent encounter	DX	ICD-10-CM
X73.1XXA	Intentional self-harm by hunting rifle discharge, initial encounter	DX	ICD-10-CM
X73.1XXD	Intentional self-harm by hunting rifle discharge, subsequent encounter	DX	ICD-10-CM
X73.2XXA	Intentional self-harm by machine gun discharge, initial encounter	DX	ICD-10-CM
X73.2XXD	Intentional self-harm by machine gun discharge, subsequent encounter	DX	ICD-10-CM
X73.8XXA	Intentional self-harm by other larger firearm discharge, initial encounter	DX	ICD-10-CM
X73.8XXD	Intentional self-harm by other larger firearm discharge, subsequent encounter	DX	ICD-10-CM
X73.9XXA	Intentional self-harm by unspecified larger firearm discharge, initial encounter	DX	ICD-10-CM
X73.9XXD	Intentional self-harm by unspecified larger firearm discharge, subsequent encounter	DX	ICD-10-CM
X74.01XA	Intentional self-harm by airgun, initial encounter	DX	ICD-10-CM
X74.01XD	Intentional self-harm by airgun, subsequent encounter	DX	ICD-10-CM
X74.02XA	Intentional self-harm by paintball gun, initial encounter	DX	ICD-10-CM
X74.02XD	Intentional self-harm by paintball gun, subsequent encounter	DX	ICD-10-CM
X74.09XA	Intentional self-harm by other gas, air or spring-operated gun, initial encounter	DX	ICD-10-CM
X74.09XD	Intentional self-harm by other gas, air or spring-operated gun, subsequent encounter	DX	ICD-10-CM
X74.8XXA	Intentional self-harm by other firearm discharge, initial encounter	DX	ICD-10-CM
X74.8XXD	Intentional self-harm by other firearm discharge, subsequent encounter	DX	ICD-10-CM
X74.9XXA	Intentional self-harm by unspecified firearm discharge, initial encounter	DX	ICD-10-CM
X74.9XXD	Intentional self-harm by unspecified firearm discharge, subsequent encounter	DX	ICD-10-CM
X75.XXXA	Intentional self-harm by explosive material, initial encounter	DX	ICD-10-CM
X75.XXXD	Intentional self-harm by explosive material, subsequent encounter	DX	ICD-10-CM
X93.XXXA	Assault by handgun discharge, initial encounter	DX	ICD-10-CM
X93.XXXD	Assault by handgun discharge, subsequent encounter	DX	ICD-10-CM
X94.0XXA	Assault by shotgun, initial encounter	DX	ICD-10-CM
X94.0XXD	Assault by shotgun, subsequent encounter	DX	ICD-10-CM
X94.1XXA	Assault by hunting rifle, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
X94.1XXD	Assault by hunting rifle, subsequent encounter	DX	ICD-10-CM
X94.2XXA	Assault by machine gun, initial encounter	DX	ICD-10-CM
X94.2XXD	Assault by machine gun, subsequent encounter	DX	ICD-10-CM
X94.8XXA	Assault by other larger firearm discharge, initial encounter	DX	ICD-10-CM
X94.8XXD	Assault by other larger firearm discharge, subsequent encounter	DX	ICD-10-CM
X94.9XXA	Assault by unspecified larger firearm discharge, initial encounter	DX	ICD-10-CM
X94.9XXD	Assault by unspecified larger firearm discharge, subsequent encounter	DX	ICD-10-CM
X95.02XA	Assault by paintball gun discharge, initial encounter	DX	ICD-10-CM
X95.02XD	Assault by paintball gun discharge, subsequent encounter	DX	ICD-10-CM
X95.09XA	Assault by other gas, air or spring-operated gun, initial encounter	DX	ICD-10-CM
X95.09XD	Assault by other gas, air or spring-operated gun, subsequent encounter	DX	ICD-10-CM
X95.8XXA	Assault by other firearm discharge, initial encounter	DX	ICD-10-CM
X95.8XXD	Assault by other firearm discharge, subsequent encounter	DX	ICD-10-CM
X95.9XXA	Assault by unspecified firearm discharge, initial encounter	DX	ICD-10-CM
X95.9XXD	Assault by unspecified firearm discharge, subsequent encounter	DX	ICD-10-CM
X96.0XXA	Assault by antipersonnel bomb, initial encounter	DX	ICD-10-CM
X96.0XXD	Assault by antipersonnel bomb, subsequent encounter	DX	ICD-10-CM
X96.1XXA	Assault by gasoline bomb, initial encounter	DX	ICD-10-CM
X96.1XXD	Assault by gasoline bomb, subsequent encounter	DX	ICD-10-CM
X96.2XXA	Assault by letter bomb, initial encounter	DX	ICD-10-CM
X96.2XXD	Assault by letter bomb, subsequent encounter	DX	ICD-10-CM
X96.3XXA	Assault by fertilizer bomb, initial encounter	DX	ICD-10-CM
X96.3XXD	Assault by fertilizer bomb, subsequent encounter	DX	ICD-10-CM
X96.4XXA	Assault by pipe bomb, initial encounter	DX	ICD-10-CM
X96.4XXD	Assault by pipe bomb, subsequent encounter	DX	ICD-10-CM
X96.8XXA	Assault by other specified explosive, initial encounter	DX	ICD-10-CM
X96.8XXD	Assault by other specified explosive, subsequent encounter	DX	ICD-10-CM
X96.9XXA	Assault by unspecified explosive, initial encounter	DX	ICD-10-CM
X96.9XXD	Assault by unspecified explosive, subsequent encounter	DX	ICD-10-CM
Y04.0XXA	Assault by unarmed brawl or fight, initial encounter	DX	ICD-10-CM
Y04.0XXD	Assault by unarmed brawl or fight, subsequent encounter	DX	ICD-10-CM
Y04.2XXA	Assault by strike against or bumped into by another person, initial encounter	DX	ICD-10-CM
Y04.2XXD	Assault by strike against or bumped into by another person, subsequent encounter	DX	ICD-10-CM
Y04.8XXA	Assault by other bodily force, initial encounter	DX	ICD-10-CM
Y04.8XXD	Assault by other bodily force, subsequent encounter	DX	ICD-10-CM
Y22.XXXA	Handgun discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y22.XXXD	Handgun discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y23.0XXA	Shotgun discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y23.0XXD	Shotgun discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y23.1XXA	Hunting rifle discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y23.1XXD	Hunting rifle discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y23.2XXA	Military firearm discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y23.2XXD	Military firearm discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
Y23.3XXA	Machine gun discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y23.3XXD	Machine gun discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y23.8XXA	Other larger firearm discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y23.8XXD	Other larger firearm discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y23.9XXA	Unspecified larger firearm discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y23.9XXD	Unspecified larger firearm discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y24.0XXA	Airgun discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y24.0XXD	Airgun discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y24.8XXA	Other firearm discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y24.8XXD	Other firearm discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y24.9XXA	Unspecified firearm discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y24.9XXD	Unspecified firearm discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y25.XXXA	Contact with explosive material, undetermined intent, initial encounter	DX	ICD-10-CM
Y25.XXXD	Contact with explosive material, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y35.001A	Legal intervention involving unspecified firearm discharge, law enforcement official injured, initial encounter	DX	ICD-10-CM
Y35.001D	Legal intervention involving unspecified firearm discharge, law enforcement official injured, subsequent encounter	DX	ICD-10-CM
Y35.002A	Legal intervention involving unspecified firearm discharge, bystander injured, initial encounter	DX	ICD-10-CM
Y35.002D	Legal intervention involving unspecified firearm discharge, bystander injured, subsequent encounter	DX	ICD-10-CM
Y35.003A	Legal intervention involving unspecified firearm discharge, suspect injured, initial encounter	DX	ICD-10-CM
Y35.003D	Legal intervention involving unspecified firearm discharge, suspect injured, subsequent encounter	DX	ICD-10-CM
Y35.011A	Legal intervention involving injury by machine gun, law enforcement official injured, initial encounter	DX	ICD-10-CM
Y35.011D	Legal intervention involving injury by machine gun, law enforcement official injured, subsequent encounter	DX	ICD-10-CM
Y35.012A	Legal intervention involving injury by machine gun, bystander injured, initial encounter	DX	ICD-10-CM
Y35.012D	Legal intervention involving injury by machine gun, bystander injured, subsequent encounter	DX	ICD-10-CM
Y35.013A	Legal intervention involving injury by machine gun, suspect injured, initial encounter	DX	ICD-10-CM
Y35.013D	Legal intervention involving injury by machine gun, suspect injured, subsequent encounter	DX	ICD-10-CM
Y35.021A	Legal intervention involving injury by handgun, law enforcement official injured, initial encounter	DX	ICD-10-CM
Y35.021D	Legal intervention involving injury by handgun, law enforcement official injured, subsequent encounter	DX	ICD-10-CM
Y35.022A	Legal intervention involving injury by handgun, bystander injured, initial encounter	DX	ICD-10-CM
Y35.022D	Legal intervention involving injury by handgun, bystander injured, subsequent encounter	DX	ICD-10-CM
Y35.023A	Legal intervention involving injury by handgun, suspect injured, initial encounter	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
Y35.023D	Legal intervention involving injury by handgun, suspect injured, subsequent encounter	DX	ICD-10-CM
Y35.031A	Legal intervention involving injury by rifle pellet, law enforcement official injured, initial encounter	DX	ICD-10-CM
Y35.031D	Legal intervention involving injury by rifle pellet, law enforcement official injured, subsequent encounter	DX	ICD-10-CM
Y35.032A	Legal intervention involving injury by rifle pellet, bystander injured, initial encounter	DX	ICD-10-CM
Y35.032D	Legal intervention involving injury by rifle pellet, bystander injured, subsequent encounter	DX	ICD-10-CM
Y35.033A	Legal intervention involving injury by rifle pellet, suspect injured, initial encounter	DX	ICD-10-CM
Y35.033D	Legal intervention involving injury by rifle pellet, suspect injured, subsequent encounter	DX	ICD-10-CM
Y35.041A	Legal intervention involving injury by rubber bullet, law enforcement official injured, initial encounter	DX	ICD-10-CM
Y35.041D	Legal intervention involving injury by rubber bullet, law enforcement official injured, subsequent encounter	DX	ICD-10-CM
Y35.042A	Legal intervention involving injury by rubber bullet, bystander injured, initial encounter	DX	ICD-10-CM
Y35.042D	Legal intervention involving injury by rubber bullet, bystander injured, subsequent encounter	DX	ICD-10-CM
Y35.043A	Legal intervention involving injury by rubber bullet, suspect injured, initial encounter	DX	ICD-10-CM
Y35.043D	Legal intervention involving injury by rubber bullet, suspect injured, subsequent encounter	DX	ICD-10-CM
Y35.091A	Legal intervention involving other firearm discharge, law enforcement official injured, initial encounter	DX	ICD-10-CM
Y35.091D	Legal intervention involving other firearm discharge, law enforcement official injured, subsequent encounter	DX	ICD-10-CM
Y35.092A	Legal intervention involving other firearm discharge, bystander injured, initial encounter	DX	ICD-10-CM
Y35.092D	Legal intervention involving other firearm discharge, bystander injured, subsequent encounter	DX	ICD-10-CM
Y35.093A	Legal intervention involving other firearm discharge, suspect injured, initial encounter	DX	ICD-10-CM
Y35.093D	Legal intervention involving other firearm discharge, suspect injured, subsequent encounter	DX	ICD-10-CM
W17.4XXA	Fall from dock, initial encounter	DX	ICD-10-CM
W17.4XXD	Fall from dock, subsequent encounter	DX	ICD-10-CM
W32.0XXA	Accidental handgun discharge, initial encounter	DX	ICD-10-CM
W32.0XXD	Accidental handgun discharge, subsequent encounter	DX	ICD-10-CM
W32.1XXA	Accidental handgun malfunction, initial encounter	DX	ICD-10-CM
W32.1XXD	Accidental handgun malfunction, subsequent encounter	DX	ICD-10-CM
W33.00XA	Accidental discharge of unspecified larger firearm, initial encounter	DX	ICD-10-CM
W33.00XD	Accidental discharge of unspecified larger firearm, subsequent encounter	DX	ICD-10-CM
W33.01XA	Accidental discharge of shotgun, initial encounter	DX	ICD-10-CM
W33.01XD	Accidental discharge of shotgun, subsequent encounter	DX	ICD-10-CM
W33.02XA	Accidental discharge of hunting rifle, initial encounter	DX	ICD-10-CM
W33.02XD	Accidental discharge of hunting rifle, subsequent encounter	DX	ICD-10-CM
W33.03XA	Accidental discharge of machine gun, initial encounter	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
W33.03XD	Accidental discharge of machine gun, subsequent encounter	DX	ICD-10-CM
W33.09XA	Accidental discharge of other larger firearm, initial encounter	DX	ICD-10-CM
W33.09XD	Accidental discharge of other larger firearm, subsequent encounter	DX	ICD-10-CM
W33.10XA	Accidental malfunction of unspecified larger firearm, initial encounter	DX	ICD-10-CM
W33.10XD	Accidental malfunction of unspecified larger firearm, subsequent encounter	DX	ICD-10-CM
W33.11XA	Accidental malfunction of shotgun, initial encounter	DX	ICD-10-CM
W33.11XD	Accidental malfunction of shotgun, subsequent encounter	DX	ICD-10-CM
W33.12XA	Accidental malfunction of hunting rifle, initial encounter	DX	ICD-10-CM
W33.12XD	Accidental malfunction of hunting rifle, subsequent encounter	DX	ICD-10-CM
W33.13XA	Accidental malfunction of machine gun, initial encounter	DX	ICD-10-CM
W33.13XD	Accidental malfunction of machine gun, subsequent encounter	DX	ICD-10-CM
W33.19XA	Accidental malfunction of other larger firearm, initial encounter	DX	ICD-10-CM
W33.19XD	Accidental malfunction of other larger firearm, subsequent encounter	DX	ICD-10-CM
W34.00XA	Accidental discharge from unspecified firearms or gun, initial encounter	DX	ICD-10-CM
W34.00XD	Accidental discharge from unspecified firearms or gun, subsequent encounter	DX	ICD-10-CM
W34.010A	Accidental discharge of airgun, initial encounter	DX	ICD-10-CM
W34.010D	Accidental discharge of airgun, subsequent encounter	DX	ICD-10-CM
W34.011A	Accidental discharge of paintball gun, initial encounter	DX	ICD-10-CM
W34.011D	Accidental discharge of paintball gun, subsequent encounter	DX	ICD-10-CM
W34.018A	Accidental discharge of other gas, air or spring-operated gun, initial encounter	DX	ICD-10-CM
W34.018D	Accidental discharge of other gas, air or spring-operated gun, subsequent encounter	DX	ICD-10-CM
W34.09XA	Accidental discharge from other specified firearms, initial encounter	DX	ICD-10-CM
W34.09XD	Accidental discharge from other specified firearms, subsequent encounter	DX	ICD-10-CM
W34.10XA	Accidental malfunction from unspecified firearms or gun, initial encounter	DX	ICD-10-CM
W34.10XD	Accidental malfunction from unspecified firearms or gun, subsequent encounter	DX	ICD-10-CM
W34.110A	Accidental malfunction of airgun, initial encounter	DX	ICD-10-CM
W34.110D	Accidental malfunction of airgun, subsequent encounter	DX	ICD-10-CM
W34.111A	Accidental malfunction of paintball gun, initial encounter	DX	ICD-10-CM
W34.111D	Accidental malfunction of paintball gun, subsequent encounter	DX	ICD-10-CM
W34.118A	Accidental malfunction of other gas, air or spring-operated gun, initial encounter	DX	ICD-10-CM
W34.118D	Accidental malfunction of other gas, air or spring-operated gun, subsequent encounter	DX	ICD-10-CM
W34.19XA	Accidental malfunction from other specified firearms, initial encounter	DX	ICD-10-CM
W34.19XD	Accidental malfunction from other specified firearms, subsequent encounter	DX	ICD-10-CM
W39.XXXA	Discharge of firework, initial encounter	DX	ICD-10-CM
W39.XXXD	Discharge of firework, subsequent encounter	DX	ICD-10-CM
W40.0XXA	Explosion of blasting material, initial encounter	DX	ICD-10-CM
W40.0XXD	Explosion of blasting material, subsequent encounter	DX	ICD-10-CM
W40.1XXA	Explosion of explosive gases, initial encounter	DX	ICD-10-CM
W40.1XXD	Explosion of explosive gases, subsequent encounter	DX	ICD-10-CM
W40.8XXA	Explosion of other specified explosive materials, initial encounter	DX	ICD-10-CM
W40.8XXD	Explosion of other specified explosive materials, subsequent encounter	DX	ICD-10-CM
W40.9XXA	Explosion of unspecified explosive materials, initial encounter	DX	ICD-10-CM
W40.9XXD	Explosion of unspecified explosive materials, subsequent encounter	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
X72.XXXA	Intentional self-harm by handgun discharge, initial encounter	DX	ICD-10-CM
X72.XXXD	Intentional self-harm by handgun discharge, subsequent encounter	DX	ICD-10-CM
X73.0XXA	Intentional self-harm by shotgun discharge, initial encounter	DX	ICD-10-CM
X73.0XXD	Intentional self-harm by shotgun discharge, subsequent encounter	DX	ICD-10-CM
X73.1XXA	Intentional self-harm by hunting rifle discharge, initial encounter	DX	ICD-10-CM
X73.1XXD	Intentional self-harm by hunting rifle discharge, subsequent encounter	DX	ICD-10-CM
X73.2XXA	Intentional self-harm by machine gun discharge, initial encounter	DX	ICD-10-CM
X73.2XXD	Intentional self-harm by machine gun discharge, subsequent encounter	DX	ICD-10-CM
X73.8XXA	Intentional self-harm by other larger firearm discharge, initial encounter	DX	ICD-10-CM
X73.8XXD	Intentional self-harm by other larger firearm discharge, subsequent encounter	DX	ICD-10-CM
X73.9XXA	Intentional self-harm by unspecified larger firearm discharge, initial encounter	DX	ICD-10-CM
X73.9XXD	Intentional self-harm by unspecified larger firearm discharge, subsequent encounter	DX	ICD-10-CM
X74.01XA	Intentional self-harm by airgun, initial encounter	DX	ICD-10-CM
X74.01XD	Intentional self-harm by airgun, subsequent encounter	DX	ICD-10-CM
X74.02XA	Intentional self-harm by paintball gun, initial encounter	DX	ICD-10-CM
X74.02XD	Intentional self-harm by paintball gun, subsequent encounter	DX	ICD-10-CM
X74.09XA	Intentional self-harm by other gas, air or spring-operated gun, initial encounter	DX	ICD-10-CM
X74.09XD	Intentional self-harm by other gas, air or spring-operated gun, subsequent encounter	DX	ICD-10-CM
X74.8XXA	Intentional self-harm by other firearm discharge, initial encounter	DX	ICD-10-CM
X74.8XXD	Intentional self-harm by other firearm discharge, subsequent encounter	DX	ICD-10-CM
X74.9XXA	Intentional self-harm by unspecified firearm discharge, initial encounter	DX	ICD-10-CM
X74.9XXD	Intentional self-harm by unspecified firearm discharge, subsequent encounter	DX	ICD-10-CM
X75.XXXA	Intentional self-harm by explosive material, initial encounter	DX	ICD-10-CM
X75.XXXD	Intentional self-harm by explosive material, subsequent encounter	DX	ICD-10-CM
X93.XXXA	Assault by handgun discharge, initial encounter	DX	ICD-10-CM
X93.XXXD	Assault by handgun discharge, subsequent encounter	DX	ICD-10-CM
X94.0XXA	Assault by shotgun, initial encounter	DX	ICD-10-CM
X94.0XXD	Assault by shotgun, subsequent encounter	DX	ICD-10-CM
X94.1XXA	Assault by hunting rifle, initial encounter	DX	ICD-10-CM
X94.1XXD	Assault by hunting rifle, subsequent encounter	DX	ICD-10-CM
X94.2XXA	Assault by machine gun, initial encounter	DX	ICD-10-CM
X94.2XXD	Assault by machine gun, subsequent encounter	DX	ICD-10-CM
X94.8XXA	Assault by other larger firearm discharge, initial encounter	DX	ICD-10-CM
X94.8XXD	Assault by other larger firearm discharge, subsequent encounter	DX	ICD-10-CM
X94.9XXA	Assault by unspecified larger firearm discharge, initial encounter	DX	ICD-10-CM
X94.9XXD	Assault by unspecified larger firearm discharge, subsequent encounter	DX	ICD-10-CM
X95.02XA	Assault by paintball gun discharge, initial encounter	DX	ICD-10-CM
X95.02XD	Assault by paintball gun discharge, subsequent encounter	DX	ICD-10-CM
X95.09XA	Assault by other gas, air or spring-operated gun, initial encounter	DX	ICD-10-CM
X95.09XD	Assault by other gas, air or spring-operated gun, subsequent encounter	DX	ICD-10-CM
X95.8XXA	Assault by other firearm discharge, initial encounter	DX	ICD-10-CM
X95.8XXD	Assault by other firearm discharge, subsequent encounter	DX	ICD-10-CM
X95.9XXA	Assault by unspecified firearm discharge, initial encounter	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
X95.9XXD	Assault by unspecified firearm discharge, subsequent encounter	DX	ICD-10-CM
X96.0XXA	Assault by antipersonnel bomb, initial encounter	DX	ICD-10-CM
X96.0XXD	Assault by antipersonnel bomb, subsequent encounter	DX	ICD-10-CM
X96.1XXA	Assault by gasoline bomb, initial encounter	DX	ICD-10-CM
X96.1XXD	Assault by gasoline bomb, subsequent encounter	DX	ICD-10-CM
X96.2XXA	Assault by letter bomb, initial encounter	DX	ICD-10-CM
X96.2XXD	Assault by letter bomb, subsequent encounter	DX	ICD-10-CM
X96.3XXA	Assault by fertilizer bomb, initial encounter	DX	ICD-10-CM
X96.3XXD	Assault by fertilizer bomb, subsequent encounter	DX	ICD-10-CM
X96.4XXA	Assault by pipe bomb, initial encounter	DX	ICD-10-CM
X96.4XXD	Assault by pipe bomb, subsequent encounter	DX	ICD-10-CM
X96.8XXA	Assault by other specified explosive, initial encounter	DX	ICD-10-CM
X96.8XXD	Assault by other specified explosive, subsequent encounter	DX	ICD-10-CM
X96.9XXA	Assault by unspecified explosive, initial encounter	DX	ICD-10-CM
X96.9XXD	Assault by unspecified explosive, subsequent encounter	DX	ICD-10-CM
Y04.0XXA	Assault by unarmed brawl or fight, initial encounter	DX	ICD-10-CM
Y04.0XXD	Assault by unarmed brawl or fight, subsequent encounter	DX	ICD-10-CM
Y04.2XXA	Assault by strike against or bumped into by another person, initial encounter	DX	ICD-10-CM
Y04.2XXD	Assault by strike against or bumped into by another person, subsequent encounter	DX	ICD-10-CM
Y04.8XXA	Assault by other bodily force, initial encounter	DX	ICD-10-CM
Y04.8XXD	Assault by other bodily force, subsequent encounter	DX	ICD-10-CM
Y22.XXXA	Handgun discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y22.XXXD	Handgun discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y23.0XXA	Shotgun discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y23.0XXD	Shotgun discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y23.1XXA	Hunting rifle discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y23.1XXD	Hunting rifle discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y23.2XXA	Military firearm discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y23.2XXD	Military firearm discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y23.3XXA	Machine gun discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y23.3XXD	Machine gun discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y23.8XXA	Other larger firearm discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y23.8XXD	Other larger firearm discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y23.9XXA	Unspecified larger firearm discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y23.9XXD	Unspecified larger firearm discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y24.0XXA	Airgun discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y24.0XXD	Airgun discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y24.8XXA	Other firearm discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y24.8XXD	Other firearm discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y24.9XXA	Unspecified firearm discharge, undetermined intent, initial encounter	DX	ICD-10-CM
Y24.9XXD	Unspecified firearm discharge, undetermined intent, subsequent encounter	DX	ICD-10-CM
Y25.XXXA	Contact with explosive material, undetermined intent, initial encounter	DX	ICD-10-CM
Y25.XXXD	Contact with explosive material, undetermined intent, subsequent encounter	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
Y35.001A	Legal intervention involving unspecified firearm discharge, law enforcement official injured, initial encounter	DX	ICD-10-CM
Y35.001D	Legal intervention involving unspecified firearm discharge, law enforcement official injured, subsequent encounter	DX	ICD-10-CM
Y35.002A	Legal intervention involving unspecified firearm discharge, bystander injured, initial encounter	DX	ICD-10-CM
Y35.002D	Legal intervention involving unspecified firearm discharge, bystander injured, subsequent encounter	DX	ICD-10-CM
Y35.003A	Legal intervention involving unspecified firearm discharge, suspect injured, initial encounter	DX	ICD-10-CM
Y35.003D	Legal intervention involving unspecified firearm discharge, suspect injured, subsequent encounter	DX	ICD-10-CM
Y35.011A	Legal intervention involving injury by machine gun, law enforcement official injured, initial encounter	DX	ICD-10-CM
Y35.011D	Legal intervention involving injury by machine gun, law enforcement official injured, subsequent encounter	DX	ICD-10-CM
Y35.012A	Legal intervention involving injury by machine gun, bystander injured, initial encounter	DX	ICD-10-CM
Y35.012D	Legal intervention involving injury by machine gun, bystander injured, subsequent encounter	DX	ICD-10-CM
Y35.013A	Legal intervention involving injury by machine gun, suspect injured, initial encounter	DX	ICD-10-CM
Y35.013D	Legal intervention involving injury by machine gun, suspect injured, subsequent encounter	DX	ICD-10-CM
Y35.021A	Legal intervention involving injury by handgun, law enforcement official injured, initial encounter	DX	ICD-10-CM
Y35.021D	Legal intervention involving injury by handgun, law enforcement official injured, subsequent encounter	DX	ICD-10-CM
Y35.022A	Legal intervention involving injury by handgun, bystander injured, initial encounter	DX	ICD-10-CM
Y35.022D	Legal intervention involving injury by handgun, bystander injured, subsequent encounter	DX	ICD-10-CM
Y35.023A	Legal intervention involving injury by handgun, suspect injured, initial encounter	DX	ICD-10-CM
Y35.023D	Legal intervention involving injury by handgun, suspect injured, subsequent encounter	DX	ICD-10-CM
Y35.031A	Legal intervention involving injury by rifle pellet, law enforcement official injured, initial encounter	DX	ICD-10-CM
Y35.031D	Legal intervention involving injury by rifle pellet, law enforcement official injured, subsequent encounter	DX	ICD-10-CM
Y35.032A	Legal intervention involving injury by rifle pellet, bystander injured, initial encounter	DX	ICD-10-CM
Y35.032D	Legal intervention involving injury by rifle pellet, bystander injured, subsequent encounter	DX	ICD-10-CM
Y35.033A	Legal intervention involving injury by rifle pellet, suspect injured, initial encounter	DX	ICD-10-CM
Y35.033D	Legal intervention involving injury by rifle pellet, suspect injured, subsequent encounter	DX	ICD-10-CM
Y35.041A	Legal intervention involving injury by rubber bullet, law enforcement official injured, initial encounter	DX	ICD-10-CM
Y35.041D	Legal intervention involving injury by rubber bullet, law enforcement official injured, subsequent encounter	DX	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Censoring Criteria and Outcomes in this Request

Code	Description	Code Type	Code Category
Y35.042A	Legal intervention involving injury by rubber bullet, bystander injured, initial encounter	DX	ICD-10-CM
Y35.042D	Legal intervention involving injury by rubber bullet, bystander injured, subsequent encounter	DX	ICD-10-CM
Y35.043A	Legal intervention involving injury by rubber bullet, suspect injured, initial encounter	DX	ICD-10-CM
Y35.043D	Legal intervention involving injury by rubber bullet, suspect injured, subsequent encounter	DX	ICD-10-CM
Y35.091A	Legal intervention involving other firearm discharge, law enforcement official injured, initial encounter	DX	ICD-10-CM
Y35.091D	Legal intervention involving other firearm discharge, law enforcement official injured, subsequent encounter	DX	ICD-10-CM
Y35.092A	Legal intervention involving other firearm discharge, bystander injured, initial encounter	DX	ICD-10-CM
Y35.092D	Legal intervention involving other firearm discharge, bystander injured, subsequent encounter	DX	ICD-10-CM
Y35.093A	Legal intervention involving other firearm discharge, suspect injured, initial encounter	DX	ICD-10-CM
Y35.093D	Legal intervention involving other firearm discharge, suspect injured, subsequent encounter	DX	ICD-10-CM

Appendix D. List of Generic and Brand Names of Medical Products Used to Define Inclusion and Exclusion Criteria in this Request

Generic Name	Brand Name
Anti-coagulants	
apixaban	Eliquis
apixaban	Eliquis DVT-PE Treat 30D Start
dabigatran etexilate mesylate	Pradaxa
dabigatran etexilate mesylate	dabigatran etexilate
edoxaban tosylate	Savaysa
rivaroxaban	Xarelto
rivaroxaban	Xarelto DVT-PE Treat 30d Start
warfarin sodium	Coumadin
warfarin sodium	warfarin
warfarin sodium	Jantoven

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Code Type	Category
Dialysis			
792.5	Cloudy (hemodialysis) (peritoneal) dialysis affluent	DX	ICD-9-CM
V45.1	Renal dialysis status	DX	ICD-9-CM
V45.11	Renal dialysis status	DX	ICD-9-CM
V45.12	Noncompliance with renal dialysis	DX	ICD-9-CM
V56.0	Encounter for extracorporeal dialysis	DX	ICD-9-CM
V56.1	Fitting and adjustment of extracorporeal dialysis catheter	DX	ICD-9-CM
V56.2	Fitting and adjustment of peritoneal dialysis catheter	DX	ICD-9-CM
V56.3	Encounter for adequacy testing for dialysis	DX	ICD-9-CM
V56.31	Encounter for adequacy testing for hemodialysis	DX	ICD-9-CM
V56.32	Encounter for adequacy testing for peritoneal dialysis	DX	ICD-9-CM
V56.8	Encounter other dialysis	DX	ICD-9-CM
R88.0	Cloudy (hemodialysis) (peritoneal) dialysis effluent	DX	ICD-10-CM
Z49.01	Encounter for fitting and adjustment of extracorporeal dialysis catheter	DX	ICD-10-CM
Z49.02	Encounter for fitting and adjustment of peritoneal dialysis catheter	DX	ICD-10-CM
Z49.31	Encounter for adequacy testing for hemodialysis	DX	ICD-10-CM
Z49.32	Encounter for adequacy testing for peritoneal dialysis	DX	ICD-10-CM
Z91.15	Patient's noncompliance with renal dialysis	DX	ICD-10-CM
Z99.2	Dependence on renal dialysis	DX	ICD-10-CM
90935	Hemodialysis procedure with single evaluation by a physician or other qualified health care professional	PX	CPT-4
90937	Hemodialysis procedure requiring repeated evaluation(s) with or without substantial revision of dialysis prescription	PX	CPT-4
90939	Hemodialysis access flow study to determine blood flow in grafts and arteriovenous fistulae by an indicator dilution method, hook-up; transcutaneous measurement and disconnection	PX	CPT-4
90940	Hemodialysis access flow study to determine blood flow in grafts and arteriovenous fistulae by an indicator method	PX	CPT-4
90941	Hemodialysis, For Acute Renal Failure And Or Intoxication,	PX	CPT-4
90942	Hemodialysis, For Acute Renal Failure And Or Intoxication,	PX	CPT-4
90943	Hemodialysis, For Acute Renal Failure And Or Intoxication,	PX	CPT-4
90944	Hemodialysis, For Acute Renal Failure And Or Intoxication,	PX	CPT-4
90945	Dialysis procedure other than hemodialysis (eg, peritoneal dialysis, hemofiltration, or other continuous renal replacement therapies), with single evaluation by a physician or other qualified health care professional	PX	CPT-4
90947	Dialysis procedure other than hemodialysis (eg, peritoneal dialysis, hemofiltration, or other continuous renal replacement therapies) requiring repeated evaluations by a physician or other qualified health care professional, with or without substantial revision of dialysis	PX	CPT-4
90951	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Code Type	Category
90952	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4
90953	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month	PX	CPT-4
90954	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4
90955	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4
90956	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month	PX	CPT-4
90957	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4
90958	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4
90959	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month	PX	CPT-4
90960	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	PX	CPT-4
90961	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 2-3 face-to-face visits by a physician or other qualified health care professional per	PX	CPT-4
90962	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 1 face-to-face visit by a physician or other qualified health care professional per	PX	CPT-4
90963	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents	PX	CPT-4

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Type	Category
90964	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents	PX	CPT-4
90965	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents	PX	CPT-4
90966	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 20 years of age and older	PX	CPT-4
90967	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients younger than 2 years of age	PX	CPT-4
90968	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 2-11 years of age	PX	CPT-4
90969	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 12-19 years of age	PX	CPT-4
90970	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 20 years of age and older	PX	CPT-4
90976	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90977	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90978	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90979	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90982	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90983	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90984	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90985	Peritoneal Dialysis For End-stage Renal Disease (esrd),	PX	CPT-4
90988	Supervision Of Hemodialysis In Hospital Or Other Facility (excluding Home Dialysis), On Monthly Basis	PX	CPT-4
90989	Dialysis training, patient, including helper where applicable, any mode, completed course	PX	CPT-4
90990	Hemodialysis Training And/or Counseling	PX	CPT-4
90991	Home Hemodialysis Care, Outpatient, For Those Services Either Provided By The Physician Primarily Responsible	PX	CPT-4
90992	Peritoneal Dialysis Training And/or Counseling	PX	CPT-4
90993	Dialysis training, patient, including helper where applicable, any mode, course not completed, per training session	PX	CPT-4
90994	Supervision Of Chronic Ambulatory Peritoneal Dialysis (capd), Home Or Out-patient (monthly)	PX	CPT-4
90995	End Stage Renal Disease (esrd) Related Services, Per Full Month	PX	CPT-4
90996	Continuous Arteriovenous Hemofiltration (cavh) (per Day)	PX	CPT-4
90997	Hemoperfusion (eg, with activated charcoal or resin)	PX	CPT-4
90998	End Stage Renal Disease (esrd) Related Services (less Than Full Month), Per Day	PX	CPT-4
90999	Unlisted dialysis procedure, inpatient or outpatient	PX	CPT-4
Kidney replacement			
556	Transplant of kidney	PX	ICD-9-CM
5561	Renal autotransplantation	PX	ICD-9-CM
5569	Other kidney transplantation	PX	ICD-9-CM

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Code	Description	Code	
		Code Type	Category
99681	Complications of transplanted kidney	DX	ICD-9-CM
V420	Kidney replaced by transplant	DX	ICD-9-CM
T86.10	Unspecified complication of kidney transplant	DX	ICD-10-CM
T86.11	Kidney transplant rejection	DX	ICD-10-CM
T86.12	Kidney transplant failure	DX	ICD-10-CM
T86.13	Kidney transplant infection	DX	ICD-10-CM
T86.19	Other complication of kidney transplant	DX	ICD-10-CM
Z48.22	Encounter for aftercare following kidney transplant	DX	ICD-10-CM
Z94.0	Kidney transplant status	DX	ICD-10-CM
OTS00ZZ	Reposition Right Kidney, Open Approach	PX	ICD-10-PCS
OTS10ZZ	Reposition Left Kidney, Open Approach	PX	ICD-10-PCS
OTY00Z0	Transplantation of Right Kidney, Allogeneic, Open Approach	PX	ICD-10-PCS
OTY00Z1	Transplantation of Right Kidney, Syngeneic, Open Approach	PX	ICD-10-PCS
OTY00Z2	Transplantation of Right Kidney, Zooplastic, Open Approach	PX	ICD-10-PCS
OTY10Z0	Transplantation of Left Kidney, Allogeneic, Open Approach	PX	ICD-10-PCS
OTY10Z1	Transplantation of Left Kidney, Syngeneic, Open Approach	PX	ICD-10-PCS
OTY10Z2	Transplantation of Left Kidney, Zooplastic, Open Approach	PX	ICD-10-PCS
Deep vein thrombosis			
4534	Acute venous embolism and thrombosis of deep vessels of lower extremity	DX	ICD-9-CM
45340	Acute venous embolism and thrombosis of unspecified deep vessels of lower extremity	DX	ICD-9-CM
45341	Acute venous embolism and thrombosis of deep vessels of proximal lower extremity	DX	ICD-9-CM
45342	Acute venous embolism and thrombosis of deep vessels of distal lower extremity	DX	ICD-9-CM
4511	Phlebitis and thrombophlebitis of deep veins of lower extremities	DX	ICD-9-CM
45111	Phlebitis and thrombophlebitis of femoral vein (deep) (superficial)	DX	ICD-9-CM
45119	Phlebitis and thrombophlebitis of deep veins of lower extremities, other	DX	ICD-9-CM
4512	Phlebitis and thrombophlebitis of lower extremities, unspecified	DX	ICD-9-CM
45181	Phlebitis and thrombophlebitis of iliac vein	DX	ICD-9-CM
45183	Phlebitis and thrombophlebitis of deep veins of upper extremities	DX	ICD-9-CM
45384	Phlebitis and thrombophlebitis of upper extremities, unspecified	DX	ICD-9-CM
I80.10	Phlebitis and thrombophlebitis of unspecified femoral vein	DX	ICD-10-CM
I80.11	Phlebitis and thrombophlebitis of right femoral vein	DX	ICD-10-CM
I80.12	Phlebitis and thrombophlebitis of left femoral vein	DX	ICD-10-CM
I80.13	Phlebitis and thrombophlebitis of femoral vein, bilateral	DX	ICD-10-CM
I80.201	Phlebitis and thrombophlebitis of unspecified deep vessels of right lower extremity	DX	ICD-10-CM
I80.202	Phlebitis and thrombophlebitis of unspecified deep vessels of left lower extremity	DX	ICD-10-CM
I80.203	Phlebitis and thrombophlebitis of unspecified deep vessels of lower extremities, bilateral	DX	ICD-10-CM
I80.209	Phlebitis and thrombophlebitis of unspecified deep vessels of unspecified lower extremity	DX	ICD-10-CM
I80.211	Phlebitis and thrombophlebitis of right iliac vein	DX	ICD-10-CM
I80.212	Phlebitis and thrombophlebitis of left iliac vein	DX	ICD-10-CM
I80.213	Phlebitis and thrombophlebitis of iliac vein, bilateral	DX	ICD-10-CM
I80.219	Phlebitis and thrombophlebitis of unspecified iliac vein	DX	ICD-10-CM
I80.221	Phlebitis and thrombophlebitis of right popliteal vein	DX	ICD-10-CM
I80.222	Phlebitis and thrombophlebitis of left popliteal vein	DX	ICD-10-CM

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Code Type	Category
I80.223	Phlebitis and thrombophlebitis of popliteal vein, bilateral	DX	ICD-10-CM
I80.229	Phlebitis and thrombophlebitis of unspecified popliteal vein	DX	ICD-10-CM
I80.231	Phlebitis and thrombophlebitis of right tibial vein	DX	ICD-10-CM
I80.232	Phlebitis and thrombophlebitis of left tibial vein	DX	ICD-10-CM
I80.233	Phlebitis and thrombophlebitis of tibial vein, bilateral	DX	ICD-10-CM
I80.239	Phlebitis and thrombophlebitis of unspecified tibial vein	DX	ICD-10-CM
I80.291	Phlebitis and thrombophlebitis of other deep vessels of right lower extremity	DX	ICD-10-CM
I80.292	Phlebitis and thrombophlebitis of other deep vessels of left lower extremity	DX	ICD-10-CM
I80.293	Phlebitis and thrombophlebitis of other deep vessels of lower extremity, bilateral	DX	ICD-10-CM
I80.299	Phlebitis and thrombophlebitis of other deep vessels of unspecified lower extremity	DX	ICD-10-CM
I80.3	Phlebitis and thrombophlebitis of lower extremities, unspecified	DX	ICD-10-CM
I80.8	Phlebitis and thrombophlebitis of other sites	DX	ICD-10-CM
I82.401	Acute embolism and thrombosis of unspecified deep veins of right lower extremity	DX	ICD-10-CM
I82.402	Acute embolism and thrombosis of unspecified deep veins of left lower extremity	DX	ICD-10-CM
I82.403	Acute embolism and thrombosis of unspecified deep veins of lower extremity, bilateral	DX	ICD-10-CM
I82.409	Acute embolism and thrombosis of unspecified deep veins of unspecified lower extremity	DX	ICD-10-CM
I82.411	Acute embolism and thrombosis of right femoral vein	DX	ICD-10-CM
I82.412	Acute embolism and thrombosis of left femoral vein	DX	ICD-10-CM
I82.413	Acute embolism and thrombosis of femoral vein, bilateral	DX	ICD-10-CM
I82.419	Acute embolism and thrombosis of unspecified femoral vein	DX	ICD-10-CM
I82.421	Acute embolism and thrombosis of right iliac vein	DX	ICD-10-CM
I82.422	Acute embolism and thrombosis of left iliac vein	DX	ICD-10-CM
I82.423	Acute embolism and thrombosis of iliac vein, bilateral	DX	ICD-10-CM
I82.429	Acute embolism and thrombosis of unspecified iliac vein	DX	ICD-10-CM
I82.431	Acute embolism and thrombosis of right popliteal vein	DX	ICD-10-CM
I82.432	Acute embolism and thrombosis of left popliteal vein	DX	ICD-10-CM
I82.433	Acute embolism and thrombosis of popliteal vein, bilateral	DX	ICD-10-CM
I82.439	Acute embolism and thrombosis of unspecified popliteal vein	DX	ICD-10-CM
I82.441	Acute embolism and thrombosis of right tibial vein	DX	ICD-10-CM
I82.442	Acute embolism and thrombosis of left tibial vein	DX	ICD-10-CM
I82.443	Acute embolism and thrombosis of tibial vein, bilateral	DX	ICD-10-CM
I82.449	Acute embolism and thrombosis of unspecified tibial vein	DX	ICD-10-CM
I82.491	Acute embolism and thrombosis of other specified deep vein of right lower extremity	DX	ICD-10-CM
I82.492	Acute embolism and thrombosis of other specified deep vein of left lower extremity	DX	ICD-10-CM
I82.493	Acute embolism and thrombosis of other specified deep vein of lower extremity, bilateral	DX	ICD-10-CM
I82.499	Acute embolism and thrombosis of other specified deep vein of unspecified lower extremity	DX	ICD-10-CM
I82.4Y1	Acute embolism and thrombosis of unspecified deep veins of right proximal lower extremity	DX	ICD-10-CM
I82.4Y2	Acute embolism and thrombosis of unspecified deep veins of left proximal lower extremity	DX	ICD-10-CM
I82.4Y3	Acute embolism and thrombosis of unspecified deep veins of proximal lower extremity, bilateral	DX	ICD-10-CM
I82.4Y9	Acute embolism and thrombosis of unspecified deep veins of unspecified proximal lower extremity	DX	ICD-10-CM
I82.4Z1	Acute embolism and thrombosis of unspecified deep veins of right distal lower extremity	DX	ICD-10-CM

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Code	Description	Code	
		Code Type	Category
I82.4Z2	Acute embolism and thrombosis of unspecified deep veins of left distal lower extremity	DX	ICD-10-CM
I82.4Z3	Acute embolism and thrombosis of unspecified deep veins of distal lower extremity, bilateral	DX	ICD-10-CM
I82.4Z9	Acute embolism and thrombosis of unspecified deep veins of unspecified distal lower extremity	DX	ICD-10-CM
I82.A11	Acute embolism and thrombosis of right axillary vein	DX	ICD-10-CM
I82.A12	Acute embolism and thrombosis of left axillary vein	DX	ICD-10-CM
I82.A13	Acute embolism and thrombosis of axillary vein, bilateral	DX	ICD-10-CM
I82.A19	Acute embolism and thrombosis of unspecified axillary vein	DX	ICD-10-CM
Deep vein thrombosis			
4534	Acute venous embolism and thrombosis of deep vessels of lower extremity	DX	ICD-9-CM
45340	Acute venous embolism and thrombosis of unspecified deep vessels of lower extremity	DX	ICD-9-CM
45341	Acute venous embolism and thrombosis of deep vessels of proximal lower extremity	DX	ICD-9-CM
45342	Acute venous embolism and thrombosis of deep vessels of distal lower extremity	DX	ICD-9-CM
4511	Phlebitis and thrombophlebitis of deep veins of lower extremities	DX	ICD-9-CM
45111	Phlebitis and thrombophlebitis of femoral vein (deep) (superficial)	DX	ICD-9-CM
45119	Phlebitis and thrombophlebitis of deep veins of lower extremities, other	DX	ICD-9-CM
4512	Phlebitis and thrombophlebitis of lower extremities, unspecified	DX	ICD-9-CM
45181	Phlebitis and thrombophlebitis of iliac vein	DX	ICD-9-CM
45183	Phlebitis and thrombophlebitis of deep veins of upper extremities	DX	ICD-9-CM
45384	Phlebitis and thrombophlebitis of upper extremities, unspecified	DX	ICD-9-CM
I80.10	Phlebitis and thrombophlebitis of unspecified femoral vein	DX	ICD-10-CM
I80.11	Phlebitis and thrombophlebitis of right femoral vein	DX	ICD-10-CM
I80.12	Phlebitis and thrombophlebitis of left femoral vein	DX	ICD-10-CM
I80.13	Phlebitis and thrombophlebitis of femoral vein, bilateral	DX	ICD-10-CM
I80.201	Phlebitis and thrombophlebitis of unspecified deep vessels of right lower extremity	DX	ICD-10-CM
I80.202	Phlebitis and thrombophlebitis of unspecified deep vessels of left lower extremity	DX	ICD-10-CM
I80.203	Phlebitis and thrombophlebitis of unspecified deep vessels of lower extremities, bilateral	DX	ICD-10-CM
I80.209	Phlebitis and thrombophlebitis of unspecified deep vessels of unspecified lower extremity	DX	ICD-10-CM
I80.211	Phlebitis and thrombophlebitis of right iliac vein	DX	ICD-10-CM
I80.212	Phlebitis and thrombophlebitis of left iliac vein	DX	ICD-10-CM
I80.213	Phlebitis and thrombophlebitis of iliac vein, bilateral	DX	ICD-10-CM
I80.219	Phlebitis and thrombophlebitis of unspecified iliac vein	DX	ICD-10-CM
I80.221	Phlebitis and thrombophlebitis of right popliteal vein	DX	ICD-10-CM
I80.222	Phlebitis and thrombophlebitis of left popliteal vein	DX	ICD-10-CM
I80.223	Phlebitis and thrombophlebitis of popliteal vein, bilateral	DX	ICD-10-CM
I80.229	Phlebitis and thrombophlebitis of unspecified popliteal vein	DX	ICD-10-CM
I80.231	Phlebitis and thrombophlebitis of right tibial vein	DX	ICD-10-CM
I80.232	Phlebitis and thrombophlebitis of left tibial vein	DX	ICD-10-CM
I80.233	Phlebitis and thrombophlebitis of tibial vein, bilateral	DX	ICD-10-CM
I80.239	Phlebitis and thrombophlebitis of unspecified tibial vein	DX	ICD-10-CM
I80.291	Phlebitis and thrombophlebitis of other deep vessels of right lower extremity	DX	ICD-10-CM
I80.292	Phlebitis and thrombophlebitis of other deep vessels of left lower extremity	DX	ICD-10-CM
I80.293	Phlebitis and thrombophlebitis of other deep vessels of lower extremity, bilateral	DX	ICD-10-CM

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Code	Description	Code	
		Code Type	Category
I80.299	Phlebitis and thrombophlebitis of other deep vessels of unspecified lower extremity	DX	ICD-10-CM
I80.3	Phlebitis and thrombophlebitis of lower extremities, unspecified	DX	ICD-10-CM
I80.8	Phlebitis and thrombophlebitis of other sites	DX	ICD-10-CM
I82.401	Acute embolism and thrombosis of unspecified deep veins of right lower extremity	DX	ICD-10-CM
I82.402	Acute embolism and thrombosis of unspecified deep veins of left lower extremity	DX	ICD-10-CM
I82.403	Acute embolism and thrombosis of unspecified deep veins of lower extremity, bilateral	DX	ICD-10-CM
I82.409	Acute embolism and thrombosis of unspecified deep veins of unspecified lower extremity	DX	ICD-10-CM
I82.411	Acute embolism and thrombosis of right femoral vein	DX	ICD-10-CM
I82.412	Acute embolism and thrombosis of left femoral vein	DX	ICD-10-CM
I82.413	Acute embolism and thrombosis of femoral vein, bilateral	DX	ICD-10-CM
I82.419	Acute embolism and thrombosis of unspecified femoral vein	DX	ICD-10-CM
I82.421	Acute embolism and thrombosis of right iliac vein	DX	ICD-10-CM
I82.422	Acute embolism and thrombosis of left iliac vein	DX	ICD-10-CM
I82.423	Acute embolism and thrombosis of iliac vein, bilateral	DX	ICD-10-CM
I82.429	Acute embolism and thrombosis of unspecified iliac vein	DX	ICD-10-CM
I82.431	Acute embolism and thrombosis of right popliteal vein	DX	ICD-10-CM
I82.432	Acute embolism and thrombosis of left popliteal vein	DX	ICD-10-CM
I82.433	Acute embolism and thrombosis of popliteal vein, bilateral	DX	ICD-10-CM
I82.439	Acute embolism and thrombosis of unspecified popliteal vein	DX	ICD-10-CM
I82.441	Acute embolism and thrombosis of right tibial vein	DX	ICD-10-CM
I82.442	Acute embolism and thrombosis of left tibial vein	DX	ICD-10-CM
I82.443	Acute embolism and thrombosis of tibial vein, bilateral	DX	ICD-10-CM
I82.449	Acute embolism and thrombosis of unspecified tibial vein	DX	ICD-10-CM
I82.491	Acute embolism and thrombosis of other specified deep vein of right lower extremity	DX	ICD-10-CM
I82.492	Acute embolism and thrombosis of other specified deep vein of left lower extremity	DX	ICD-10-CM
I82.493	Acute embolism and thrombosis of other specified deep vein of lower extremity, bilateral	DX	ICD-10-CM
I82.499	Acute embolism and thrombosis of other specified deep vein of unspecified lower extremity	DX	ICD-10-CM
I82.4Y1	Acute embolism and thrombosis of unspecified deep veins of right proximal lower extremity	DX	ICD-10-CM
I82.4Y2	Acute embolism and thrombosis of unspecified deep veins of left proximal lower extremity	DX	ICD-10-CM
I82.4Y3	Acute embolism and thrombosis of unspecified deep veins of proximal lower extremity, bilateral	DX	ICD-10-CM
I82.4Y9	Acute embolism and thrombosis of unspecified deep veins of unspecified proximal lower extremity	DX	ICD-10-CM
I82.4Z1	Acute embolism and thrombosis of unspecified deep veins of right distal lower extremity	DX	ICD-10-CM
I82.4Z2	Acute embolism and thrombosis of unspecified deep veins of left distal lower extremity	DX	ICD-10-CM
I82.4Z3	Acute embolism and thrombosis of unspecified deep veins of distal lower extremity, bilateral	DX	ICD-10-CM
I82.4Z9	Acute embolism and thrombosis of unspecified deep veins of unspecified distal lower extremity	DX	ICD-10-CM
I82.A11	Acute embolism and thrombosis of right axillary vein	DX	ICD-10-CM
I82.A12	Acute embolism and thrombosis of left axillary vein	DX	ICD-10-CM
I82.A13	Acute embolism and thrombosis of axillary vein, bilateral	DX	ICD-10-CM
I82.A19	Acute embolism and thrombosis of unspecified axillary vein	DX	ICD-10-CM

Pulmonary embolism

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Code	Description	Code	
		Code Type	Category
4151	Pulmonary embolism and infarction	DX	ICD-9-CM
41511	Iatrogenic pulmonary embolism and infarction	DX	ICD-9-CM
41512	Septic pulmonary embolism	DX	ICD-9-CM
41519	Other pulmonary embolism and infarction	DX	ICD-9-CM
I26.01	Septic pulmonary embolism with acute cor pulmonale	DX	ICD-10-CM
I26.09	Other pulmonary embolism with acute cor pulmonale	DX	ICD-10-CM
I26.90	Septic pulmonary embolism without acute cor pulmonale	DX	ICD-10-CM
I26.99	Other pulmonary embolism without acute cor pulmonale	DX	ICD-10-CM
T80.0XXA	Air embolism following infusion, transfusion and therapeutic injection, initial encounter	DX	ICD-10-CM
T81.718A	Complication of other artery following a procedure, not elsewhere classified, initial encounter	DX	ICD-10-CM
T81.72XA	Complication of vein following a procedure, not elsewhere classified, initial encounter	DX	ICD-10-CM
T82.817A	Embolism due to cardiac prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
T82.818A	Embolism due to vascular prosthetic devices, implants and grafts, initial encounter	DX	ICD-10-CM
Joint replacement			
V436	Joint replaced by other means	DX	ICD-9-CM
V4360	Unspecified joint replacement	DX	ICD-9-CM
V4361	Shoulder joint replacement	DX	ICD-9-CM
V4362	Elbow joint replacement	DX	ICD-9-CM
V4363	Wrist joint replacement	DX	ICD-9-CM
V4364	Hip joint replacement	DX	ICD-9-CM
V4365	Knee joint replacement	DX	ICD-9-CM
V4366	Ankle joint replacement	DX	ICD-9-CM
V4369	Other joint replacement	DX	ICD-9-CM
815	JOINT REPLACEMENT LOWER EXTREMITY	PX	ICD-9-CM
8151	TOTAL HIP REPLACEMENT	PX	ICD-9-CM
8152	PARTIAL HIP REPLACEMENT	PX	ICD-9-CM
8153	REVISION OF HIP REPLACEMENT NOS	PX	ICD-9-CM
8154	TOTAL KNEE REPLACEMENT	PX	ICD-9-CM
8155	REVISION OF KNEE REPLACEMENT NOS	PX	ICD-9-CM
8156	TOTAL ANKLE REPLACEMENT	PX	ICD-9-CM
8157	REPLACEMENT OF JOINT OF FOOT&TOE	PX	ICD-9-CM
8159	REV JOINT REPLCMT LOWER EXTREM NEC	PX	ICD-9-CM
818	ARTHROPLASTY&REPAIR SHOULDER&ELBOW	PX	ICD-9-CM
8180	OTHER TOTAL SHOULDER REPLACEMENT	PX	ICD-9-CM
8181	PARTIAL SHOULDER REPLACEMENT	PX	ICD-9-CM
8182	REPAIR RECURRENT DISLOC SHOULDER	PX	ICD-9-CM
8183	OTHER REPAIR OF SHOULDER	PX	ICD-9-CM
8184	TOTAL ELBOW REPLACEMENT	PX	ICD-9-CM
8185	OTHER REPAIR OF ELBOW	PX	ICD-9-CM
24363	REPLACE ELBOW JOINT	PX	CPT-4
27130	TOTAL HIP ARTHROPLASTY	PX	CPT-4
27132	TOTAL HIP ARTHROPLASTY	PX	CPT-4
27134	REVISE HIP JOINT REPLACEMENT	PX	CPT-4

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Code	Description	Code	
		Code Type	Category
27137	REVISE HIP JOINT REPLACEMENT	PX	CPT-4
27138	REVISE HIP JOINT REPLACEMENT	PX	CPT-4
27447	TOTAL KNEE ARTHROPLASTY	PX	CPT-4
Z96.60	Presence of unspecified orthopedic joint implant	DX	ICD-10-CM
Z96.611	Presence of right artificial shoulder joint	DX	ICD-10-CM
Z96.612	Presence of left artificial shoulder joint	DX	ICD-10-CM
Z96.619	Presence of unspecified artificial shoulder joint	DX	ICD-10-CM
Z96.621	Presence of right artificial elbow joint	DX	ICD-10-CM
Z96.622	Presence of left artificial elbow joint	DX	ICD-10-CM
Z96.629	Presence of unspecified artificial elbow joint	DX	ICD-10-CM
Z96.631	Presence of right artificial wrist joint	DX	ICD-10-CM
Z96.632	Presence of left artificial wrist joint	DX	ICD-10-CM
Z96.639	Presence of unspecified artificial wrist joint	DX	ICD-10-CM
Z96.641	Presence of right artificial hip joint	DX	ICD-10-CM
Z96.642	Presence of left artificial hip joint	DX	ICD-10-CM
Z96.643	Presence of artificial hip joint, bilateral	DX	ICD-10-CM
Z96.649	Presence of unspecified artificial hip joint	DX	ICD-10-CM
Z96.651	Presence of right artificial knee joint	DX	ICD-10-CM
Z96.652	Presence of left artificial knee joint	DX	ICD-10-CM
Z96.653	Presence of artificial knee joint, bilateral	DX	ICD-10-CM
Z96.659	Presence of unspecified artificial knee joint	DX	ICD-10-CM
Z96.661	Presence of right artificial ankle joint	DX	ICD-10-CM
Z96.662	Presence of left artificial ankle joint	DX	ICD-10-CM
Z96.669	Presence of unspecified artificial ankle joint	DX	ICD-10-CM
Z96.691	Finger-joint replacement of right hand	DX	ICD-10-CM
Z96.692	Finger-joint replacement of left hand	DX	ICD-10-CM
Z96.693	Finger-joint replacement, bilateral	DX	ICD-10-CM
Z96.698	Presence of other orthopedic joint implants	DX	ICD-10-CM
Z96.7	Presence of other bone and tendon implants	DX	ICD-10-CM
ORQE0ZZ	Repair Right Sternoclavicular Joint, Open Approach	PX	ICD-10-PCS
ORQE3ZZ	Repair Right Sternoclavicular Joint, Percutaneous Approach	PX	ICD-10-PCS
ORQE4ZZ	Repair Right Sternoclavicular Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORQEXZZ	Repair Right Sternoclavicular Joint, External Approach	PX	ICD-10-PCS
ORQF0ZZ	Repair Left Sternoclavicular Joint, Open Approach	PX	ICD-10-PCS
ORQF3ZZ	Repair Left Sternoclavicular Joint, Percutaneous Approach	PX	ICD-10-PCS
ORQF4ZZ	Repair Left Sternoclavicular Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORQFXZZ	Repair Left Sternoclavicular Joint, External Approach	PX	ICD-10-PCS
ORQG0ZZ	Repair Right Acromioclavicular Joint, Open Approach	PX	ICD-10-PCS
ORQG3ZZ	Repair Right Acromioclavicular Joint, Percutaneous Approach	PX	ICD-10-PCS
ORQG4ZZ	Repair Right Acromioclavicular Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORQGXZZ	Repair Right Acromioclavicular Joint, External Approach	PX	ICD-10-PCS
ORQH0ZZ	Repair Left Acromioclavicular Joint, Open Approach	PX	ICD-10-PCS
ORQH3ZZ	Repair Left Acromioclavicular Joint, Percutaneous Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Code Type	Category
ORQH4ZZ	Repair Left Acromioclavicular Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORQHZZ	Repair Left Acromioclavicular Joint, External Approach	PX	ICD-10-PCS
ORQJ0ZZ	Repair Right Shoulder Joint, Open Approach	PX	ICD-10-PCS
ORQJ3ZZ	Repair Right Shoulder Joint, Percutaneous Approach	PX	ICD-10-PCS
ORQJ4ZZ	Repair Right Shoulder Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORQJXZZ	Repair Right Shoulder Joint, External Approach	PX	ICD-10-PCS
ORQK0ZZ	Repair Left Shoulder Joint, Open Approach	PX	ICD-10-PCS
ORQK3ZZ	Repair Left Shoulder Joint, Percutaneous Approach	PX	ICD-10-PCS
ORQK4ZZ	Repair Left Shoulder Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORQKXZZ	Repair Left Shoulder Joint, External Approach	PX	ICD-10-PCS
ORQL0ZZ	Repair Right Elbow Joint, Open Approach	PX	ICD-10-PCS
ORQL3ZZ	Repair Right Elbow Joint, Percutaneous Approach	PX	ICD-10-PCS
ORQL4ZZ	Repair Right Elbow Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORQLXZZ	Repair Right Elbow Joint, External Approach	PX	ICD-10-PCS
ORQM0ZZ	Repair Left Elbow Joint, Open Approach	PX	ICD-10-PCS
ORQM3ZZ	Repair Left Elbow Joint, Percutaneous Approach	PX	ICD-10-PCS
ORQM4ZZ	Repair Left Elbow Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORQMXZZ	Repair Left Elbow Joint, External Approach	PX	ICD-10-PCS
ORRE07Z	Replacement of Right Sternoclavicular Joint with Autologous Tissue Substitute, Open	PX	ICD-10-PCS
ORRE0JZ	Replacement of Right Sternoclavicular Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORRE0KZ	Replacement of Right Sternoclavicular Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORRF07Z	Replacement of Left Sternoclavicular Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORRF0JZ	Replacement of Left Sternoclavicular Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORRF0KZ	Replacement of Left Sternoclavicular Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORRG07Z	Replacement of Right Acromioclavicular Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORRG0JZ	Replacement of Right Acromioclavicular Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORRG0KZ	Replacement of Right Acromioclavicular Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORRH07Z	Replacement of Left Acromioclavicular Joint with Autologous Tissue Substitute, Open	PX	ICD-10-PCS
ORRH0JZ	Replacement of Left Acromioclavicular Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORRH0KZ	Replacement of Left Acromioclavicular Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORRJ07Z	Replacement of Right Shoulder Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORRJ0J6	Replacement of Right Shoulder Joint with Synthetic Substitute, Humeral Surface, Open Approach	PX	ICD-10-PCS
ORRJ0J7	Replacement of Right Shoulder Joint with Synthetic Substitute, Glenoid Surface, Open Approach	PX	ICD-10-PCS
ORRJ0JZ	Replacement of Right Shoulder Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORRJ0KZ	Replacement of Right Shoulder Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORRK07Z	Replacement of Left Shoulder Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Code Type	Category
ORRK0J6	Replacement of Left Shoulder Joint with Synthetic Substitute, Humeral Surface, Open	PX	ICD-10-PCS
ORRK0J7	Replacement of Left Shoulder Joint with Synthetic Substitute, Glenoid Surface, Open	PX	ICD-10-PCS
ORRK0JZ	Replacement of Left Shoulder Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORRK0KZ	Replacement of Left Shoulder Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORRLO7Z	Replacement of Right Elbow Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORRLOJZ	Replacement of Right Elbow Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORRLOKZ	Replacement of Right Elbow Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORRM07Z	Replacement of Left Elbow Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORRM0JZ	Replacement of Left Elbow Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORRM0KZ	Replacement of Left Elbow Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORSE04Z	Reposition Right Sternoclavicular Joint with Internal Fixation Device, Open Approach	PX	ICD-10-PCS
ORSE0ZZ	Reposition Right Sternoclavicular Joint, Open Approach	PX	ICD-10-PCS
ORSF04Z	Reposition Left Sternoclavicular Joint with Internal Fixation Device, Open Approach	PX	ICD-10-PCS
ORSF0ZZ	Reposition Left Sternoclavicular Joint, Open Approach	PX	ICD-10-PCS
ORSG04Z	Reposition Right Acromioclavicular Joint with Internal Fixation Device, Open Approach	PX	ICD-10-PCS
ORSG0ZZ	Reposition Right Acromioclavicular Joint, Open Approach	PX	ICD-10-PCS
ORSH04Z	Reposition Left Acromioclavicular Joint with Internal Fixation Device, Open Approach	PX	ICD-10-PCS
ORSH0ZZ	Reposition Left Acromioclavicular Joint, Open Approach	PX	ICD-10-PCS
ORSJ04Z	Reposition Right Shoulder Joint with Internal Fixation Device, Open Approach	PX	ICD-10-PCS
ORSJ0ZZ	Reposition Right Shoulder Joint, Open Approach	PX	ICD-10-PCS
ORSK04Z	Reposition Left Shoulder Joint with Internal Fixation Device, Open Approach	PX	ICD-10-PCS
ORSK0ZZ	Reposition Left Shoulder Joint, Open Approach	PX	ICD-10-PCS
ORUE07Z	Supplement Right Sternoclavicular Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUE0JZ	Supplement Right Sternoclavicular Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORUE0KZ	Supplement Right Sternoclavicular Joint with Nonautologous Tissue Substitute, Open	PX	ICD-10-PCS
ORUE37Z	Supplement Right Sternoclavicular Joint with Autologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUE3JZ	Supplement Right Sternoclavicular Joint with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUE3KZ	Supplement Right Sternoclavicular Joint with Nonautologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUE47Z	Supplement Right Sternoclavicular Joint with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUE4JZ	Supplement Right Sternoclavicular Joint with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUE4KZ	Supplement Right Sternoclavicular Joint with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUF07Z	Supplement Left Sternoclavicular Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUF0JZ	Supplement Left Sternoclavicular Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORUF0KZ	Supplement Left Sternoclavicular Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUF37Z	Supplement Left Sternoclavicular Joint with Autologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUF3JZ	Supplement Left Sternoclavicular Joint with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
ORUF3KZ	Supplement Left Sternoclavicular Joint with Nonautologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUF47Z	Supplement Left Sternoclavicular Joint with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUF4JZ	Supplement Left Sternoclavicular Joint with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUF4KZ	Supplement Left Sternoclavicular Joint with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUG07Z	Supplement Right Acromioclavicular Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUG0JZ	Supplement Right Acromioclavicular Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORUG0KZ	Supplement Right Acromioclavicular Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUG37Z	Supplement Right Acromioclavicular Joint with Autologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUG3JZ	Supplement Right Acromioclavicular Joint with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUG3KZ	Supplement Right Acromioclavicular Joint with Nonautologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUG47Z	Supplement Right Acromioclavicular Joint with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUG4JZ	Supplement Right Acromioclavicular Joint with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUG4KZ	Supplement Right Acromioclavicular Joint with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUH07Z	Supplement Left Acromioclavicular Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUH0JZ	Supplement Left Acromioclavicular Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORUH0KZ	Supplement Left Acromioclavicular Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUH37Z	Supplement Left Acromioclavicular Joint with Autologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUH3JZ	Supplement Left Acromioclavicular Joint with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUH3KZ	Supplement Left Acromioclavicular Joint with Nonautologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUH47Z	Supplement Left Acromioclavicular Joint with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUH4JZ	Supplement Left Acromioclavicular Joint with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUH4KZ	Supplement Left Acromioclavicular Joint with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUJ07Z	Supplement Right Shoulder Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUJ0JZ	Supplement Right Shoulder Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORUJ0KZ	Supplement Right Shoulder Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUJ37Z	Supplement Right Shoulder Joint with Autologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUJ3JZ	Supplement Right Shoulder Joint with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
ORUJ3KZ	Supplement Right Shoulder Joint with Nonautologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUJ47Z	Supplement Right Shoulder Joint with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUJ4JZ	Supplement Right Shoulder Joint with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUJ4KZ	Supplement Right Shoulder Joint with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUK07Z	Supplement Left Shoulder Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUK0JZ	Supplement Left Shoulder Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORUK0KZ	Supplement Left Shoulder Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUK37Z	Supplement Left Shoulder Joint with Autologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUK3JZ	Supplement Left Shoulder Joint with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUK3KZ	Supplement Left Shoulder Joint with Nonautologous Tissue Substitute, Percutaneous	PX	ICD-10-PCS
ORUK47Z	Supplement Left Shoulder Joint with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUK4JZ	Supplement Left Shoulder Joint with Synthetic Substitute, Percutaneous Endoscopic	PX	ICD-10-PCS
ORUK4KZ	Supplement Left Shoulder Joint with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUL07Z	Supplement Right Elbow Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUL0JZ	Supplement Right Elbow Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORUL0KZ	Supplement Right Elbow Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUL37Z	Supplement Right Elbow Joint with Autologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUL3JZ	Supplement Right Elbow Joint with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUL3KZ	Supplement Right Elbow Joint with Nonautologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUL47Z	Supplement Right Elbow Joint with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUL4JZ	Supplement Right Elbow Joint with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUL4KZ	Supplement Right Elbow Joint with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUM07Z	Supplement Left Elbow Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUM0JZ	Supplement Left Elbow Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
ORUM0KZ	Supplement Left Elbow Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
ORUM37Z	Supplement Left Elbow Joint with Autologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUM3JZ	Supplement Left Elbow Joint with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUM3KZ	Supplement Left Elbow Joint with Nonautologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
ORUM47Z	Supplement Left Elbow Joint with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUM4JZ	Supplement Left Elbow Joint with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
ORUM4KZ	Supplement Left Elbow Joint with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSR9019	Replacement of Right Hip Joint with Metal Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSR901A	Replacement of Right Hip Joint with Metal Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Code Type	Category
OSR901Z	Replacement of Right Hip Joint with Metal Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSR9029	Replacement of Right Hip Joint with Metal on Polyethylene Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSR902A	Replacement of Right Hip Joint with Metal on Polyethylene Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSR902Z	Replacement of Right Hip Joint with Metal on Polyethylene Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSR9039	Replacement of Right Hip Joint with Ceramic Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSR903A	Replacement of Right Hip Joint with Ceramic Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSR903Z	Replacement of Right Hip Joint with Ceramic Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSR9049	Replacement of Right Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSR904A	Replacement of Right Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSR904Z	Replacement of Right Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSR907Z	Replacement of Right Hip Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSR90J9	Replacement of Right Hip Joint with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSR90JA	Replacement of Right Hip Joint with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSR90JZ	Replacement of Right Hip Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSR90KZ	Replacement of Right Hip Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRA009	Replacement of Right Hip Joint, Acetabular Surface with Polyethylene Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRA00A	Replacement of Right Hip Joint, Acetabular Surface with Polyethylene Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRA00Z	Replacement of Right Hip Joint, Acetabular Surface with Polyethylene Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRA019	Replacement of Right Hip Joint, Acetabular Surface with Metal Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRA01A	Replacement of Right Hip Joint, Acetabular Surface with Metal Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRA01Z	Replacement of Right Hip Joint, Acetabular Surface with Metal Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRA039	Replacement of Right Hip Joint, Acetabular Surface with Ceramic Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRA03A	Replacement of Right Hip Joint, Acetabular Surface with Ceramic Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRA03Z	Replacement of Right Hip Joint, Acetabular Surface with Ceramic Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRA07Z	Replacement of Right Hip Joint, Acetabular Surface with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
OSRA0J9	Replacement of Right Hip Joint, Acetabular Surface with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRA0JA	Replacement of Right Hip Joint, Acetabular Surface with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRA0JZ	Replacement of Right Hip Joint, Acetabular Surface with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRA0KZ	Replacement of Right Hip Joint, Acetabular Surface with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRB019	Replacement of Left Hip Joint with Metal Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRB01A	Replacement of Left Hip Joint with Metal Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRB01Z	Replacement of Left Hip Joint with Metal Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRB029	Replacement of Left Hip Joint with Metal on Polyethylene Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRB02A	Replacement of Left Hip Joint with Metal on Polyethylene Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRB02Z	Replacement of Left Hip Joint with Metal on Polyethylene Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRB039	Replacement of Left Hip Joint with Ceramic Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRB03A	Replacement of Left Hip Joint with Ceramic Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRB03Z	Replacement of Left Hip Joint with Ceramic Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRB049	Replacement of Left Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRB04A	Replacement of Left Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRB04Z	Replacement of Left Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRB07Z	Replacement of Left Hip Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRB0J9	Replacement of Left Hip Joint with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRB0JA	Replacement of Left Hip Joint with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRB0JZ	Replacement of Left Hip Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRB0KZ	Replacement of Left Hip Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRC07Z	Replacement of Right Knee Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRC0J9	Replacement of Right Knee Joint with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRC0JA	Replacement of Right Knee Joint with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRC0JZ	Replacement of Right Knee Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRC0KZ	Replacement of Right Knee Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRC0L9	Replacement of Right Knee Joint with Unicondylar Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRC0LA	Replacement of Right Knee Joint with Unicondylar Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRC0LZ	Replacement of Right Knee Joint with Unicondylar Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRD07Z	Replacement of Left Knee Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRD0J9	Replacement of Left Knee Joint with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRD0JA	Replacement of Left Knee Joint with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRD0JZ	Replacement of Left Knee Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Code Type	Category
OSRD0KZ	Replacement of Left Knee Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRD0L9	Replacement of Left Knee Joint with Unicondylar Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRD0LA	Replacement of Left Knee Joint with Unicondylar Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRD0LZ	Replacement of Left Knee Joint with Unicondylar Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRE009	Replacement of Left Hip Joint, Acetabular Surface with Polyethylene Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRE00A	Replacement of Left Hip Joint, Acetabular Surface with Polyethylene Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRE00Z	Replacement of Left Hip Joint, Acetabular Surface with Polyethylene Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRE019	Replacement of Left Hip Joint, Acetabular Surface with Metal Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRE01A	Replacement of Left Hip Joint, Acetabular Surface with Metal Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRE01Z	Replacement of Left Hip Joint, Acetabular Surface with Metal Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRE039	Replacement of Left Hip Joint, Acetabular Surface with Ceramic Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRE03A	Replacement of Left Hip Joint, Acetabular Surface with Ceramic Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRE03Z	Replacement of Left Hip Joint, Acetabular Surface with Ceramic Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRE07Z	Replacement of Left Hip Joint, Acetabular Surface with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRE0J9	Replacement of Left Hip Joint, Acetabular Surface with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRE0JA	Replacement of Left Hip Joint, Acetabular Surface with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRE0JZ	Replacement of Left Hip Joint, Acetabular Surface with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRE0KZ	Replacement of Left Hip Joint, Acetabular Surface with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRF07Z	Replacement of Right Ankle Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRF0J9	Replacement of Right Ankle Joint with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRF0JA	Replacement of Right Ankle Joint with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRF0JZ	Replacement of Right Ankle Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRF0KZ	Replacement of Right Ankle Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRG07Z	Replacement of Left Ankle Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRG0J9	Replacement of Left Ankle Joint with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRG0JA	Replacement of Left Ankle Joint with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRG0JZ	Replacement of Left Ankle Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRG0KZ	Replacement of Left Ankle Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Code Type	Category
OSRH07Z	Replacement of Right Tarsal Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRH0JZ	Replacement of Right Tarsal Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRH0KZ	Replacement of Right Tarsal Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRJ07Z	Replacement of Left Tarsal Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRJ0JZ	Replacement of Left Tarsal Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRJ0KZ	Replacement of Left Tarsal Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRK07Z	Replacement of Right Metatarsal-Tarsal Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRK0JZ	Replacement of Right Metatarsal-Tarsal Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRK0KZ	Replacement of Right Metatarsal-Tarsal Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRL07Z	Replacement of Left Metatarsal-Tarsal Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRL0JZ	Replacement of Left Metatarsal-Tarsal Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRL0KZ	Replacement of Left Metatarsal-Tarsal Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRM07Z	Replacement of Right Metatarsal-Phalangeal Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRM0JZ	Replacement of Right Metatarsal-Phalangeal Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRM0KZ	Replacement of Right Metatarsal-Phalangeal Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRN07Z	Replacement of Left Metatarsal-Phalangeal Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRN0JZ	Replacement of Left Metatarsal-Phalangeal Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRN0KZ	Replacement of Left Metatarsal-Phalangeal Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRP07Z	Replacement of Right Toe Phalangeal Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRP0JZ	Replacement of Right Toe Phalangeal Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRP0KZ	Replacement of Right Toe Phalangeal Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRQ07Z	Replacement of Left Toe Phalangeal Joint with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRQ0JZ	Replacement of Left Toe Phalangeal Joint with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRQ0KZ	Replacement of Left Toe Phalangeal Joint with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRR019	Replacement of Right Hip Joint, Femoral Surface with Metal Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRR01A	Replacement of Right Hip Joint, Femoral Surface with Metal Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRR01Z	Replacement of Right Hip Joint, Femoral Surface with Metal Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRR039	Replacement of Right Hip Joint, Femoral Surface with Ceramic Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRR03A	Replacement of Right Hip Joint, Femoral Surface with Ceramic Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Code Type	Category
OSRR03Z	Replacement of Right Hip Joint, Femoral Surface with Ceramic Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRR07Z	Replacement of Right Hip Joint, Femoral Surface with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRR0J9	Replacement of Right Hip Joint, Femoral Surface with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRR0JA	Replacement of Right Hip Joint, Femoral Surface with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRR0JZ	Replacement of Right Hip Joint, Femoral Surface with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRR0KZ	Replacement of Right Hip Joint, Femoral Surface with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRS019	Replacement of Left Hip Joint, Femoral Surface with Metal Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRS01A	Replacement of Left Hip Joint, Femoral Surface with Metal Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRS01Z	Replacement of Left Hip Joint, Femoral Surface with Metal Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRS039	Replacement of Left Hip Joint, Femoral Surface with Ceramic Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRS03A	Replacement of Left Hip Joint, Femoral Surface with Ceramic Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRS03Z	Replacement of Left Hip Joint, Femoral Surface with Ceramic Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRS07Z	Replacement of Left Hip Joint, Femoral Surface with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRS0J9	Replacement of Left Hip Joint, Femoral Surface with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRS0JA	Replacement of Left Hip Joint, Femoral Surface with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRS0JZ	Replacement of Left Hip Joint, Femoral Surface with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRS0KZ	Replacement of Left Hip Joint, Femoral Surface with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRT07Z	Replacement of Right Knee Joint, Femoral Surface with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRT0J9	Replacement of Right Knee Joint, Femoral Surface with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRT0JA	Replacement of Right Knee Joint, Femoral Surface with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRT0JZ	Replacement of Right Knee Joint, Femoral Surface with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRT0KZ	Replacement of Right Knee Joint, Femoral Surface with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRU07Z	Replacement of Left Knee Joint, Femoral Surface with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
OSRU0J9	Replacement of Left Knee Joint, Femoral Surface with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRU0JA	Replacement of Left Knee Joint, Femoral Surface with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRU0JZ	Replacement of Left Knee Joint, Femoral Surface with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRU0KZ	Replacement of Left Knee Joint, Femoral Surface with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRV07Z	Replacement of Right Knee Joint, Tibial Surface with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRV0J9	Replacement of Right Knee Joint, Tibial Surface with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRV0JA	Replacement of Right Knee Joint, Tibial Surface with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRV0JZ	Replacement of Right Knee Joint, Tibial Surface with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRV0KZ	Replacement of Right Knee Joint, Tibial Surface with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRW07Z	Replacement of Left Knee Joint, Tibial Surface with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSRW0J9	Replacement of Left Knee Joint, Tibial Surface with Synthetic Substitute, Cemented, Open Approach	PX	ICD-10-PCS
OSRW0JA	Replacement of Left Knee Joint, Tibial Surface with Synthetic Substitute, Uncemented, Open Approach	PX	ICD-10-PCS
OSRW0JZ	Replacement of Left Knee Joint, Tibial Surface with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
OSRW0KZ	Replacement of Left Knee Joint, Tibial Surface with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
OSW90JZ	Revision of Synthetic Substitute in Right Hip Joint, Open Approach	PX	ICD-10-PCS
OSW93JZ	Revision of Synthetic Substitute in Right Hip Joint, Percutaneous Approach	PX	ICD-10-PCS
OSW94JZ	Revision of Synthetic Substitute in Right Hip Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWA0JZ	Revision of Synthetic Substitute in Right Hip Joint, Acetabular Surface, Open Approach	PX	ICD-10-PCS
OSWA3JZ	Revision of Synthetic Substitute in Right Hip Joint, Acetabular Surface, Percutaneous	PX	ICD-10-PCS
OSWA4JZ	Revision of Synthetic Substitute in Right Hip Joint, Acetabular Surface, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWB0JZ	Revision of Synthetic Substitute in Left Hip Joint, Open Approach	PX	ICD-10-PCS
OSWB3JZ	Revision of Synthetic Substitute in Left Hip Joint, Percutaneous Approach	PX	ICD-10-PCS
OSWB4JZ	Revision of Synthetic Substitute in Left Hip Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWC0JC	Revision of Synthetic Substitute in Right Knee Joint, Patellar Surface, Open Approach	PX	ICD-10-PCS
OSWC0JZ	Revision of Synthetic Substitute in Right Knee Joint, Open Approach	PX	ICD-10-PCS
OSWC3JC	Revision of Synthetic Substitute in Right Knee Joint, Patellar Surface, Percutaneous Approach	PX	ICD-10-PCS
OSWC3JZ	Revision of Synthetic Substitute in Right Knee Joint, Percutaneous Approach	PX	ICD-10-PCS
OSWC4JC	Revision of Synthetic Substitute in Right Knee Joint, Patellar Surface, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWC4JZ	Revision of Synthetic Substitute in Right Knee Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWD0JC	Revision of Synthetic Substitute in Left Knee Joint, Patellar Surface, Open Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
OSWD0JZ	Revision of Synthetic Substitute in Left Knee Joint, Open Approach	PX	ICD-10-PCS
OSWD3JC	Revision of Synthetic Substitute in Left Knee Joint, Patellar Surface, Percutaneous Approach	PX	ICD-10-PCS
OSWD3JZ	Revision of Synthetic Substitute in Left Knee Joint, Percutaneous Approach	PX	ICD-10-PCS
OSWD4JC	Revision of Synthetic Substitute in Left Knee Joint, Patellar Surface, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWD4JZ	Revision of Synthetic Substitute in Left Knee Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWE0JZ	Revision of Synthetic Substitute in Left Hip Joint, Acetabular Surface, Open Approach	PX	ICD-10-PCS
OSWE3JZ	Revision of Synthetic Substitute in Left Hip Joint, Acetabular Surface, Percutaneous Approach	PX	ICD-10-PCS
OSWE4JZ	Revision of Synthetic Substitute in Left Hip Joint, Acetabular Surface, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWF0JZ	Revision of Synthetic Substitute in Right Ankle Joint, Open Approach	PX	ICD-10-PCS
OSWF3JZ	Revision of Synthetic Substitute in Right Ankle Joint, Percutaneous Approach	PX	ICD-10-PCS
OSWF4JZ	Revision of Synthetic Substitute in Right Ankle Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWG0JZ	Revision of Synthetic Substitute in Left Ankle Joint, Open Approach	PX	ICD-10-PCS
OSWG3JZ	Revision of Synthetic Substitute in Left Ankle Joint, Percutaneous Approach	PX	ICD-10-PCS
OSWG4JZ	Revision of Synthetic Substitute in Left Ankle Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWH0JZ	Revision of Synthetic Substitute in Right Tarsal Joint, Open Approach	PX	ICD-10-PCS
OSWH3JZ	Revision of Synthetic Substitute in Right Tarsal Joint, Percutaneous Approach	PX	ICD-10-PCS
OSWH4JZ	Revision of Synthetic Substitute in Right Tarsal Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWJ0JZ	Revision of Synthetic Substitute in Left Tarsal Joint, Open Approach	PX	ICD-10-PCS
OSWJ3JZ	Revision of Synthetic Substitute in Left Tarsal Joint, Percutaneous Approach	PX	ICD-10-PCS
OSWJ4JZ	Revision of Synthetic Substitute in Left Tarsal Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWK0JZ	Revision of Synthetic Substitute in Right Metatarsal-Tarsal Joint, Open Approach	PX	ICD-10-PCS
OSWK3JZ	Revision of Synthetic Substitute in Right Metatarsal-Tarsal Joint, Percutaneous Approach	PX	ICD-10-PCS
OSWK4JZ	Revision of Synthetic Substitute in Right Metatarsal-Tarsal Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWL0JZ	Revision of Synthetic Substitute in Left Metatarsal-Tarsal Joint, Open Approach	PX	ICD-10-PCS
OSWL3JZ	Revision of Synthetic Substitute in Left Metatarsal-Tarsal Joint, Percutaneous Approach	PX	ICD-10-PCS
OSWL4JZ	Revision of Synthetic Substitute in Left Metatarsal-Tarsal Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWM0JZ	Revision of Synthetic Substitute in Right Metatarsal-Phalangeal Joint, Open Approach	PX	ICD-10-PCS
OSWM3JZ	Revision of Synthetic Substitute in Right Metatarsal-Phalangeal Joint, Percutaneous Approach	PX	ICD-10-PCS
OSWM4JZ	Revision of Synthetic Substitute in Right Metatarsal-Phalangeal Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWN0JZ	Revision of Synthetic Substitute in Left Metatarsal-Phalangeal Joint, Open Approach	PX	ICD-10-PCS
OSWN3JZ	Revision of Synthetic Substitute in Left Metatarsal-Phalangeal Joint, Percutaneous Approach	PX	ICD-10-PCS
OSWN4JZ	Revision of Synthetic Substitute in Left Metatarsal-Phalangeal Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWP0JZ	Revision of Synthetic Substitute in Right Toe Phalangeal Joint, Open Approach	PX	ICD-10-PCS
OSWP3JZ	Revision of Synthetic Substitute in Right Toe Phalangeal Joint, Percutaneous Approach	PX	ICD-10-PCS
OSWP4JZ	Revision of Synthetic Substitute in Right Toe Phalangeal Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWQ0JZ	Revision of Synthetic Substitute in Left Toe Phalangeal Joint, Open Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Code Type	Category
OSWQ3JZ	Revision of Synthetic Substitute in Left Toe Phalangeal Joint, Percutaneous Approach	PX	ICD-10-PCS
OSWQ4JZ	Revision of Synthetic Substitute in Left Toe Phalangeal Joint, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWR0JZ	Revision of Synthetic Substitute in Right Hip Joint, Femoral Surface, Open Approach	PX	ICD-10-PCS
OSWR3JZ	Revision of Synthetic Substitute in Right Hip Joint, Femoral Surface, Percutaneous Approach	PX	ICD-10-PCS
OSWR4JZ	Revision of Synthetic Substitute in Right Hip Joint, Femoral Surface, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWS0JZ	Revision of Synthetic Substitute in Left Hip Joint, Femoral Surface, Open Approach	PX	ICD-10-PCS
OSWS3JZ	Revision of Synthetic Substitute in Left Hip Joint, Femoral Surface, Percutaneous Approach	PX	ICD-10-PCS
OSWS4JZ	Revision of Synthetic Substitute in Left Hip Joint, Femoral Surface, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWT0JZ	Revision of Synthetic Substitute in Right Knee Joint, Femoral Surface, Open Approach	PX	ICD-10-PCS
OSWT3JZ	Revision of Synthetic Substitute in Right Knee Joint, Femoral Surface, Percutaneous Approach	PX	ICD-10-PCS
OSWT4JZ	Revision of Synthetic Substitute in Right Knee Joint, Femoral Surface, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWU0JZ	Revision of Synthetic Substitute in Left Knee Joint, Femoral Surface, Open Approach	PX	ICD-10-PCS
OSWU3JZ	Revision of Synthetic Substitute in Left Knee Joint, Femoral Surface, Percutaneous Approach	PX	ICD-10-PCS
OSWU4JZ	Revision of Synthetic Substitute in Left Knee Joint, Femoral Surface, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
OSWV0JZ	Revision of Synthetic Substitute in Right Knee Joint, Tibial Surface, Open Approach	PX	ICD-10-PCS
OSWV3JZ	Revision of Synthetic Substitute in Right Knee Joint, Tibial Surface, Percutaneous Approach	PX	ICD-10-PCS
OSWV4JZ	Revision of Synthetic Substitute in Right Knee Joint, Tibial Surface, Percutaneous Endoscopic Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Code Type	Category
0SWW0JZ	Revision of Synthetic Substitute in Left Knee Joint, Tibial Surface, Open Approach	PX	ICD-10-PCS
0SWW3JZ	Revision of Synthetic Substitute in Left Knee Joint, Tibial Surface, Percutaneous Approach	PX	ICD-10-PCS
0SWW4JZ	Revision of Synthetic Substitute in Left Knee Joint, Tibial Surface, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
Mitral valve disease			
394.0	Mitral stenosis	DX	ICD-9-CM
394.1	Rheumatic mitral insufficiency	DX	ICD-9-CM
394.2	Mitral stenosis with insufficiency	DX	ICD-9-CM
396.0	Mitral valve stenosis and aortic valve stenosis	DX	ICD-9-CM
396.1	Mitral valve stenosis and aortic valve insufficiency	DX	ICD-9-CM
396.2	Mitral valve insufficiency and aortic valve stenosis	DX	ICD-9-CM
396.3	Mitral valve insufficiency and aortic valve insufficiency	DX	ICD-9-CM
746.5	Congenital mitral stenosis	DX	ICD-9-CM
746.6	Congenital mitral insufficiency	DX	ICD-9-CM
I05.0	Rheumatic mitral stenosis	DX	ICD-10-CM
I05.1	Rheumatic mitral insufficiency	DX	ICD-10-CM
I05.2	Rheumatic mitral stenosis with insufficiency	DX	ICD-10-CM
I08.0	Rheumatic disorders of both mitral and aortic valves	DX	ICD-10-CM
I08.3	Combined rheumatic disorders of mitral, aortic and tricuspid valves	DX	ICD-10-CM
I34.2	Nonrheumatic mitral stenosis	DX	ICD-10-CM
Q23.2	Congenital mitral stenosis	DX	ICD-10-CM
Q23.3	Congenital mitral insufficiency	DX	ICD-10-CM
027G04Z	Dilation of Mitral Valve with Drug-eluting Intraluminal Device, Open Approach	PX	ICD-10-PCS
027G0DZ	Dilation of Mitral Valve with Intraluminal Device, Open Approach	PX	ICD-10-PCS
027G0ZZ	Dilation of Mitral Valve, Open Approach	PX	ICD-10-PCS
02NG0ZZ	Release Mitral Valve, Open Approach	PX	ICD-10-PCS
02QG0ZZ	Repair Mitral Valve, Open Approach	PX	ICD-10-PCS
02VG0ZZ	Restriction of Mitral Valve, Open Approach	PX	ICD-10-PCS
Valve replacement			
V422	Heart valve replaced by transplant	DX	ICD-9-CM
V433	Heart valve replaced by other means	DX	ICD-9-CM
352	OPEN & OTHR REPLACEMENT HEART VALVE	PX	ICD-9-CM
3520	OPEN & OTHER REPL UNS HEART VALVE	PX	ICD-9-CM
3521	OPEN OTH REPL AORTIC VALVE TISS GFT	PX	ICD-9-CM
3522	OPEN & OTHR REPLACEMENT AORTIC VALVE	PX	ICD-9-CM
3523	OPN OTH REPL MITRL VALVE TISS GRAFT	PX	ICD-9-CM
3524	OPEN & OTHER REPLACEMENT MITRAL VALVE	PX	ICD-9-CM
3525	OPEN OTH REPL PULM VALVE TISS GRAFT	PX	ICD-9-CM
3526	OPEN & OTHER REPL PULMONARY VALVE	PX	ICD-9-CM
3527	OPEN & OTH REPL TV W/TISSUE GRAFT	PX	ICD-9-CM
3528	OPEN & OTHER REPL TRICUSPD VALVE	PX	ICD-9-CM
33405	REPLACEMENT OF AORTIC VALVE	PX	CPT-4
33406	REPLACEMENT OF AORTIC VALVE	PX	CPT-4

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Code Type	Category
33410	REPLACEMENT OF AORTIC VALVE	PX	CPT-4
33411	REPLACEMENT OF AORTIC VALVE	PX	CPT-4
33412	REPLACEMENT OF AORTIC VALVE	PX	CPT-4
33413	REPLACEMENT OF AORTIC VALVE	PX	CPT-4
33430	REPLACEMENT OF MITRAL VALVE	PX	CPT-4
33465	REPLACE TRICUSPID VALVE	PX	CPT-4
33475	REPLACEMENT PULMONARY VALVE	PX	CPT-4
33496	REPAIR PROSTH VALVE CLOT	PX	CPT-4
Z95.2	Presence of prosthetic heart valve	DX	ICD-10-CM
Z95.3	Presence of xenogenic heart valve	DX	ICD-10-CM
Z95.4	Presence of other heart-valve replacement	DX	ICD-10-CM
02RF07Z	Replacement of Aortic Valve with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
02RF08Z	Replacement of Aortic Valve with Zooplasic Tissue, Open Approach	PX	ICD-10-PCS
02RF0JZ	Replacement of Aortic Valve with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
02RF0KZ	Replacement of Aortic Valve with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
02RF47Z	Replacement of Aortic Valve with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
02RF48Z	Replacement of Aortic Valve with Zooplasic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
02RF4JZ	Replacement of Aortic Valve with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
02RF4KZ	Replacement of Aortic Valve with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
02RG07Z	Replacement of Mitral Valve with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
02RG08Z	Replacement of Mitral Valve with Zooplasic Tissue, Open Approach	PX	ICD-10-PCS
02RG0JZ	Replacement of Mitral Valve with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
02RG0KZ	Replacement of Mitral Valve with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
02RG37Z	Replacement of Mitral Valve with Autologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
02RG38Z	Replacement of Mitral Valve with Zooplasic Tissue, Percutaneous Approach	PX	ICD-10-PCS
02RG3JZ	Replacement of Mitral Valve with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-PCS
02RG3KZ	Replacement of Mitral Valve with Nonautologous Tissue Substitute, Percutaneous Approach	PX	ICD-10-PCS
02RG47Z	Replacement of Mitral Valve with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
02RG48Z	Replacement of Mitral Valve with Zooplasic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
02RG4JZ	Replacement of Mitral Valve with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
02RG4KZ	Replacement of Mitral Valve with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
02RH07Z	Replacement of Pulmonary Valve with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
02RH08Z	Replacement of Pulmonary Valve with Zooplasic Tissue, Open Approach	PX	ICD-10-PCS
02RH0JZ	Replacement of Pulmonary Valve with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
02RH0KZ	Replacement of Pulmonary Valve with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
02RH47Z	Replacement of Pulmonary Valve with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
02RH48Z	Replacement of Pulmonary Valve with Zooplasic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-PCS

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology, Fourth Edition (CPT-4), Category I Procedure Codes Used to Define Inclusion and Exclusion Criteria in this Request

Code	Description	Code	
		Code Type	Category
02RH4JZ	Replacement of Pulmonary Valve with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
02RH4KZ	Replacement of Pulmonary Valve with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
02RJ07Z	Replacement of Tricuspid Valve with Autologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
02RJ08Z	Replacement of Tricuspid Valve with Zooplasic Tissue, Open Approach	PX	ICD-10-PCS
02RJ0JZ	Replacement of Tricuspid Valve with Synthetic Substitute, Open Approach	PX	ICD-10-PCS
02RJ0KZ	Replacement of Tricuspid Valve with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-PCS
02RJ47Z	Replacement of Tricuspid Valve with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
02RJ48Z	Replacement of Tricuspid Valve with Zooplasic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
02RJ4JZ	Replacement of Tricuspid Valve with Synthetic Substitute, Percutaneous Endoscopic	PX	ICD-10-PCS
02RJ4KZ	Replacement of Tricuspid Valve with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-PCS
X2RF03Z	Replacement of Aortic Valve using Zooplasic Tissue, Rapid Deployment Technique, Open Approach, New Technology Group 2	PX	ICD-10-PCS
X2RF43Z	Replacement of Aortic Valve using Zooplasic Tissue, Rapid Deployment Technique, Percutaneous Endoscopic Approach, New Technology Group 2	PX	ICD-10-PCS
Valve repair			
33400	REPAIR OF AORTIC VALVE	PX	CPT-4
33401	VALVULOPLASTY OPEN	PX	CPT-4
33403	VALVULOPLASTY W/CP BYPASS	PX	CPT-4
33420	REVISION OF MITRAL VALVE	PX	CPT-4
33422	REVISION OF MITRAL VALVE	PX	CPT-4
33425	REPAIR OF MITRAL VALVE	PX	CPT-4
33426	REPAIR OF MITRAL VALVE	PX	CPT-4
33427	REPAIR OF MITRAL VALVE	PX	CPT-4
33463	VALVULOPLASTY TRICUSPID	PX	CPT-4
33464	VALVULOPLASTY TRICUSPID	PX	CPT-4
33465	REPLACE TRICUSPID VALVE	PX	CPT-4
33470	REVISION OF PULMONARY VALVE	PX	CPT-4
33471	VALVOTOMY PULMONARY VALVE	PX	CPT-4
33472	REVISION OF PULMONARY VALVE	PX	CPT-4
33474	REVISION OF PULMONARY VALVE	PX	CPT-4
92986	REVISION OF AORTIC VALVE	PX	CPT-4
92987	REVISION OF MITRAL VALVE	PX	CPT-4
92990	REVISION OF PULMONARY VALVE	PX	CPT-4

Appendix F. List of Generic and Brand Names of Medical Products Used to Define Censoring Criteria in this Request

Generic Name	Brand Name
Anti-coagulants	
apixaban	Eliquis
apixaban	Eliquis DVT-PE Treat 30D Start
dabigatran etexilate mesylate	Pradaxa
dabigatran etexilate mesylate	dabigatran etexilate
edoxaban tosylate	Savaysa
rivaroxaban	Xarelto
rivaroxaban	Xarelto DVT-PE Treat 30d Start
warfarin sodium	Coumadin
warfarin sodium	warfarin
warfarin sodium	Jantoven

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
Estrogen replacement	
drospirenone/estradiol	Angeliq
estradiol	estradiol
estradiol	Estrace
estradiol	Elestrin
estradiol	Vivelle-Dot
estradiol	Estraderm
estradiol	Divigel
estradiol	Evamist
estradiol	Estrasorb
estradiol	EstroGel
estradiol	Climara
estradiol	Menostar
estradiol	Alora
estradiol	Vivelle
estradiol	Estradiol Transdermal Patch
estradiol	Minivelle
estradiol	Estring
estradiol	Vagifem
estradiol	Yuvaferm
estradiol	Dotti
estradiol	Lyllana
estradiol acetate	Femtrace
estradiol acetate	Femring
estradiol cypionate	Depo-Estradiol
estradiol valerate	estradiol valerate
estradiol valerate	Delestrogen
estradiol/levonorgestrel	Climara Pro
estradiol/norethindrone acetate	Mimvey Lo
estradiol/norethindrone acetate	Mimvey
estradiol/norethindrone acetate	Activella
estradiol/norethindrone acetate	estradiol-norethindrone acet
estradiol/norethindrone acetate	Amabelz
estradiol/norethindrone acetate	Lopreeza
estradiol/norethindrone acetate	CombiPatch
estradiol/norgestimate	Prefest
estradiol/norgestimate	Ortho-Prefest
estradiol/progesterone	Bijuva
estrogens, conjugated	Premarin
estrogens, conjugated, synthetic A	Cenestin
estrogens, conjugated, synthetic B	Enjuvia
estrogens, conjugated/bazedoxifene acetate	Duavee
estrogens, conjugated/medroxyprogesterone acetate	Prempro
estrogens, conjugated/medroxyprogesterone acetate	Premphase
estrogens,esterified	Menest
estrogens,esterified/methyltestosterone	estrogens-methyltestosterone
estrogens,esterified/methyltestosterone	Covaryx

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
estrogens,esterified/methyltestosterone	Covaryx H.S.
estrogens,esterified/methyltestosterone	EEMT
estrogens,esterified/methyltestosterone	EEMT HS
estrogens,esterified/methyltestosterone	Essian
estrogens,esterified/methyltestosterone	Essian H.S.
estrone	estrone (bulk)
estropipate	Ogen 1.25
estropipate	estropipate
estropipate	Ogen 0.625
estropipate	Ogen 2.5
estropipate	Ortho-Est 0.625
estropipate	Ortho-Est 1.25
norethindrone acetate-ethinyl estradiol	Jinteli
norethindrone acetate-ethinyl estradiol	Femhrt Low Dose
norethindrone acetate-ethinyl estradiol	Femhrt 1/5
norethindrone acetate-ethinyl estradiol	Jevantique Lo
norethindrone acetate-ethinyl estradiol	Jevantique
norethindrone acetate-ethinyl estradiol	Fyavolv
norethindrone acetate-ethinyl estradiol	norethindrone ac-eth estradiol
H2-antagonist	
nizatidine	Axid
famotidine	Pepcid
famotidine	Pepcid RPD
cimetidine HCl	cimetidine HCl
cimetidine	cimetidine
famotidine	famotidine
nizatidine	nizatidine
ibuprofen/famotidine	ibuprofen-famotidine
ranitidine HCl	ranitidine HCl
cimetidine	Tagamet
cimetidine	Heartburn Relief (cimetidine)
ranitidine HCl	Acid Reducer (ranitidine)
famotidine	Acid Reducer (famotidine)
famotidine	Acid Controller
famotidine/calcium carbonate/magnesium hydroxide	Complete
ranitidine HCl	Zantac
cimetidine	Tagamet HB
famotidine/calcium carbonate/magnesium hydroxide	Tums Dual Action (famotidine)
ranitidine HCl	Zantac 150 EFFERdose
ranitidine HCl	Zantac 25 EFFERdose
ranitidine HCl	Wal-Zan 150
ranitidine HCl	Wal-Zan 75
famotidine/calcium carbonate/magnesium hydroxide	Acid Controller Complete
ranitidine HCl	Zantac 75
ranitidine HCl	Zantac Maximum Strength
nizatidine	Axid AR

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
cimetidine	Acid Reducer (cimetidine)
famotidine	Heartburn Relief (famotidine)
famotidine/calcium carbonate/magnesium hydroxide	Dual Action Complete
famotidine/calcium carbonate/magnesium hydroxide	Acid Reducer Complete (famot)
ranitidine HCl	Taladine
famotidine/calcium carbonate/magnesium hydroxide	Pepcid Complete
famotidine	Pepcid AC
ranitidine HCl	Acid Control (ranitidine)
famotidine	Heartburn Prevention
ranitidine HCl	Heartburn Relief (ranitidine)
cimetidine	Heartburn 200
cimetidine	Acid Relief (cimetidine)
RANITIDINE HCL	Deprizine
cimetidine	Heartburn
ranitidine HCl/dietary supplement no.17	Gabitidine
ranitidine HCl/dietary supplement no.8	Sentradine
ibuprofen/famotidine	Duexis
famotidine/calcium carbonate/magnesium hydroxide	Duo Fusion
Non-steroidal anti-inflammatory drugs (NSAIDs)	
naproxen	Naprosyn
ketorolac tromethamine	Toradol
naproxen sodium	Anaprox DS
naproxen sodium	Anaprox
naproxen	EC-Naprosyn
indomethacin	Indocin
rofecoxib	Vioxx
sulindac	Clinoril
ketoprofen	Oruvail
flurbiprofen	Ansaid
ibuprofen	Motrin IB
ibuprofen	Motrin
oxaprozin	Daypro
diclofenac sodium/misoprostol	Arthrotec 50
diclofenac sodium/misoprostol	Arthrotec 75
celecoxib	Celebrex
valdecoxib	Bextra
diclofenac potassium	Cataflam
diclofenac sodium	Voltaren-XR
diclofenac sodium	Voltaren
nabumetone	Relafen
ibuprofen	Children's Motrin
tolmetin sodium	Tolectin DS
tolmetin sodium	Tolectin
etodolac	Lodine
etodolac	Lodine XL
meloxicam	meloxicam

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
naproxen	naproxen
diclofenac sodium	diclofenac sodium
piroxicam	Feldene
ketorolac tromethamine	ketorolac
hydrocodone/ibuprofen	Vicoprofen
ibuprofen	ibuprofen
naproxen sodium	Naprelan
naproxen sodium	naproxen sodium
flurbiprofen	flurbiprofen
piroxicam	piroxicam
etodolac	etodolac
oxaprozin	oxaprozin
diclofenac potassium	diclofenac potassium
nabumetone	nabumetone
tolmetin sodium	tolmetin
ketoprofen	ketoprofen
diclofenac epolamine	diclofenac epolamine
indomethacin	indomethacin
hydrocodone/ibuprofen	hydrocodone-ibuprofen
celecoxib	celecoxib
ibuprofen/famotidine	ibuprofen-famotidine
ibuprofen	Ibuprofen Jr Strength
ibuprofen/diphenhydramine citrate	Ibuprofen PM
ibuprofen	Infant's Ibuprofen
ibuprofen/pseudoephedrine HCl	Ibuprofen Cold-Sinus(with PSE)
ibuprofen	Children's Ibuprofen
naproxen sodium	All Day Pain Relief
fenoprofen calcium	fenoprofen
sumatriptan succinate/naproxen sodium	Treximet
ibuprofen	Genpril
naproxen/esomeprazole magnesium	Vimovo
ibuprofen/oxycodone HCl	ibuprofen-oxycodone
mefenamic acid	Ponstel
mefenamic acid	mefenamic acid
naproxen sodium/pseudoephedrine HCl	Aleve Cold and Sinus
naproxen sodium/pseudoephedrine HCl	Aleve Sinus and Headache
lansoprazole/naproxen	PREVACID NapraPAC
ibuprofen/pseudoephedrine HCl	Wal-Profen Cold-Sinus
ibuprofen	Wal-Profen
naproxen sodium	Wal-Proxen
naproxen sodium/pseudoephedrine HCl	All Day Pain Relief Sinus,Cold
ibuprofen/pseudoephedrine HCl	Wal-Profen D Cold and Sinus
ibuprofen/diphenhydramine HCl	Ibuprofen PM
meclofenamate sodium	meclofenamate
sulindac	sulindac

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
naproxen/esomeprazole magnesium	naproxen-esomeprazole
sumatriptan succinate/naproxen sodium	sumatriptan-naproxen
diclofenac sodium	Dyloject
indomethacin sodium	indomethacin sodium
ibuprofen	Infant's Motrin
naproxen sodium/pseudoephedrine HCl	Sudafed 12 Hr Pressure-Pain
ibuprofen	Children's Motrin Jr Strength
ibuprofen/diphenhydramine citrate	Motrin PM
ibuprofen/pseudoephedrine HCl	Children's Motrin Cold
ibuprofen/oxycodone HCl	Combunox
ketorolac tromethamine	Sprix
naproxen sodium	All Day Relief
ibuprofen/phenylephrine HCl	Congestion Relief (ibuprof-PE)
ibuprofen	Menadol
ketoprofen	Orudis KT
ibuprofen/acetaminophen	Advil Dual Action
ibuprofen	Advil
ibuprofen/diphenhydramine citrate	Advil PM
ibuprofen/diphenhydramine HCl	Advil PM Liqui-Gels
ibuprofen	Advil Migraine
ibuprofen	Advil Liqui-Gel
ibuprofen	Children's Advil
ibuprofen	Advil Junior Strength
ibuprofen/pseudoephedrine HCl	Advil Cold and Sinus
chlorpheniramine maleate/pseudoephedrine HCl/ibuprofen	Advil Allergy Sinus
ibuprofen	Infant's Advil
ibuprofen/phenylephrine HCl	Advil Congestion Relief
chlorpheniramine maleate/phenylephrine HCl/ibuprofen	Advil Allergy-Congestion Rlf
ibuprofen/phenylephrine HCl	Advil Sinus Congestion-Pain
diclofenac sodium/misoprostol	diclofenac-misoprostol
meloxicam	Mobic
ibuprofen	Q-Profen
fenoprofen calcium	Nalfon
ibuprofen	IBU-200
diclofenac epolamine	Flector
ibuprofen	Ibuprofen IB
ibuprofen/pseudoephedrine HCl	Cold-Sinus Relief
dextromethorphan HBr/acetaminophen/doxylamine	Nite Time Cold-Flu
naproxen sodium/pseudoephedrine HCl	Sinus and Cold-D
ibuprofen	Children's Ibu-Drops
ibuprofen	Ibupain-200
ibuprofen	Profen IB
ibuprofen	Midol Max St Cramp Formula
naproxen sodium	Midol (naproxen)
diclofenac potassium	Zipsor

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
diclofenac potassium	Cambia
nabumetone	Relafen DS
diclofenac potassium	Lofena
naproxen sodium	Naprelan CR
ibuprofen	Nuprin
ibuprofen/pseudoephedrine HCl	Cold and Sinus Pain Relief
hydrocodone/ibuprofen	Reprexain
ibuprofen/pseudoephedrine HCl	Ibuprofen Cold
ibuprofen	Tab-Profen
naproxen sodium	Aleve
naproxen sodium/pseudoephedrine HCl	Aleve-D Sinus and Headache
naproxen sodium/pseudoephedrine HCl	Aleve-D Sinus and Cold
naproxen sodium/diphenhydramine HCl	Aleve PM
naproxen sodium	Flanax (naproxen)
ibuprofen/diphenhydramine HCl	ibuprofen-diphenhydramine HCl
ibuprofen	Child Ibuprofen
ibuprofen	Infants Ibu-Drops
ibuprofen	Ibu-Drops
ibuprofen lysine/PF	ibuprofen lysine (PF)
ibuprofen	Children's Profen IB
ibuprofen	Infants ProfenIB
indomethacin, submicronized	Tivorbex
diclofenac submicronized	Zorvolex
meloxicam, submicronized	Vivlodex
ibuprofen/irritants counter-irritants combination no.2	Comfort Pac-Ibuprofen
meloxicam/irritants counter-irritants combination no.2	Comfort Pac-Meloxicam
bupivacaine/meloxicam	Zynrelef
ibuprofen	I-Prin
naproxen sodium	Mediproxen
ibuprofen	Addaprin
ibuprofen	Medi-Profen
ibuprofen	Infant's Medi-Profen
ibuprofen	Children's Medi-Profen
ibuprofen	Nuprin Menstrual Relief
ibuprofen/diphenhydramine citrate	ibuprofen-diphenhydramine cit
ibuprofen	Motrin Migraine
naproxen sodium/pseudoephedrine HCl	Sudafed 12 Hr Sinus-Pain
naproxen sodium/pseudoephedrine HCl	Sudafed Sinus 12Hr Pressr-Pain
ibuprofen/phenylephrine HCl	Sudafed PE Head Congestn-Pain
hydrocodone/ibuprofen	Ibudone
hydrocodone/ibuprofen	Xylon 10
ibuprofen	ElixSure IB Suspension
fentanyl citrate	fentanyl citrate
ketorolac tromethamine	ReadySharp ketorolac
fenoprofen calcium	Fenortho

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
indomethacin	Indocin SR
ketoprofen	Orudis
ibuprofen	IBU
naproxen/irritant counter-irritant combination no.2	Comfort Pac-Naproxen
ibuprofen lysine/PF	NeoProfen (ibuprofen lysn)(PF)
ibuprofen	Advanced Pain Relief
Ibuprofen/Caffeine/Vitamins B1, B2, B6, & B12	IC400
Ibuprofen/Caffeine/Vitamins B1, B2, B6, & B12	IC800
diclofenac sodium/capsicum oleoresin	Inflammacin
naproxen/capsicum oleoresin	Naprotin
ibuprofen/glycerin	Ibupak
ibuprofen	Yaprofen
celecoxib	Elyxyb
calcitriol	calcitriol
naproxen sodium/diphenhydramine HCl	Naproxen PM
ibuprofen	Provil
phenylephrine HCl/ketorolac tromethamine	Omidria
naproxen sodium/menthol	NaproPak Cool
naproxen	EC-Naproxen
NAPROXEN	Naproderm
ibuprofen	Ibuprofen M
ibuprofen	Caldolor
tramadol HCl/celecoxib	Seglentis
fenoprofen calcium	ProFeno
indomethacin sodium	Indocin I.V.
phenol	Sore Throat (phenol)
meloxicam, submicronized	meloxicam submicronized
naproxen/dietary supplement,misc. cb.11	Theraproxen
naproxen/dietary supplement,misc. cb.11	Theraproxen-90
piroxicam/dietary supplement,misc. cb.11	Therafeldamine
ibuprofen/dietary supplement,misc. cb.11	Theraprofen-60
ibuprofen/dietary supplement,misc. cb.11	Theraprofen-90
naproxen sodium	Naprelan CR Dose Card
naproxen/capsaicin/menthol/methyl salicylate	Pain Relief Collection
amlodipine besylate/celecoxib	Consensi
diclofenac sodium/capsicum oleoresin	DermaSilkRx DicloPak
diclofenac sodium/capsaicin	Flexipak
bupivacaine/ketorolac/ketamine	bupivacaine-ketorolac-ketamine
ropivacaine HCl/clonidine HCl/ketorolac tromethamine	ropivacaine-clonidin-ketorolac
ropivacaine/ketorolac/ketamine	ropivacaine-ketorolac-ketamine
naproxen/capsaicin/menthol	NaproxenPax
naproxen/capsaicin/menthol	NaproPax
diclofenac sodium/capsicum oleoresin	Xenaflamm
celecoxib/capsaicin/menthol	CapXib
celecoxib/lidocaine/menthol	LidoXib

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
ibuprofen/pseudoephedrine HCl	Cold-Sinus Relief (ibuprofen)
naproxen sodium/pseudoephedrine HCl	All Day Cold and Sinus
ropivacaine HCl/epinephrine/clonidine HCl/ketorolac trometh	ropivacaine-epi-clonid-ketorol
diclofenac sodium/methyl salicylate/menthol/camphor	Inflamma-K
meloxicam	Qmiiz ODT
diclofenac sodium/capsaicin	NuDiclo TabPAK
celecoxib/capsaicin/methyl salicylate/menthol	NuDroxiPAK
ibuprofen/capsaicin/methyl salicylate/menthol	NuDroxiPAK I-800
nabumetone/capsaicin/methyl salicylate/menthol	NuDroxiPAK N-500
diclofenac sodium/capsaicin/methyl salicylate/menthol	NuDroxiPAK DSDR-50
diclofenac sodium/capsaicin/methyl salicylate/menthol	NuDroxiPAK DSDR-75
etodolac/capsaicin/methyl salicylate/menthol	NuDroxiPAK E-400
dexamethasone sod ph/moxifloxacin HCl/ketorolac/sod chlor,	dexamet-moxifl-ketoro-NaCl(PF)
meloxicam	Anjeso
diclofenac epolamine	Licart
diclofenac sodium/lidocaine	Lidovix
diclofenac sodium/capsaicin	Inavix
diclofenac sodium/trolamine salicylate	Inflatherm (diclofenac-trolam)
diclofenac sodium/menthol/camphor	Inflatherm(diclofenac-menthol)
indomethacin, submicronized	indomethacin submicronized
diclofenac submicronized	diclofenac submicronized
diclofenac sodium/capsicum oleoresin	PrevidolRx Plus Analgesic Pak
ibuprofen/famotidine	Duexis
ketorolac/norflurane and pentafluoropropane (HFC 245fa)	Toronova SUIK
ketorolac/norflurane and pentafluoropropane (HFC 245fa)	Toronova II SUIK
NAPROXEN	Napro
ibuprofen	Cap-Profen
ibuprofen	Ibutab
Proton pump inhibitors	
pantoprazole sodium	pantoprazole
pantoprazole sodium	Protonix
lansoprazole	Prevacid 24Hr
rabeprazole sodium	rabeprazole
lansoprazole	lansoprazole
omeprazole	omeprazole
esomeprazole magnesium	esomeprazole magnesium
lansoprazole/amoxicillin trihydrate/clarithromycin	amoxicil-clarithromy-lansopraz
omeprazole magnesium	omeprazole magnesium
naproxen/esomeprazole magnesium	Vimovo
omeprazole	Prilosec
omeprazole magnesium	Prilosec
esomeprazole magnesium	Nexium Packet
esomeprazole magnesium	Nexium
esomeprazole sodium	Nexium IV
lansoprazole	Prevacid
lansoprazole	Prevacid SoluTab

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
lansoprazole/naproxen	PREVACID NapraPAC
lansoprazole/amoxicillin trihydrate/clarithromycin	Prevpac
lansoprazole	Prevacid IV
omeprazole/sodium bicarbonate	omeprazole-sodium bicarbonate
naproxen/esomeprazole magnesium	naproxen-esomeprazole
lansoprazole	Heartburn Treatment 24 Hour
esomeprazole magnesium	Nexium 24HR
lansoprazole	Heartburn Relief 24 Hour
omeprazole/sodium bicarbonate	Zegerid OTC
rabeprazole sodium	AcipHex Sprinkle
rabeprazole sodium	AcipHex
esomeprazole sodium	esomeprazole sodium
dexlansoprazole	dexlansoprazole
omeprazole magnesium	Prilosec OTC
OMEPRAZOLE	Omeprazole+SyrSpend SF Alka
esomeprazole strontium	esomeprazole strontium
omeprazole/sodium bicarbonate	Zegerid
dexlansoprazole	Kapidex
dexlansoprazole	Dexilant
colchicine	colchicine
omeprazole magnesium/amoxicillin trihydrate/rifabutin	Talicia
esomeprazole magnesium/glycerin	Esomep-EZS
aspirin/omeprazole	Yosprala
aspirin/omeprazole	aspirin-omeprazole
omeprazole/clarithromycin/amoxicillin trihydrate	Omeclamox-Pak
OMEPRAZOLE	FIRST-Omeprazole
LANSOPRAZOLE	FIRST-Lansoprazole
omeprazole/sodium bicarbonate	OmePPi
omeprazole magnesium	Acid Reducer (omeprazole)
esomeprazole magnesium	Heartburn Treatment
famotidine	Zantac-360 (famotidine)
Selective serotonin reuptake inhibitor (SSRI) antidepressants	
fluoxetine HCl	Prozac Weekly
fluoxetine HCl	Sarafem
olanzapine/fluoxetine HCl	Symbyax
fluoxetine HCl	Prozac
paroxetine HCl	Paxil CR
paroxetine HCl	Paxil
sertraline HCl	Zoloft
sertraline HCl	sertraline
citalopram hydrobromide	citalopram
fluvoxamine maleate	fluvoxamine
fluoxetine HCl	fluoxetine
olanzapine/fluoxetine HCl	olanzapine-fluoxetine
escitalopram oxalate	escitalopram oxalate

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Generic Name	Brand Name
paroxetine HCl	paroxetine HCl
fluoxetine HCl	Selfemra
escitalopram oxalate	Lexapro
citalopram hydrobromide	Celexa
fluoxetine HCl	Rapiflux
zaleplon	zaleplon
paroxetine mesylate	Pexeva
metformin HCl	metformin
fluoxetine HCl/dietary supplement no.17	Gaboxetine
fluoxetine HCl/dietary supplement no.8	Sentroxatine
fluvoxamine maleate	Luvox CR
paroxetine mesylate	Brisdelle
Insulin	
insulin lispro	Humalog U-100 Insulin
insulin lispro protamine and insulin lispro	Humalog Mix 75-25(U-100)Insulin
insulin lispro protamine and insulin lispro	Humalog Mix 50-50 Insulin U-100
insulin lispro	Humalog KwikPen Insulin
insulin lispro	Humalog Junior KwikPen U-100
insulin glargine,human recombinant analog	Basaglar KwikPen U-100 Insulin
insulin lispro-aabc	Lyumjev U-100 Insulin
insulin lispro	insulin lispro
insulin lispro-aabc	Lyumjev KwikPen U-100 Insulin
insulin regular,beef-pork	Iletin I Regular
insulin,pork purified	Iletin II Regular (Pork)
insulin regular, human	Humulin R Regular U-100 Insulin
insulin lispro-aabc	Lyumjev KwikPen U-200 Insulin
insulin lispro protamine and insulin lispro	insulin lispro protamin-lispro
insulin isophane NPH,bf-pk	Iletin I NPH
insulin isophane,pork pure	Iletin II NPH (Pork)
insulin NPH human isophane	Humulin N NPH U-100 Insulin
insulin zinc,beef-pork	Iletin I Lente
insulin zinc,pork purified	Iletin II Lente (Pork)
insulin zinc human recombinant	Humulin L
insulin regular, human	Humulin R U-500 (Conc) Insulin
insulin zinc extended human recombinant	Humulin U Insulin
insulin NPH human isophane/insulin regular, human	Humulin 70/30 U-100 Insulin
insulin lispro	Humalog Pen
insulin NPH human isophane	Humulin N Pen
insulin NPH human isophane/insulin regular, human	Humulin 70/30 Insulin Pen
insulin lispro protamine and insulin lispro	Humalog Mix 75-25 KwikPen
insulin lispro protamine and insulin lispro	Humalog Mix 50-50 KwikPen
insulin NPH human isophane/insulin regular, human	Humulin 70/30 U-100 KwikPen
insulin NPH human isophane	Humulin N NPH Insulin KwikPen
insulin regular, human	Humulin R U-500 (Conc) Kwikpen
insulin NPH human isophane/insulin regular, human	Humulin 50/50

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
insulin glargine,human recombinant analog/lixisenatide	Soliqua 100/33
insulin glargine,human recombinant analog	Toujeo SoloStar U-300 Insulin
insulin glargine,human recombinant analog	Toujeo Max U-300 SoloStar
insulin regular, human	Afrezza
insulin lispro	Admelog U-100 Insulin lispro
insulin lispro	Admelog SoloStar U-100 Insulin
insulin regular, human/insulin release unit	Exubera Combination Pack 12
insulin regular, human/insulin release unit	Exubera Combination Pack 15
Insulin Regular, Human/Insulin Release Unit/Chamber/Inhaler	Exubera Kit
insulin regular, human/insulin release unit	Exubera Patient Pack
insulin glargine,human recombinant analog	Lantus Solostar U-100 Insulin
insulin glargine,human recombinant analog	Lantus U-100 Insulin
insulin glulisine	Apidra U-100 Insulin
insulin glulisine	Apidra SoloStar U-100 Insulin
insulin NPH human isophane/insulin regular, human	Novolin 70/30 U-100 Insulin
insulin regular, human	Novolin R Regular U-100 Insulin
insulin NPH human isophane	Novolin N NPH U-100 Insulin
insulin regular,human buffered	Velosulin BR (rDNA)
insulin zinc human recombinant	Novolin L
insulin aspart	Novolog U-100 Insulin aspart
insulin aspart	Novolog FlexPen U-100 Insulin
insulin aspart protamine human/insulin aspart	Novolog Mix 70-30 U-100 Insulin
insulin aspart protamine human/insulin aspart	Novolog Mix 70-30FlexPen U-100
insulin regular, human	Novolin R InnoLet
insulin NPH human isophane	Novolin N InnoLet
insulin NPH human isophane/insulin regular, human	Novolin 70/30 InnoLet Insulin
insulin degludec	Tresiba FlexTouch U-200
insulin degludec	Tresiba FlexTouch U-100
insulin degludec	Tresiba U-100 Insulin
insulin degludec/liraglutide	Xultophy 100/3.6
insulin regular, human	Novolin R FlexPen
insulin NPH human isophane	Novolin N FlexPen
insulin NPH human isophane/insulin regular, human	Novolin 70-30 FlexPen U-100
insulin aspart (niacinamide)	Fiasp U-100 Insulin
insulin aspart (niacinamide)	Fiasp FlexTouch U-100 Insulin
insulin aspart (niacinamide)	Fiasp Penfill U-100 Insulin
insulin aspart	Novolog PenFill U-100 Insulin
insulin regular, human	Novolin R PenFill
insulin NPH human isophane	Novolin N PenFill
insulin NPH human isophane/insulin regular, human	Novolin 70/30 PenFill
insulin detemir	Levemir U-100 Insulin
insulin detemir	Levemir FlexTouch U-100 Insulin
insulin detemir	Levemir FlexPen
diluent,insulin aspart combination no.1	Diluting Medium for Novolog
insulin regular, human in 0.9 % sodium chloride	Myxredlin

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
insulin glargine,human recombinant analog	insulin glargine
insulin regular,human buffered	Velosulin Human Br
insulin glargine,human recombinant analog	Semglee U-100 Insulin
insulin glargine,human recombinant analog	Semglee Pen U-100 Insulin
insulin glargine-yfgn	Semglee(insulin glargine-yfgn)
insulin glargine-yfgn	Semglee(insulin glarg-yfgn)Pen
insulin glargine-yfgn	insulin glargine-yfgn
insulin aspart	insulin aspart U-100
insulin aspart protamine human/insulin aspart	insulin asp prt-insulin aspart
insulin degludec	insulin degludec
Metformin (Biguanide)	
saxagliptin HCl/metformin HCl	Kombiglyze XR
sitagliptin phosphate/metformin HCl	Janumet XR
sitagliptin phosphate/metformin HCl	Janumet
ertugliflozin pidolate/metformin HCl	Segluromet
rosiglitazone maleate/metformin HCl	Avandamet
metformin HCl	Glucophage
metformin HCl	Glucophage XR
glyburide/metformin HCl	Glucovance
glipizide/metformin HCl	Metaglip
metformin HCl	metformin
pioglitazone HCl/metformin HCl	pioglitazone-metformin
glyburide/metformin HCl	glyburide-metformin
glipizide/metformin HCl	glipizide-metformin
repaglinide/metformin HCl	Prandimet
dapagliflozin propanediol/metformin HCl	Xigduo XR
gabapentin	gabapentin
linagliptin/metformin HCl	Jentadueto
empagliflozin/metformin HCl	Synjardy
linagliptin/metformin HCl	Jentadueto XR
empagliflozin/linagliptin/metformin HCl	Trijardy XR
metformin HCl	Riomet ER
metformin HCl	Riomet
metformin HCl	Glumetza
pioglitazone HCl/metformin HCl	Actoplus MET
alogliptin benzoate/metformin HCl	alogliptin-metformin
butalbital/aspirin/caffeine	butalbital-aspirin-caffeine
canagliflozin/metformin HCl	Invokamet
canagliflozin/metformin HCl	Invokamet XR
metformin HCl	Fortamet
pioglitazone HCl/metformin HCl	Actoplus Met XR
alogliptin benzoate/metformin HCl	Kazano
repaglinide/metformin HCl	repaglinide-metformin
metformin/caffeine/amino acids 7/herbal comb 125/choline bitartrate	Appformin
metformin/amino acids no.7/herbal cmb.125/choline bitartrate	Appformin-D
Sulfonylureas	

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Generic Name	Brand Name
rosiglitazone maleate/glimepiride	Avandaryl
tolazamide	Tolinase
glyburide	Micronase
glyburide,micronized	Glynase
glyburide	Diabeta
glimepiride	Amaryl
glipizide	Glucotrol XL
glipizide	Glucotrol
chlorpropamide	Diabinese
glyburide/metformin HCl	Glucovance
glipizide/metformin HCl	Metaglip
glyburide/metformin HCl	glyburide-metformin
glimepiride	glimepiride
glipizide/metformin HCl	glipizide-metformin
glyburide,micronized	glyburide micronized
glyburide	glyburide
tolazamide	tolazamide
glipizide	glipizide
chlorpropamide	chlorpropamide
tolbutamide	tolbutamide
acetoexamide	acetoexamide
pioglitazone HCl/glimepiride	pioglitazone-glimepiride
triamterene/hydrochlorothiazide	triamterene-hydrochlorothiazid
naproxen sodium	naproxen sodium
pramipexole di-HCl	pramipexole
bupirone HCl	bupirone
pioglitazone HCl/glimepiride	DUETACT
glyburide,micronized	Glycron
Other Diabetes Medications	
dulaglutide	Trulicity
dapagliflozin propanediol	Farxiga
saxagliptin HCl	Onglyza
saxagliptin HCl/metformin HCl	Kombiglyze XR
sitagliptin phosphate/metformin HCl	Janumet XR
sitagliptin phosphate	Januvia
sitagliptin phosphate/simvastatin	Juvisync
sitagliptin phosphate/metformin HCl	Janumet
ertugliflozin pidolate	Steglatro
ertugliflozin pidolate/metformin HCl	Segluromet
rosiglitazone maleate/glimepiride	Avandaryl
rosiglitazone maleate/metformin HCl	Avandamet
migliitol	Glyset
lixisenatide	Adlyxin
insulin glargine,human recombinant analog/lixisenatide	Soliqua 100/33
acarbose	Precose
rosiglitazone maleate	Avandia

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Generic Name	Brand Name
acarbose	acarbose
nateglinide	Starlix
pioglitazone HCl	pioglitazone
pioglitazone HCl/metformin HCl	pioglitazone-metformin
repaglinide	Prandin
repaglinide/metformin HCl	Prandimet
liraglutide	Saxenda
insulin degludec/liraglutide	Xultophy 100/3.6
liraglutide	Victoza 2-Pak
liraglutide	Victoza 3-Pak
semaglutide	Ozempic
semaglutide	Rybelsus
semaglutide	Wegovy
albiglutide	Tanzeum
dapagliflozin propanediol/metformin HCl	Xigduo XR
exenatide	Byetta
exenatide microspheres	Bydureon
exenatide microspheres	Bydureon BCise
pramlintide acetate	SymLinPen 60
pramlintide acetate	SymLinPen 120
repaglinide	repaglinide
nateglinide	nateglinide
linagliptin	Tradjenta
linagliptin/metformin HCl	Jentadueto
empagliflozin	Jardiance
empagliflozin/metformin HCl	Synjardy
empagliflozin/linagliptin	Glyxambi
linagliptin/metformin HCl	Jentadueto XR
empagliflozin/metformin HCl	Synjardy XR
pioglitazone HCl/glimepiride	pioglitazone-glimepiride
phosphorated carbohydrate (dextrose and fructose)	Especol
pioglitazone HCl	Actos
phosphorated carbohydrate (dextrose and fructose)	Anti-Nausea
pioglitazone HCl/metformin HCl	Actoplus MET
pramlintide acetate	SymLin
alogliptin benzoate	alogliptin
alogliptin benzoate/metformin HCl	alogliptin-metformin
alogliptin benzoate/pioglitazone HCl	alogliptin-pioglitazone
canagliflozin	Invokana
canagliflozin/metformin HCl	Invokamet
canagliflozin/metformin HCl	Invokamet XR
phosphorated carbohydrate (dextrose and fructose)	Emetrol
miglitol	miglitol
alogliptin benzoate/pioglitazone HCl	Oseni
alogliptin benzoate	Nesina

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Generic Name	Brand Name
pioglitazone HCl/glimepiride	DUETACT
pioglitazone HCl/metformin HCl	Actoplus Met XR
alogliptin benzoate/metformin HCl	Kazano
repaglinide/metformin HCl	repaglinide-metformin
mifepristone	Korlym
Angiotensin-converting enzyme inhibitors (ACEI)/Angiotensin receptor blockers (ARBs)	
captopril/hydrochlorothiazide	Capozide
captopril	Capoten
enalapril maleate	Vasotec
lisinopril	Prinivil
lisinopril/hydrochlorothiazide	Prinzide
enalapril maleate/hydrochlorothiazide	Vaseretic
losartan potassium/hydrochlorothiazide	Hyzaar
losartan potassium	Cozaar
nebivolol HCl/valsartan	Byvalson
irbesartan	Avapro
irbesartan/hydrochlorothiazide	Avalide
perindopril erbumine	Aceon
trandolapril	Mavik
trandolapril/verapamil HCl	Tarka
eprosartan mesylate	Teveten
ramipril	ramipril
perindopril erbumine	perindopril erbumine
losartan potassium	losartan
losartan potassium/hydrochlorothiazide	losartan-hydrochlorothiazide
irbesartan	irbesartan
irbesartan/hydrochlorothiazide	irbesartan-hydrochlorothiazide
telmisartan	telmisartan
telmisartan/hydrochlorothiazide	telmisartan-hydrochlorothiazid
quinapril HCl/hydrochlorothiazide	Accuretic
quinapril HCl	Accupril
eprosartan mesylate/hydrochlorothiazide	Teveten HCT
valsartan/hydrochlorothiazide	Diovan HCT
valsartan	Diovan
amlodipine besylate/benazepril HCl	Lotrel
benazepril HCl	Lotensin
benazepril HCl/hydrochlorothiazide	Lotensin HCT
amlodipine besylate/valsartan	Exforge
amlodipine besylate/valsartan/hydrochlorothiazide	Exforge HCT
aliskiren/valsartan	Valturna
sacubitril/valsartan	Entresto
fosinopril sodium	Monopril
fosinopril sodium/hydrochlorothiazide	Monopril HCT
moexipril HCl	Univasc
moexipril HCl/hydrochlorothiazide	Uniretic
moexipril HCl	moexipril

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Generic Name	Brand Name
enalapril maleate	enalapril maleate
captopril	captopril
captopril/hydrochlorothiazide	captopril-hydrochlorothiazide
lisinopril/hydrochlorothiazide	lisinopril-hydrochlorothiazide
enalapril maleate/hydrochlorothiazide	enalapril-hydrochlorothiazide
quinapril HCl	quinapril
lisinopril	lisinopril
olmesartan medoxomil/amlodipine besylate/hydrochlorothiazide	olmesartan-amlodipin-hcthiazid
benazepril HCl	benazepril
moexipril HCl/hydrochlorothiazide	moexipril-hydrochlorothiazide
amlodipine besylate/olmesartan medoxomil	amlodipine-olmesartan
amlodipine besylate/valsartan/hydrochlorothiazide	amlodipine-valsartan-hcthiazid
fosinopril sodium	fosinopril
trandolapril	trandolapril
amlodipine besylate/benazepril HCl	amlodipine-benazepril
valsartan	valsartan
olmesartan medoxomil	olmesartan
olmesartan medoxomil/hydrochlorothiazide	olmesartan-hydrochlorothiazide
amlodipine besylate/valsartan	amlodipine-valsartan
enalaprilat dihydrate	enalaprilat
benazepril HCl/hydrochlorothiazide	benazepril-hydrochlorothiazide
fosinopril sodium/hydrochlorothiazide	fosinopril-hydrochlorothiazide
enalapril maleate/felodipine	Lexxel
candesartan cilexetil	Atacand
candesartan cilexetil/hydrochlorothiazide	Atacand HCT
lisinopril	Zestril
ramipril	Altace
lisinopril/hydrochlorothiazide	Zestoretic
quinapril HCl/hydrochlorothiazide	quinapril-hydrochlorothiazide
telmisartan/amlodipine besylate	telmisartan-amlodipine
candesartan cilexetil/hydrochlorothiazide	candesartan-hydrochlorothiazid
candesartan cilexetil	candesartan
valsartan/hydrochlorothiazide	valsartan-hydrochlorothiazide
eprosartan mesylate	eprosartan
telmisartan	Micardis
telmisartan/hydrochlorothiazide	Micardis HCT
telmisartan/amlodipine besylate	Twynsta
olmesartan medoxomil	Benicar
olmesartan medoxomil/hydrochlorothiazide	Benicar HCT
amlodipine besylate/olmesartan medoxomil	Azor
olmesartan medoxomil/amlodipine besylate/hydrochlorothiazide	Tribenzor
isosorbide dinitrate	isosorbide dinitrate
trandolapril/verapamil HCl	trandolapril-verapamil
quinapril HCl/hydrochlorothiazide	Quinaretic
enalapril maleate	Epaned

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
lisinopril	Qbrelis
azilsartan medoxomil	Edarbi
azilsartan medoxomil/chlorthalidone	Edarbyclor
perindopril arginine/amlodipine besylate	Prestalia
lisinopril/dietary supplement,comb.10	Lytensopril
lisinopril/dietary supplement,comb.10	Lytensopril-90
Antiarrhythmics	
quinidine gluconate	quinidine gluconate
procainamide HCl	Pronestyl
procainamide HCl	Pronestyl-SR
amiodarone HCl	Cordarone
ibutilide fumarate	Corvert
dronedarone HCl	Multaq
verapamil HCl	Calan
disopyramide phosphate	Norpace CR
disopyramide phosphate	Norpace
quinidine sulfate	Quinidex Extentabs
propafenone HCl	Rythmol
flecainide acetate	flecainide
mexiletine HCl	mexiletine
dofetilide	Tikosyn
verapamil HCl	verapamil
diltiazem HCl	diltiazem HCl
flecainide acetate	Tambocor
sotalol HCl	sotalol
disopyramide phosphate	disopyramide phosphate
sotalol HCl	Sotalol AF
procainamide HCl	procainamide
amiodarone HCl	amiodarone
quinidine sulfate	quinidine sulfate
phenytoin sodium	phenytoin sodium
propafenone HCl	Rythmol SR
lidocaine HCl/PF	Xylocaine (Cardiac) (PF)
tocainide HCl	Tonocard
sotalol HCl	Sorine
amiodarone HCl	Pacerone
mexiletine HCl	Mexitil
lidocaine HCl in dextrose 5% in water/PF	lidocaine in 5 % dextrose (PF)
propafenone HCl	propafenone
lidocaine HCl/PF	lidocaine (PF)
adenosine	Adenocard
ibutilide fumarate	ibutilide fumarate
esmolol HCl	esmolol
adenosine	adenosine
dofetilide	dofetilide
esmolol HCl in sodium chloride, iso-osmotic	Brevibloc in NaCl (iso-osm)

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
esmolol HCl	Brevibloc
sotalol HCl	Sotylize
esmolol HCl in sodium chloride, iso-osmotic	esmolol in NaCl (iso-osm)
lidocaine HCl in sodium chloride, iso-osmotic/PF	lidocaine in NaCl,iso-osmo(PF)
amiodarone HCl/dextrose 5 % in water	amiodarone in dextrose 5 %
amiodarone in dextrose, iso-osmotic	Nexterone
esmolol HCl in sterile water	esmolol in sterile water
quinidine sulfate	quinidine sulfate (bulk)
quinidine gluconate	Quinaglute Dura-Tabs
sotalol HCl	Betapace
sotalol HCl	Betapace AF
adenosine in 0.9 % sodium chloride	adenosine in 0.9 % sod chlor
adenosine triphosphate	ATP
moricizine HCl	Ethmozine
procainamide HCl	Procanbid
bretylum tosylate	bretylum tosylate
Anti-coagulant (injectable)	
heparin sodium,porcine	heparin (porcine)
fondaparinux sodium	Arixtra
argatroban	argatroban
heparin sodium,bovine	heparin (bovine)
dalteparin sodium,porcine	Fragmin
heparin sodium,porcine/PF	heparin, porcine (PF)
heparin sodium,porcine	heparin lock flush (porcine)
heparin sodium,porcine IN 0.9 % sodium chloride/PF	heparin (porcine) in NaCl (PF)
heparin sodium,porcine in 0.45 % sodium chloride	heparin(porcine) in 0.45% NaCl
heparin sodium,porcine/dextrose 5 % in water	heparin (porcine) in 5 % dex
enoxaparin sodium	Lovenox
argatroban in 0.9 % sodium chloride	argatroban in 0.9 % sod chlor
desirudin	Iprivask
heparin sodium,porcine in 0.9 % sodium chloride	heparin (porcine) in 0.9% NaCl
bivalirudin in 0.9 % sodium chloride	bivalirudin-0.9 % sodium chlor
bivalirudin	bivalirudin
enoxaparin sodium	enoxaparin
warfarin sodium	Coumadin
argatroban in sodium chloride, iso-osmotic	argatroban in NaCl (iso-os)
fondaparinux sodium	fondaparinux
bivalirudin	Angiomax
heparin sodium,porcine/dextrose 5 % in water/PF	heparin (porcine) in D5W (PF)
tinzaparin sodium,porcine	Innohep
lepirudin,recombinant	Refludan
heparin sodium,porcine/PF	Heparin LockFlush(Porcine)(PF)
Anti-platelets	
prasugrel HCl	Effient
abciximab	Reopro
ticlopidine HCl	Ticlid

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Generic Name	Brand Name
vorapaxar sulfate	Zontivity
clopidogrel bisulfate	Plavix
cilostazol	cilostazol
dipyridamole	dipyridamole
aspirin/dipyridamole	aspirin-dipyridamole
eptifibatide	Integrilin
ticlopidine HCl	ticlopidine
clopidogrel bisulfate	clopidogrel
aspirin	aspirin
aspirin	Ecotrin
aspirin	Ecotrin Low Strength
anagrelide HCl	anagrelide
aspirin	Genacote
aspirin	Children's Aspirin
ticagrelor	Brilinta
aspirin	Bayer Aspirin
aspirin	Bayer Chewable Aspirin
aspirin	Bayer Low Dose Aspirin
aspirin/calcium carbonate	Women's Aspirin with Calcium
eptifibatide	eptifibatide
prasugrel HCl	prasugrel
aspirin	EC Aspirin
aspirin	St. Joseph Aspirin
aspirin	St. Joseph Low-Dose Aspirin
aspirin/dipyridamole	Aggrenox
dipyridamole	Persantine
aspirin	Aspir-Low
cangrelor tetrasodium	Kengreal
aspirin	Aspirin Childrens
aspirin	Enteric Coated Aspirin
aspirin	Stanback Headache Powder
aspirin	Aspir-Trin
aspirin	Extra Strength Bayer
aspirin	Bayer Advanced
aspirin	St Joseph Aspirin
aspirin	Aspirin Extra Strength
aspirin	AsperDrink
aspirin	Lite Coat Aspirin
tirofiban HCl monohydrate	Aggrastat Concentrate
tirofiban HCl monohydrate in 0.9 % sodium chloride	Aggrastat in sodium chloride
aspirin	Lo-Dose Aspirin
aspirin	Aspirin Low-Strength
aspirin	Adult Low Dose Aspirin
aspirin	Miniprin
aspirin	Child Aspirin

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
aspirin	Halfprin
anagrelide HCl	Agrylin
cilostazol	Pletal
aspirin	Baby Aspirin
dipyridamole	Dipradam
aspirin	Durlaza
aspirin	Aspir-81
aspirin	E.C. Prin
acetaminophen	acetaminophen
aspirin/omeprazole	Yosprala
aspirin/omeprazole	aspirin-omeprazole
aspirin	Adult Aspirin Regimen
aspirin	Vazalore
Beta-blockers	
nadolol	Corgard
bisoprolol fumarate/hydrochlorothiazide	Ziac
bisoprolol fumarate	Zebeta
timolol maleate	Blocadren
timolol maleate/hydrochlorothiazide	Timolide
carvedilol phosphate	Coreg CR
carvedilol	Coreg
acebutolol HCl	Sectral
betaxolol HCl	Kerlone
metoprolol tartrate/hydrochlorothiazide	Lopressor HCT
metoprolol tartrate	Lopressor
propranolol HCl	Inderal
propranolol HCl	Inderal LA
propranolol HCl/hydrochlorothiazide	Inderide
propranolol HCl	propranolol
carteolol HCl	Cartrol
penbutolol sulfate	Levatol
carvedilol	carvedilol
metoprolol tartrate	metoprolol tartrate
atenolol	atenolol
sotalol HCl	sotalol
bisoprolol fumarate/hydrochlorothiazide	bisoprolol-hydrochlorothiazide
nadolol	nadolol
bisoprolol fumarate	bisoprolol fumarate
sotalol HCl	Sotalol AF
nadolol/bendroflumethiazide	nadolol-bendroflumethiazide
labetalol HCl	labetalol
labetalol HCl in sodium chloride, iso-osmotic	labetalol in NaCl (iso-osmot)
labetalol HCl in dextrose, iso-osmotic	labetalol in dextrose,iso-osm
pindolol	pindolol
labetalol HCl	Trandate
propranolol HCl	InnoPran XL

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
metoprolol succinate	metoprolol succinate
metoprolol succinate	Toprol XL
propranolol HCl/hydrochlorothiazide	propranolol-hydrochlorothiazid
sotalol HCl	Sorine
atenolol	Tenormin
atenolol/chlorthalidone	Tenoretic 50
atenolol/chlorthalidone	Tenoretic 100
metoprolol succinate/hydrochlorothiazide	Dutoprol
timolol maleate	timolol maleate
metoprolol tartrate/hydrochlorothiazide	metoprolol ta-hydrochlorothiaz
acebutolol HCl	acebutolol
atenolol/chlorthalidone	atenolol-chlorthalidone
nebivolol HCl	Bystolic
esmolol HCl	esmolol
nebivolol HCl	nebivolol
esmolol HCl in sodium chloride, iso-osmotic	Brevibloc in NaCl (iso-osm)
esmolol HCl	Brevibloc
betaxolol HCl	betaxolol
metoprolol succinate	Kapsargo Sprinkle
carvedilol phosphate	carvedilol phosphate
sotalol HCl	Sotylize
esmolol HCl in sodium chloride, iso-osmotic	esmolol in NaCl (iso-osm)
esmolol HCl in sterile water	esmolol in sterile water
sotalol HCl	Betapace
sotalol HCl	Betapace AF
labetalol HCl	Normodyne
nadolol/bendroflumethiazide	Corzide
pindolol	Visken
levetiracetam	Keppra
pravastatin sodium	pravastatin
labetalol in dextrose 5 % in water	labetalol in dextrose 5 %
propranolol HCl	Inderal XL
propranolol HCl	Hemangeol
metoprolol tartrate/dietary supplement,comb.10	Hypertensolol
metoprolol succinate/hydrochlorothiazide	metoprolol su-hydrochlorothiaz
Calcium channel blockers	
nicardipine HCl	Cardene SR
nicardipine HCl	Cardene
verapamil HCl	Calan
verapamil HCl	Calan SR
verapamil HCl	Covera-HS
nimodipine	Nimotop
nifedipine	Adalat CC
verapamil HCl	Isoptin SR
bepidil HCl	Vascor
trandolapril/verapamil HCl	Tarka

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
amlodipine besylate	amlodipine
amlodipine besylate	Norvasc
amlodipine besylate/atorvastatin calcium	Caduet
nifedipine	Procardia
nifedipine	Procardia XL
verapamil HCl	verapamil
diltiazem HCl	diltiazem HCl
diltiazem HCl	Cardizem LA
amlodipine besylate/benazepril HCl	Lotrel
amlodipine besylate/valsartan	Exforge
amlodipine besylate/valsartan/hydrochlorothiazide	Exforge HCT
aliskiren hemifumarate/amlodipine besylate	Tekamlo
aliskiren hemifumarate/amlodipine/hydrochlorothiazide	Amturnide
diltiazem HCl	Cardizem
diltiazem HCl	Cardizem SR
diltiazem HCl	Cardizem CD
verapamil HCl	Verelan
verapamil HCl	Verelan PM
nicardipine HCl	nicardipine
nifedipine	Nifedical XL
nifedipine	Nifediac CC
nifedipine	nifedipine
amlodipine besylate/valsartan/hydrochlorothiazide	amlodipine-valsartan-hcthiazid
amlodipine besylate/benazepril HCl	amlodipine-benazepril
amlodipine besylate/valsartan	amlodipine-valsartan
nicardipine in sodium chloride, iso-osmotic	nicardipine in NaCl (iso-os)
isradipine	DynaCirc CR
enalapril maleate/felodipine	Lexxel
felodipine	Plendil
diltiazem HCl	Tiazac
nisoldipine	Sular
telmisartan/amlodipine besylate	telmisartan-amlodipine
nisoldipine	nisoldipine
amlodipine besylate/atorvastatin calcium	amlodipine-atorvastatin
felodipine	felodipine
diltiazem HCl	Cartia XT
diltiazem HCl	Diltia XT
nimodipine	nimodipine
nifedipine	Afeditab CR
telmisartan/amlodipine besylate	Twynsta
nicardipine in sodium chloride, iso-osmotic	Cardene IV in sodium chloride
nicardipine in dextrose, iso-osmotic	Cardene IV in dextrose
clevidipine butyrate	Cleviprex
diltiazem HCl/dextrose 5 % in water	diltiazem in dextrose 5 %
isradipine	isradipine

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
nimodipine	Nymalize
nicardipine HCl	Cardene IV
levamlodipine maleate	levamlodipine
nicardipine HCl in 0.9 % sodium chloride	nicardipine in 0.9 % sod chlor
amlodipine besylate	Norliqva
trandolapril/verapamil HCl	trandolapril-verapamil
diltiazem HCl	Dilacor XR
diltiazem HCl	Matzim LA
amlodipine benzoate	Katerzia
isradipine	DynaCirc
amlodipine besylate/olmesartan medoxomil	Azor
diltiazem HCl	DILT-XR
fosinopril sodium	fosinopril
diltiazem HCl	DILT-CD
diltiazem HCl	Diltzac ER
diltiazem HCl	Taztia XT
diltiazem HCl in 0.9 % sodium chloride	diltiazem HCl in 0.9% NaCl
nicardipine in 5 % dextrose in water	nicardipine in 5 % dextrose
perindopril arginine/amlodipine besylate	Prestalia
olmesartan medoxomil/amlodipine besylate/hydrochlorothiazide	Tribenzor
levamlodipine maleate	Conjupri
diltiazem HCl	Tiadylt ER
amlodipine besylate/celecoxib	Consensi
Digoxin	
digoxin	digoxin
digoxin	Lanoxin
digoxin	Lanoxin Pediatric
digoxin	Lanoxicaps
digoxin	Digitek
digoxin	Digox
Diuretics - Loop	
bumetanide	Bumex
toremide	Demadex
ethacrynic acid	Edecrin
furosemide	Lasix
toremide	toremide
ethacrynic acid	ethacrynic acid
furosemide	furosemide
bumetanide	bumetanide
furosemide in 0.9 % sodium chloride	furosemide in 0.9 % NaCl
ethacrynate sodium	Sodium Edecrin
ethacrynate sodium	ethacrynate sodium
furosemide/dextrose 5 % in water	furosemide in dextrose 5 %
furosemide	Furoscix
toremide	Soanz
Diuretics - Potassium sparing	

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
amiloride HCl	Midamor
amiloride HCl/hydrochlorothiazide	Moduretic
triamterene/hydrochlorothiazide	Dyazide
spironolactone	Aldactone
spironolactone/hydrochlorothiazide	Aldactazide
eplerenone	Inspra
triamterene/hydrochlorothiazide	triamterene-hydrochlorothiazid
eplerenone	eplerenone
spironolactone	spironolactone
spironolactone/hydrochlorothiazide	spironolacton-hydrochlorothiaz
triamterene/hydrochlorothiazide	Maxzide
triamterene/hydrochlorothiazide	Maxzide-25mg
amiloride HCl/hydrochlorothiazide	amiloride-hydrochlorothiazide
amiloride HCl	amiloride
spironolactone	CaroSpir
triamterene	triamterene
triamterene	Dyrenium
metoprolol tartrate	metoprolol tartrate
Diuretics - Thiazide	
captopril/hydrochlorothiazide	Capozide
bendroflumethiazide	Naturetin
bisoprolol fumarate/hydrochlorothiazide	Ziac
hydrochlorothiazide	HydroDiuril
timolol maleate/hydrochlorothiazide	Timolide
lisinopril/hydrochlorothiazide	Prinzide
enalapril maleate/hydrochlorothiazide	Vaseretic
chlorothiazide	Diuril
methyldopa/hydrochlorothiazide	Aldoril-15
methyldopa/hydrochlorothiazide	Aldoril-25
methyldopa/chlorothiazide	Aldoclor
methyldopa/hydrochlorothiazide	Aldoril D30
losartan potassium/hydrochlorothiazide	Hyzaar
amiloride HCl/hydrochlorothiazide	Moduretic
triamterene/hydrochlorothiazide	Dyazide
irbesartan/hydrochlorothiazide	Avalide
spironolactone/hydrochlorothiazide	Aldactazide
metoprolol tartrate/hydrochlorothiazide	Lopressor HCT
methyclothiazide	Aquatensen
propranolol HCl/hydrochlorothiazide	Inderide
losartan potassium/hydrochlorothiazide	losartan-hydrochlorothiazide
irbesartan/hydrochlorothiazide	irbesartan-hydrochlorothiazide
telmisartan/hydrochlorothiazide	telmisartan-hydrochlorothiazid
hydrochlorothiazide	hydrochlorothiazide
polythiazide	Renese
prazosin HCl/polythiazide	Minizide
quinapril HCl/hydrochlorothiazide	Accuretic

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
eprosartan mesylate/hydrochlorothiazide	Teveten HCT
methyclothiazide	Enduron
deserpidine/methyclothiazide	Enduronyl
deserpidine/methyclothiazide	Enduronyl Forte
hydrochlorothiazide	Oretic
indapamide	Lozol
valsartan/hydrochlorothiazide	Diovan HCT
benazepril HCl/hydrochlorothiazide	Lotensin HCT
aliskiren hemifumarate/hydrochlorothiazide	Tekturna HCT
amlodipine besylate/valsartan/hydrochlorothiazide	Exforge HCT
aliskiren hemifumarate/amlodipine/hydrochlorothiazide	Amturnide
fosinopril sodium/hydrochlorothiazide	Monopril HCT
moexipril HCl/hydrochlorothiazide	Uniretic
indapamide	indapamide
captopril/hydrochlorothiazide	captopril-hydrochlorothiazide
lisinopril/hydrochlorothiazide	lisinopril-hydrochlorothiazide
enalapril maleate/hydrochlorothiazide	enalapril-hydrochlorothiazide
moexipril HCl/hydrochlorothiazide	moexipril-hydrochlorothiazide
amlodipine besylate/valsartan/hydrochlorothiazide	amlodipine-valsartan-hcthiiazid
metolazone	metolazone
nadolol/bendroflumethiazide	nadolol-bendroflumethiazide
chlorothiazide	chlorothiazide
triamterene/hydrochlorothiazide	triamterene-hydrochlorothiazid
benazepril HCl/hydrochlorothiazide	benazepril-hydrochlorothiazide
bisoprolol fumarate/hydrochlorothiazide	bisoprolol-hydrochlorothiazide
fosinopril sodium/hydrochlorothiazide	fosinopril-hydrochlorothiazide
candesartan cilexetil/hydrochlorothiazide	Atacand HCT
propranolol HCl/hydrochlorothiazide	propranolol-hydrochlorothiazid
lisinopril/hydrochlorothiazide	Zestoretic
atenolol/chlorthalidone	Tenoretic 50
atenolol/chlorthalidone	Tenoretic 100
metoprolol succinate/hydrochlorothiazide	Dutoprol
clonidine HCl/chlorthalidone	Clorpres
spironolactone/hydrochlorothiazide	spironolacton-hydrochlorothiaz
methyclothiazide	methyclothiazide
chlorthalidone	chlorthalidone
metoprolol tartrate/hydrochlorothiazide	metoprolol ta-hydrochlorothiaz
triamterene/hydrochlorothiazide	Maxzide
triamterene/hydrochlorothiazide	Maxzide-25mg
methyldopa/hydrochlorothiazide	methyldopa-hydrochlorothiazide
quinapril HCl/hydrochlorothiazide	quinapril-hydrochlorothiazide
amiloride HCl/hydrochlorothiazide	amiloride-hydrochlorothiazide
atenolol/chlorthalidone	atenolol-chlorthalidone
candesartan cilexetil/hydrochlorothiazide	candesartan-hydrochlorothiazid
valsartan/hydrochlorothiazide	valsartan-hydrochlorothiazide

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
chlorothiazide sodium	chlorothiazide sodium
telmisartan/hydrochlorothiazide	Micardis HCT
hydralazine HCl/reserpine/hydrochlorothiazide	Uni-Serp
isosorbide dinitrate/hydralazine HCl	BiDil
hydralazine HCl/hydrochlorothiazide	Hydra-Zide
hydralazine HCl/hydrochlorothiazide	hydralazine-hydrochlorothiazid
quinapril HCl/hydrochlorothiazide	Quinaretic
hydrochlorothiazide	Microzide
metolazone	Zaroxolyn
metolazone	Mykrox
nadolol/bendroflumethiazide	Corzide
reserpine/hydrochlorothiazide	reserpine-hydrochlorothiazide
hydralazine HCl/reserpine/hydrochlorothiazide	hydralazine-reserpin-hcthiaziid
metoprolol tartrate	metoprolol tartrate
spironolactone	spironolactone
azilsartan medoxomil/chlorthalidone	Edarbyclor
chlorthalidone	Thalitone
chlorothiazide sodium	Diuril IV
Nitrates	
isosorbide mononitrate	Ismo
isosorbide dinitrate	Isordil Titrados
isosorbide dinitrate	Isordil
nitroglycerin	Nitrostat
isosorbide mononitrate	Imdur
nitroglycerin	Nitro-Dur
nitroglycerin	Minitran
nitroglycerin	nitroglycerin
isosorbide dinitrate	Dilatrate-SR
isosorbide mononitrate	Monoket
isosorbide mononitrate	isosorbide mononitrate
isosorbide dinitrate	isosorbide dinitrate
nitroglycerin	Nitro-Bid
nitroglycerin	Nitrol
nitroglycerin in 5 % dextrose in water	nitroglycerin in 5 % dextrose
isosorbide dinitrate	ISOCHRON
nitroglycerin	Nitrogard
nitroglycerin	Nitroglyn
isosorbide dinitrate/hydralazine HCl	BiDil
nitroglycerin	Nitrolingual
nitroglycerin	Nitromist
nitroglycerin	GoNitro
amyl nitrite	amyl nitrite
nitroglycerin	Rectiv
nitroglycerin	Nitro-Time
isosorbide dinitrate	IsoDitrate
nitroglycerin	NitroTab

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
nitroglycerin	NitroQuick
nitroglycerin	Nitronal
nitroglycerin	Nitrek
meloxicam	meloxicam
Statins	
pitavastatin calcium	Livalo
pravastatin sodium	Pravachol
aspirin (calcium carb & magnesium buffers)/pravastatin	PRAVIGARD PAC
sitagliptin phosphate/simvastatin	Juvisync
simvastatin	Zocor
lovastatin	Mevacor
amlodipine besylate/atorvastatin calcium	Caduet
atorvastatin calcium	Lipitor
niacin/lovastatin	Advicor
niacin/simvastatin	Simcor
fluvastatin sodium	Lescol
fluvastatin sodium	Lescol XL
lovastatin	lovastatin
pravastatin sodium	pravastatin
atorvastatin calcium	atorvastatin
simvastatin	simvastatin
fluvastatin sodium	fluvastatin
rosuvastatin calcium	rosuvastatin
ezetimibe/simvastatin	ezetimibe-simvastatin
rosuvastatin calcium	Crestor
amlodipine besylate/atorvastatin calcium	amlodipine-atorvastatin
ezetimibe/simvastatin	Vytorin 10-40
ezetimibe/simvastatin	Vytorin 10-20
ezetimibe/simvastatin	Vytorin 10-10
ezetimibe/simvastatin	Vytorin 10-80
pitavastatin magnesium	Zypitamag
simvastatin	FloLipid
rosuvastatin calcium	Ezallor Sprinkle
lovastatin	Altoprev
nefazodone HCl	nefazodone
lovastatin	Altacor
ezetimibe/atorvastatin calcium	Liptruzet
ezetimibe/rosuvastatin calcium	Roszet
ezetimibe/rosuvastatin calcium	ezetimibe-rosuvastatin
Fibrates	
gemfibrozil	gemfibrozil
gemfibrozil	Lopid
fenofibric acid (choline)	Trilipix
fenofibrate nanocrystallized	Tricor
fenofibrate, micronized	Tricor
fenofibrate nanocrystallized	fenofibrate nanocrystallized

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
fenofibrate,micronized	fenofibrate micronized
fenofibric acid (choline)	fenofibric acid (choline)
fenofibrate	fenofibrate
fenofibric acid	Fibricor
fenofibrate,micronized	Antara
fenofibrate	Fenoglide
fenofibric acid	fenofibric acid
fenofibrate,micronized	Lofibra
fenofibrate nanocrystallized	Triglide
fenofibrate	Lofibra
fenofibrate	Lipofen
Amiodarone	
amiodarone HCl	Cordarone
amiodarone HCl	amiodarone
amiodarone HCl	Pacerone
amiodarone HCl/dextrose 5 % in water	amiodarone in dextrose 5 %
amiodarone in dextrose, iso-osmotic	Nexterone
Dronedarone	
dronedarone HCl	Multaq

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
Diabetes			
250	Diabetes mellitus	DX	ICD-9-CM
250.0	Diabetes mellitus without mention of complication	DX	ICD-9-CM
250.00	Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled	DX	ICD-9-CM
250.01	Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled	DX	ICD-9-CM
250.02	Diabetes mellitus without mention of complication, type II or unspecified type, uncontrolled	DX	ICD-9-CM
250.03	Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled	DX	ICD-9-CM
250.1	Diabetes with ketoacidosis	DX	ICD-9-CM
250.10	Diabetes with ketoacidosis, type II or unspecified type, not stated as uncontrolled	DX	ICD-9-CM
250.11	Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled	DX	ICD-9-CM
250.12	Diabetes with ketoacidosis, type II or unspecified type, uncontrolled	DX	ICD-9-CM
250.13	Diabetes with ketoacidosis, type I [juvenile type], uncontrolled	DX	ICD-9-CM
250.2	Diabetes with hyperosmolarity	DX	ICD-9-CM
250.20	Diabetes with hyperosmolarity, type II or unspecified type, not stated as uncontrolled	DX	ICD-9-CM
250.21	Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled	DX	ICD-9-CM
250.22	Diabetes with hyperosmolarity, type II or unspecified type, uncontrolled	DX	ICD-9-CM
250.23	Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled	DX	ICD-9-CM
250.3	Diabetes with other coma	DX	ICD-9-CM
250.30	Diabetes with other coma, type II or unspecified type, not stated as uncontrolled	DX	ICD-9-CM
250.31	Diabetes with other coma, type I [juvenile type], not stated as uncontrolled	DX	ICD-9-CM
250.32	Diabetes with other coma, type II or unspecified type, uncontrolled	DX	ICD-9-CM
250.33	Diabetes with other coma, type I [juvenile type], uncontrolled	DX	ICD-9-CM
250.4	Diabetes with renal manifestations	DX	ICD-9-CM
250.40	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled	DX	ICD-9-CM
250.41	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled	DX	ICD-9-CM
250.42	Diabetes with renal manifestations, type II or unspecified type, uncontrolled	DX	ICD-9-CM
250.43	Diabetes with renal manifestations, type I [juvenile type], uncontrolled	DX	ICD-9-CM
250.5	Diabetes with ophthalmic manifestations	DX	ICD-9-CM
250.50	Diabetes with ophthalmic manifestations, type II or unspecified type, not stated as uncontrolled	DX	ICD-9-CM
250.51	Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled	DX	ICD-9-CM
250.52	Diabetes with ophthalmic manifestations, type II or unspecified type, uncontrolled	DX	ICD-9-CM
250.53	Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled	DX	ICD-9-CM
250.6	Diabetes with neurological manifestations	DX	ICD-9-CM
250.60	Diabetes with neurological manifestations, type II or unspecified type, not stated as uncontrolled	DX	ICD-9-CM
250.61	Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled	DX	ICD-9-CM
250.62	Diabetes with neurological manifestations, type II or unspecified type, uncontrolled	DX	ICD-9-CM
250.63	Diabetes with neurological manifestations, type I [juvenile type], uncontrolled	DX	ICD-9-CM
250.7	Diabetes with peripheral circulatory disorders	DX	ICD-9-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
250.70	Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled	DX	ICD-9-CM
250.71	Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as	DX	ICD-9-CM
250.72	Diabetes with peripheral circulatory disorders, type II or unspecified type, uncontrolled	DX	ICD-9-CM
250.73	Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled	DX	ICD-9-CM
250.8	Diabetes with other specified manifestations	DX	ICD-9-CM
250.80	Diabetes with other specified manifestations, type II or unspecified type, not stated as uncontrolled	DX	ICD-9-CM
250.81	Diabetes with other specified manifestations, type I [juvenile type], not stated as	DX	ICD-9-CM
250.82	Diabetes with other specified manifestations, type II or unspecified type, uncontrolled	DX	ICD-9-CM
250.83	Diabetes with other specified manifestations, type I [juvenile type], uncontrolled	DX	ICD-9-CM
250.9	Diabetes with unspecified complication	DX	ICD-9-CM
250.90	Diabetes with unspecified complication, type II or unspecified type, not stated as	DX	ICD-9-CM
250.91	Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled	DX	ICD-9-CM
250.92	Diabetes with unspecified complication, type II or unspecified type, uncontrolled	DX	ICD-9-CM
250.93	Diabetes with unspecified complication, type I [juvenile type], uncontrolled	DX	ICD-9-CM
A5500	For diabetics only, fitting (including follow-up), custom preparation and supply of off-the-shelf depth-inlay shoe manufactured to accommodate multidensity insert(s), per shoe	PX	HCPCS
A5501	For diabetics only, fitting (including follow-up), custom preparation and supply of shoe molded from cast(s) of patient's foot (custom molded shoe), per shoe	PX	HCPCS
A5503	For diabetics only, modification (including fitting) of off-the-shelf depth-inlay shoe or custom molded shoe with roller or rigid rocker bottom, per shoe	PX	HCPCS
A5504	For diabetics only, modification (including fitting) of off-the-shelf depth-inlay shoe or custom molded shoe with wedge(s), per shoe	PX	HCPCS
A5505	For diabetics only, modification (including fitting) of off-the-shelf depth-inlay shoe or custom molded shoe with metatarsal bar, per shoe	PX	HCPCS
A5506	For diabetics only, modification (including fitting) of off-the-shelf depth-inlay shoe or custom molded shoe with off-set heel(s), per shoe	PX	HCPCS
A5507	For diabetics only, not otherwise specified modification (including fitting) of off-the-shelf depth-inlay shoe or custom molded shoe, per shoe	PX	HCPCS
A5508	For diabetics only, deluxe feature of off-the-shelf depth-inlay shoe or custom molded shoe, per shoe	PX	HCPCS
A5510	For diabetics only, direct formed, compression molded to patient's foot without external heat source, multiple-density insert(s) prefabricated, per shoe	PX	HCPCS
A5512	For diabetics only, multiple density insert, direct formed, molded to foot after external heat source of 230 degrees Fahrenheit or higher, total contact with patient's foot, including arch, base layer minimum of 1/4 inch material of Shore A 35 durometer or 3/16 inch material of Shore A 40 durometer (or higher), prefabricated, each	PX	HCPCS
A5513	For diabetics only, multiple density insert, custom molded from model of patient's foot, total contact with patient's foot, including arch, base layer minimum of 3/16 inch material of Shore A 35 durometer (or higher), includes arch filler and other shaping material, custom fabricated, each	PX	HCPCS
G0108	Diabetes outpatient self-management training services, individual, per 30 minutes	PX	HCPCS

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
G0109	Diabetes outpatient self-management training services, group session (2 or more), per 30 minutes	PX	HCPCS
G0245	Initial physician evaluation and management of a diabetic patient with diabetic sensory neuropathy resulting in a loss of protective sensation (LOPS) which must include: (1) the diagnosis of LOPS, (2) a patient history, (3) a physical examination that consists of at least the following elements: (a) visual inspection of the forefoot, hindfoot, and toe web spaces, (b) evaluation of a protective sensation, (c) evaluation of foot structure and biomechanics, (d) evaluation of vascular status and skin integrity, and (e) evaluation and recommendation of footwear, and (4) patient education	PX	HCPCS
G0246	Follow-up physician evaluation and management of a diabetic patient with diabetic sensory neuropathy resulting in a loss of protective sensation (LOPS) to include at least the following: (1) a patient history, (2) a physical examination that includes: (a) visual inspection of the forefoot, hindfoot, and toe web spaces, (b) evaluation of protective sensation, (c) evaluation of foot structure and biomechanics, (d) evaluation of vascular status and skin integrity, and (e) evaluation and recommendation of footwear, and (3) patient education	PX	HCPCS
G0247	Routine foot care by a physician of a diabetic patient with diabetic sensory neuropathy resulting in a loss of protective sensation (LOPS) to include the local care of superficial wounds (i.e., superficial to muscle and fascia) and at least the following, if present: (1) local care of superficial wounds, (2) debridement of corns and calluses, and (3) trimming and debridement of nails	PX	HCPCS
G8015	Diabetic patient with most recent hemoglobin A1c level (within the last 6 months) documented as greater than 9%	PX	HCPCS
G8016	Diabetic patient with most recent hemoglobin A1c level (within the last 6 months) documented as less than or equal to 9%	PX	HCPCS
G8017	Clinician documented that diabetic patient was not eligible candidate for hemoglobin A1c measure	PX	HCPCS
G8018	Clinician has not provided care for the diabetic patient for the required time for hemoglobin A1c measure (6 months)	PX	HCPCS
G8019	Diabetic patient with most recent low-density lipoprotein (within the last 12 months) documented as greater than or equal to 100 mg/dl	PX	HCPCS
G8020	Diabetic patient with most recent low-density lipoprotein (within the last 12 months) documented as less than 100 mg/dl	PX	HCPCS
G8021	Clinician documented that diabetic patient was not eligible candidate for low-density lipoprotein measure	PX	HCPCS
G8022	Clinician has not provided care for the diabetic patient for the required time for low-density lipoprotein measure (12 months)	PX	HCPCS
G8023	Diabetic patient with most recent blood pressure (within the last 6 months) documented as equal to or greater than 140 systolic or equal to or greater than 80 mm Hg diastolic	PX	HCPCS
G8024	Diabetic patient with most recent blood pressure (within the last 6 months) documented as less than 140 systolic and less than 80 diastolic	PX	HCPCS
G8025	Clinician documented that the diabetic patient was not eligible candidate for blood pressure measure	PX	HCPCS

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
G8026	Clinician has not provided care for the diabetic patient for the required time for blood pressure measure (within the last 6 months)	PX	HCPCS
G8332	Clinician has not provided care for the diabetic retinopathy patient for the required time for macular edema and retinopathy measurement	PX	HCPCS
G8333	Patient documented to have had findings of macular or fundus exam communicated to the physician managing the diabetes care	PX	HCPCS
G8334	Documentation of findings of macular or fundus exam not communicated to the physician managing the patient's ongoing diabetes care	PX	HCPCS
G8335	Clinician documentation that patient was not an eligible candidate for the findings of their macular or fundus exam being communicated to the physician managing their diabetes care during the reporting year	PX	HCPCS
G8336	Clinician has not provided care for the diabetic retinopathy patient for the required time for physician communication measurement	PX	HCPCS
G8385	Diabetic patients with no documentation of hemoglobin A1c level (within the last 12 months)	PX	HCPCS
G8386	Diabetic patients with no documentation of low-density lipoprotein (within the last 12 months)	PX	HCPCS
G8390	Diabetic patients with no documentation of blood pressure measurement (within the last 12 months)	PX	HCPCS
E11.9	Type 2 diabetes mellitus without complications	DX	ICD-10-CM
E10.9	Type 1 diabetes mellitus without complications	DX	ICD-10-CM
E11.65	Type 2 diabetes mellitus with hyperglycemia	DX	ICD-10-CM
E10.65	Type 1 diabetes mellitus with hyperglycemia	DX	ICD-10-CM
E11.69	Type 2 diabetes mellitus with other specified complication	DX	ICD-10-CM
E13.10	Other specified diabetes mellitus with ketoacidosis without coma	DX	ICD-10-CM
E10.10	Type 1 diabetes mellitus with ketoacidosis without coma	DX	ICD-10-CM
E11.00	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	DX	ICD-10-CM
E11.01	Type 2 diabetes mellitus with hyperosmolarity with coma	DX	ICD-10-CM
E10.69	Type 1 diabetes mellitus with other specified complication	DX	ICD-10-CM
E11.641	Type 2 diabetes mellitus with hypoglycemia with coma	DX	ICD-10-CM
E10.11	Type 1 diabetes mellitus with ketoacidosis with coma	DX	ICD-10-CM
E10.641	Type 1 diabetes mellitus with hypoglycemia with coma	DX	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	DX	ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	DX	ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	DX	ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	DX	ICD-10-CM
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema	DX	ICD-10-CM
E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema	DX	ICD-10-CM
E11.36	Type 2 diabetes mellitus with diabetic cataract	DX	ICD-10-CM
E11.39	Type 2 diabetes mellitus with other diabetic ophthalmic complication	DX	ICD-10-CM
E10.311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema	DX	ICD-10-CM
E10.319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema	DX	ICD-10-CM
E10.36	Type 1 diabetes mellitus with diabetic cataract	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
E10.37X1	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, right	DX	ICD-10-CM
E10.37X2	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	DX	ICD-10-CM
E10.37X3	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	DX	ICD-10-CM
E10.37X9	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	DX	ICD-10-CM
E10.39	Type 1 diabetes mellitus with other diabetic ophthalmic complication	DX	ICD-10-CM
E11.40	Type 2 diabetes mellitus with diabetic neuropathy, unspecified	DX	ICD-10-CM
E10.40	Type 1 diabetes mellitus with diabetic neuropathy, unspecified	DX	ICD-10-CM
E11.51	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	DX	ICD-10-CM
E10.51	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene	DX	ICD-10-CM
E11.618	Type 2 diabetes mellitus with other diabetic arthropathy	DX	ICD-10-CM
E11.620	Type 2 diabetes mellitus with diabetic dermatitis	DX	ICD-10-CM
E11.621	Type 2 diabetes mellitus with foot ulcer	DX	ICD-10-CM
E11.622	Type 2 diabetes mellitus with other skin ulcer	DX	ICD-10-CM
E11.628	Type 2 diabetes mellitus with other skin complications	DX	ICD-10-CM
E11.630	Type 2 diabetes mellitus with periodontal disease	DX	ICD-10-CM
E11.638	Type 2 diabetes mellitus with other oral complications	DX	ICD-10-CM
E11.649	Type 2 diabetes mellitus with hypoglycemia without coma	DX	ICD-10-CM
E10.618	Type 1 diabetes mellitus with other diabetic arthropathy	DX	ICD-10-CM
E10.620	Type 1 diabetes mellitus with diabetic dermatitis	DX	ICD-10-CM
E10.621	Type 1 diabetes mellitus with foot ulcer	DX	ICD-10-CM
E10.622	Type 1 diabetes mellitus with other skin ulcer	DX	ICD-10-CM
E10.628	Type 1 diabetes mellitus with other skin complications	DX	ICD-10-CM
E10.630	Type 1 diabetes mellitus with periodontal disease	DX	ICD-10-CM
E10.638	Type 1 diabetes mellitus with other oral complications	DX	ICD-10-CM
E10.649	Type 1 diabetes mellitus with hypoglycemia without coma	DX	ICD-10-CM
E11.8	Type 2 diabetes mellitus with unspecified complications	DX	ICD-10-CM
E10.8	Type 1 diabetes mellitus with unspecified complications	DX	ICD-10-CM
E13.9	Other specified diabetes mellitus without complications	DX	ICD-10-CM
E13.00	Other specified diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	DX	ICD-10-CM
E13.01	Other specified diabetes mellitus with hyperosmolarity with coma	DX	ICD-10-CM
E13.11	Other specified diabetes mellitus with ketoacidosis with coma	DX	ICD-10-CM
E13.641	Other specified diabetes mellitus with hypoglycemia with coma	DX	ICD-10-CM
E13.21	Other specified diabetes mellitus with diabetic nephropathy	DX	ICD-10-CM
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease	DX	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	DX	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	DX	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	DX	ICD-10-CM
E11.3211	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	DX	ICD-10-CM
E11.3212	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
E11.3213	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	DX	ICD-10-CM
E11.3219	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	DX	ICD-10-CM
E11.3291	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	DX	ICD-10-CM
E11.3292	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	DX	ICD-10-CM
E11.3293	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	DX	ICD-10-CM
E11.3299	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	DX	ICD-10-CM
E11.3311	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	DX	ICD-10-CM
E11.3312	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	DX	ICD-10-CM
E11.3313	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	DX	ICD-10-CM
E11.3319	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	DX	ICD-10-CM
E11.3391	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	DX	ICD-10-CM
E11.3392	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	DX	ICD-10-CM
E11.3393	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	DX	ICD-10-CM
E11.3399	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	DX	ICD-10-CM
E11.3411	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	DX	ICD-10-CM
E11.3412	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	DX	ICD-10-CM
E11.3413	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	DX	ICD-10-CM
E11.3419	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	DX	ICD-10-CM
E11.3491	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	DX	ICD-10-CM
E11.3492	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	DX	ICD-10-CM
E11.3493	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
E11.3499	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	DX	ICD-10-CM
E11.3511	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right	DX	ICD-10-CM
E11.3512	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	DX	ICD-10-CM
E11.3513	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	DX	ICD-10-CM
E11.3519	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	DX	ICD-10-CM
E11.3521	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	DX	ICD-10-CM
E11.3522	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	DX	ICD-10-CM
E11.3523	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	DX	ICD-10-CM
E11.3529	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	DX	ICD-10-CM
E11.3531	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	DX	ICD-10-CM
E11.3532	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	DX	ICD-10-CM
E11.3533	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	DX	ICD-10-CM
E11.3539	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	DX	ICD-10-CM
E11.3541	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	DX	ICD-10-CM
E11.3542	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	DX	ICD-10-CM
E11.3543	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	DX	ICD-10-CM
E11.3549	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	DX	ICD-10-CM
E11.3551	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	DX	ICD-10-CM
E11.3552	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	DX	ICD-10-CM
E11.3553	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	DX	ICD-10-CM
E11.3559	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	DX	ICD-10-CM
E11.3591	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	DX	ICD-10-CM
E11.3592	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	DX	ICD-10-CM
E11.3593	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	DX	ICD-10-CM
E11.3599	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
E13.3211	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	DX	ICD-10-CM
E13.3212	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	DX	ICD-10-CM
E13.3213	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	DX	ICD-10-CM
E13.3219	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	DX	ICD-10-CM
E13.3291	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	DX	ICD-10-CM
E13.3292	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	DX	ICD-10-CM
E13.3293	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	DX	ICD-10-CM
E13.3299	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	DX	ICD-10-CM
E13.3311	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	DX	ICD-10-CM
E13.3312	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	DX	ICD-10-CM
E13.3313	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	DX	ICD-10-CM
E13.3319	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	DX	ICD-10-CM
E13.3391	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	DX	ICD-10-CM
E13.3392	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	DX	ICD-10-CM
E13.3393	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	DX	ICD-10-CM
E13.3399	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	DX	ICD-10-CM
E13.3411	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	DX	ICD-10-CM
E13.3412	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	DX	ICD-10-CM
E13.3413	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	DX	ICD-10-CM
E13.3419	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	DX	ICD-10-CM
E13.3491	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
E13.3492	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	DX	ICD-10-CM
E13.3493	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	DX	ICD-10-CM
E13.3499	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	DX	ICD-10-CM
E13.3511	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	DX	ICD-10-CM
E13.3512	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	DX	ICD-10-CM
E13.3513	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	DX	ICD-10-CM
E13.3519	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	DX	ICD-10-CM
E13.3521	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	DX	ICD-10-CM
E13.3522	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	DX	ICD-10-CM
E13.3523	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	DX	ICD-10-CM
E13.3529	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	DX	ICD-10-CM
E13.3531	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	DX	ICD-10-CM
E13.3532	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	DX	ICD-10-CM
E13.3533	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	DX	ICD-10-CM
E13.3539	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	DX	ICD-10-CM
E13.3541	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	DX	ICD-10-CM
E13.3542	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	DX	ICD-10-CM
E13.3543	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	DX	ICD-10-CM
E13.3549	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	DX	ICD-10-CM
E13.3551	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, right eye	DX	ICD-10-CM
E13.3552	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, left eye	DX	ICD-10-CM
E13.3553	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	DX	ICD-10-CM
E13.3559	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, unspecified	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
E13.3591	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	DX	ICD-10-CM
E13.3592	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	DX	ICD-10-CM
E13.3593	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	DX	ICD-10-CM
E13.3599	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	DX	ICD-10-CM
E13.311	Other specified diabetes mellitus with unspecified diabetic retinopathy with macular edema	DX	ICD-10-CM
E13.319	Other specified diabetes mellitus with unspecified diabetic retinopathy without macular edema	DX	ICD-10-CM
E13.36	Other specified diabetes mellitus with diabetic cataract	DX	ICD-10-CM
E13.37X1	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	DX	ICD-10-CM
E13.37X2	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	DX	ICD-10-CM
E13.37X3	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	DX	ICD-10-CM
E13.37X9	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	DX	ICD-10-CM
E13.39	Other specified diabetes mellitus with other diabetic ophthalmic complication	DX	ICD-10-CM
E11.37X1	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	DX	ICD-10-CM
E11.37X2	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	DX	ICD-10-CM
E11.37X3	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	DX	ICD-10-CM
E11.37X9	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	DX	ICD-10-CM
E10.3211	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	DX	ICD-10-CM
E10.3212	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	DX	ICD-10-CM
E10.3213	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	DX	ICD-10-CM
E10.3219	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	DX	ICD-10-CM
E10.3291	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	DX	ICD-10-CM
E10.3292	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	DX	ICD-10-CM
E10.3293	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	DX	ICD-10-CM
E10.3299	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
E10.3311	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	DX	ICD-10-CM
E10.3312	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	DX	ICD-10-CM
E10.3313	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	DX	ICD-10-CM
E10.3319	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	DX	ICD-10-CM
E10.3391	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	DX	ICD-10-CM
E10.3392	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	DX	ICD-10-CM
E10.3393	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	DX	ICD-10-CM
E10.3399	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	DX	ICD-10-CM
E10.3411	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	DX	ICD-10-CM
E10.3412	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	DX	ICD-10-CM
E10.3413	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	DX	ICD-10-CM
E10.3419	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	DX	ICD-10-CM
E10.3491	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	DX	ICD-10-CM
E10.3492	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	DX	ICD-10-CM
E10.3493	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	DX	ICD-10-CM
E10.3499	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	DX	ICD-10-CM
E10.3511	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	DX	ICD-10-CM
E10.3512	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	DX	ICD-10-CM
E10.3513	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	DX	ICD-10-CM
E10.3519	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	DX	ICD-10-CM
E10.3521	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	DX	ICD-10-CM
E10.3522	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	DX	ICD-10-CM
E10.3523	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
E10.3529	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	DX	ICD-10-CM
E10.3531	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	DX	ICD-10-CM
E10.3532	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	DX	ICD-10-CM
E10.3533	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	DX	ICD-10-CM
E10.3539	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	DX	ICD-10-CM
E10.3541	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	DX	ICD-10-CM
E10.3542	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	DX	ICD-10-CM
E10.3543	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	DX	ICD-10-CM
E10.3549	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	DX	ICD-10-CM
E10.3551	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	DX	ICD-10-CM
E10.3552	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	DX	ICD-10-CM
E10.3553	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	DX	ICD-10-CM
E10.3559	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	DX	ICD-10-CM
E10.3591	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	DX	ICD-10-CM
E10.3592	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	DX	ICD-10-CM
E10.3593	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	DX	ICD-10-CM
E10.3599	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	DX	ICD-10-CM
E13.40	Other specified diabetes mellitus with diabetic neuropathy, unspecified	DX	ICD-10-CM
E13.41	Other specified diabetes mellitus with diabetic mononeuropathy	DX	ICD-10-CM
E13.42	Other specified diabetes mellitus with diabetic polyneuropathy	DX	ICD-10-CM
E13.43	Other specified diabetes mellitus with diabetic autonomic (poly)neuropathy	DX	ICD-10-CM
E13.44	Other specified diabetes mellitus with diabetic amyotrophy	DX	ICD-10-CM
E13.49	Other specified diabetes mellitus with other diabetic neurological complication	DX	ICD-10-CM
E13.610	Other specified diabetes mellitus with diabetic neuropathic arthropathy	DX	ICD-10-CM
E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy	DX	ICD-10-CM
E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy	DX	ICD-10-CM
E11.43	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy	DX	ICD-10-CM
E11.44	Type 2 diabetes mellitus with diabetic amyotrophy	DX	ICD-10-CM
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication	DX	ICD-10-CM
E11.610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
E10.41	Type 1 diabetes mellitus with diabetic mononeuropathy	DX	ICD-10-CM
E10.42	Type 1 diabetes mellitus with diabetic polyneuropathy	DX	ICD-10-CM
E10.43	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy	DX	ICD-10-CM
E10.44	Type 1 diabetes mellitus with diabetic amyotrophy	DX	ICD-10-CM
E10.49	Type 1 diabetes mellitus with other diabetic neurological complication	DX	ICD-10-CM
E10.610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy	DX	ICD-10-CM
E13.51	Other specified diabetes mellitus with diabetic peripheral angiopathy without gangrene	DX	ICD-10-CM
E13.52	Other specified diabetes mellitus with diabetic peripheral angiopathy with gangrene	DX	ICD-10-CM
E13.59	Other specified diabetes mellitus with other circulatory complications	DX	ICD-10-CM
E11.52	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	DX	ICD-10-CM
E11.59	Type 2 diabetes mellitus with other circulatory complications	DX	ICD-10-CM
E10.52	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene	DX	ICD-10-CM
E10.59	Type 1 diabetes mellitus with other circulatory complications	DX	ICD-10-CM
E13.618	Other specified diabetes mellitus with other diabetic arthropathy	DX	ICD-10-CM
E13.620	Other specified diabetes mellitus with diabetic dermatitis	DX	ICD-10-CM
E13.621	Other specified diabetes mellitus with foot ulcer	DX	ICD-10-CM
E13.622	Other specified diabetes mellitus with other skin ulcer	DX	ICD-10-CM
E13.628	Other specified diabetes mellitus with other skin complications	DX	ICD-10-CM
E13.630	Other specified diabetes mellitus with periodontal disease	DX	ICD-10-CM
E13.638	Other specified diabetes mellitus with other oral complications	DX	ICD-10-CM
E13.649	Other specified diabetes mellitus with hypoglycemia without coma	DX	ICD-10-CM
E13.65	Other specified diabetes mellitus with hyperglycemia	DX	ICD-10-CM
E13.69	Other specified diabetes mellitus with other specified complication	DX	ICD-10-CM
E13.8	Other specified diabetes mellitus with unspecified complications	DX	ICD-10-CM
E11.10	Type 2 diabetes mellitus with ketoacidosis without coma	DX	ICD-10-CM
E11.11	Type 2 diabetes mellitus with ketoacidosis with coma	DX	ICD-10-CM
Hypercholesterolemia			
272.0	Pure hypercholesterolemia	DX	ICD-9-CM
272.2	Mixed hyperlipidemia	DX	ICD-9-CM
E78.00	Pure hypercholesterolemia, unspecified	DX	ICD-10-CM
E78.01	Familial hypercholesterolemia	DX	ICD-10-CM
E78.2	Mixed hyperlipidemia	DX	ICD-10-CM
Hypertension			
401	Essential hypertension	DX	ICD-9-CM
401.0	Essential hypertension, malignant	DX	ICD-9-CM
401.1	Essential hypertension, benign	DX	ICD-9-CM
401.9	Unspecified essential hypertension	DX	ICD-9-CM
402	Hypertensive heart disease	DX	ICD-9-CM
402.0	Malignant hypertensive heart disease	DX	ICD-9-CM
402.00	Malignant hypertensive heart disease without heart failure	DX	ICD-9-CM
402.01	Malignant hypertensive heart disease with heart failure	DX	ICD-9-CM
402.1	Benign hypertensive heart disease	DX	ICD-9-CM
402.10	Benign hypertensive heart disease without heart failure	DX	ICD-9-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
402.11	Benign hypertensive heart disease with heart failure	DX	ICD-9-CM
402.9	Unspecified hypertensive heart disease	DX	ICD-9-CM
402.90	Unspecified hypertensive heart disease without heart failure	DX	ICD-9-CM
402.91	Hypertensive heart disease, unspecified, with heart failure	DX	ICD-9-CM
403	Hypertensive chronic kidney disease	DX	ICD-9-CM
403.0	Hypertensive chronic kidney disease, malignant	DX	ICD-9-CM
403.00	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-9-CM
403.01	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage V or end stage renal disease	DX	ICD-9-CM
403.1	Hypertensive chronic kidney disease, benign	DX	ICD-9-CM
403.10	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-9-CM
403.11	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage V or end stage renal disease	DX	ICD-9-CM
403.9	Hypertensive chronic kidney disease, unspecified	DX	ICD-9-CM
403.90	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-9-CM
403.91	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage V or end stage renal disease	DX	ICD-9-CM
404	Hypertensive heart and chronic kidney disease	DX	ICD-9-CM
404.0	Hypertensive heart and chronic kidney disease, malignant	DX	ICD-9-CM
404.00	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-9-CM
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-9-CM
404.02	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease	DX	ICD-9-CM
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	DX	ICD-9-CM
404.1	Hypertensive heart and chronic kidney disease, benign	DX	ICD-9-CM
404.10	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-9-CM
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-9-CM
404.12	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage V or end stage renal disease	DX	ICD-9-CM
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	DX	ICD-9-CM
404.9	Hypertensive heart and chronic kidney disease, unspecified	DX	ICD-9-CM
404.90	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-9-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-9-CM
404.92	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease	DX	ICD-9-CM
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	DX	ICD-9-CM
405	Secondary hypertension	DX	ICD-9-CM
405.0	Secondary hypertension, malignant	DX	ICD-9-CM
405.01	Secondary renovascular hypertension, malignant	DX	ICD-9-CM
405.09	Other secondary hypertension, malignant	DX	ICD-9-CM
405.1	Secondary hypertension, benign	DX	ICD-9-CM
405.11	Secondary renovascular hypertension, benign	DX	ICD-9-CM
405.19	Other secondary hypertension, benign	DX	ICD-9-CM
405.9	Unspecified secondary hypertension, unspecified	DX	ICD-9-CM
405.91	Secondary renovascular hypertension, unspecified	DX	ICD-9-CM
405.99	Other secondary hypertension, unspecified	DX	ICD-9-CM
997.91	Hypertension	DX	ICD-9-CM
I10	Essential (primary) hypertension	DX	ICD-10-CM
I11.0	Hypertensive heart disease with heart failure	DX	ICD-10-CM
I11.9	Hypertensive heart disease without heart failure	DX	ICD-10-CM
I12.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease	DX	ICD-10-CM
I12.9	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	DX	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	DX	ICD-10-CM
I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	DX	ICD-10-CM
I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	DX	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	DX	ICD-10-CM
I15.0	Renovascular hypertension	DX	ICD-10-CM
I15.1	Hypertension secondary to other renal disorders	DX	ICD-10-CM
I15.2	Hypertension secondary to endocrine disorders	DX	ICD-10-CM
I15.8	Other secondary hypertension	DX	ICD-10-CM
I15.9	Secondary hypertension, unspecified	DX	ICD-10-CM
I16.0	Hypertensive urgency	DX	ICD-10-CM
I16.1	Hypertensive emergency	DX	ICD-10-CM
I16.9	Hypertensive crisis, unspecified	DX	ICD-10-CM
I97.3	Postprocedural hypertension	DX	ICD-10-CM
N26.2	Acute kidney	DX	ICD-10-CM
Kidney failure - Chronic			

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
585	Chronic kidney disease (CKD)	DX	ICD-9-CM
585.1	Chronic kidney disease, Stage I	DX	ICD-9-CM
585.2	Chronic kidney disease, Stage II (mild)	DX	ICD-9-CM
585.3	Chronic kidney disease, Stage III (moderate)	DX	ICD-9-CM
585.4	Chronic kidney disease, Stage IV (severe)	DX	ICD-9-CM
585.5	Chronic kidney disease, Stage V	DX	ICD-9-CM
585.6	End stage renal disease	DX	ICD-9-CM
585.9	Chronic kidney disease, unspecified	DX	ICD-9-CM
586	Unspecified renal failure	DX	ICD-9-CM
587	Unspecified renal sclerosis	DX	ICD-9-CM
N18.1	Chronic kidney disease, stage 1	DX	ICD-10-CM
N18.2	Chronic kidney disease, stage 2 (mild)	DX	ICD-10-CM
N18.3	Chronic kidney disease, stage 3 (moderate)	DX	ICD-10-CM
N18.4	Chronic kidney disease, stage 4 (severe)	DX	ICD-10-CM
N18.5	Chronic kidney disease, stage 5	DX	ICD-10-CM
N18.6	End stage renal disease	DX	ICD-10-CM
N18.9	Chronic kidney disease, unspecified	DX	ICD-10-CM
N19	Unspecified kidney failure	DX	ICD-10-CM
N26.1	Atrophy of kidney (terminal)	DX	ICD-10-CM
N26.9	Renal sclerosis, unspecified	DX	ICD-10-CM
Kidney failure - Acute			
584	Acute kidney failure	DX	ICD-9-CM
584.5	Acute kidney failure with lesion of tubular necrosis	DX	ICD-9-CM
584.6	Acute kidney failure with lesion of renal cortical necrosis	DX	ICD-9-CM
584.7	Acute kidney failure with lesion of medullary [papillary] necrosis	DX	ICD-9-CM
584.8	Acute kidney failure with other specified pathological lesion in kidney	DX	ICD-9-CM
584.9	Acute kidney failure, unspecified	DX	ICD-9-CM
N17.0	Acute kidney failure with tubular necrosis	DX	ICD-10-CM
N17.1	Acute kidney failure with acute cortical necrosis	DX	ICD-10-CM
N17.2	Acute kidney failure with medullary necrosis	DX	ICD-10-CM
N17.8	Other acute kidney failure	DX	ICD-10-CM
N17.9	Acute kidney failure, unspecified	DX	ICD-10-CM
Obesity			
278.0	Overweight and obesity	DX	ICD-9-CM
278.00	Obesity, unspecified	DX	ICD-9-CM
278.01	Morbid obesity	DX	ICD-9-CM
278.02	Overweight	DX	ICD-9-CM
278.1	Localized adiposity	DX	ICD-9-CM
V4586	Bariatric surgery status	DX	ICD-9-CM
V853	Body Mass Index between 30-39, adult	DX	ICD-9-CM
V8530	Body Mass Index 30.0-30.9, adult	DX	ICD-9-CM
V8531	Body Mass Index 31.0-31.9, adult	DX	ICD-9-CM
V8532	Body Mass Index 32.0-32.9, adult	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
V8533	Body Mass Index 33.0-33.9, adult	DX	ICD-9-CM
V8534	Body Mass Index 34.0-34.9, adult	DX	ICD-9-CM
V8535	Body Mass Index 35.0-35.9, adult	DX	ICD-9-CM
V8536	Body Mass Index 36.0-36.9, adult	DX	ICD-9-CM
V8537	Body Mass Index 37.0-37.9, adult	DX	ICD-9-CM
V8538	Body Mass Index 38.0-38.9, adult	DX	ICD-9-CM
V8539	Body Mass Index 39.0-39.9, adult	DX	ICD-9-CM
V854	Body Mass Index 40 and over, adult	DX	ICD-9-CM
44.31	High gastric bypass	PX	ICD-9-CM
44.68	Laparoscopic gastroplasty	PX	ICD-9-CM
44.95	Laparoscopic gastric restrictive procedure	PX	ICD-9-CM
E65	Localized adiposity	DX	ICD-10-CM
E66.01	Morbid (severe) obesity due to excess calories	DX	ICD-10-CM
E66.09	Other obesity due to excess calories	DX	ICD-10-CM
E66.1	Drug-induced obesity	DX	ICD-10-CM
E66.3	Overweight	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
E66.8	Other obesity	DX	ICD-10-CM
E66.9	Obesity, unspecified	DX	ICD-10-CM
Z68.30	Body mass index (BMI) 30.0-30.9, adult	DX	ICD-10-CM
Z68.31	Body mass index (BMI) 31.0-31.9, adult	DX	ICD-10-CM
Z68.32	Body mass index (BMI) 32.0-32.9, adult	DX	ICD-10-CM
Z68.33	Body mass index (BMI) 33.0-33.9, adult	DX	ICD-10-CM
Z68.34	Body mass index (BMI) 34.0-34.9, adult	DX	ICD-10-CM
Z68.35	Body mass index (BMI) 35.0-35.9, adult	DX	ICD-10-CM
Z68.36	Body mass index (BMI) 36.0-36.9, adult	DX	ICD-10-CM
Z68.37	Body mass index (BMI) 37.0-37.9, adult	DX	ICD-10-CM
Z68.38	Body mass index (BMI) 38.0-38.9, adult	DX	ICD-10-CM
Z68.39	Body mass index (BMI) 39.0-39.9, adult	DX	ICD-10-CM
Z98.84	Bariatric surgery status	DX	ICD-10-CM
0D1607A	Bypass Stomach to Jejunum with Autologous Tissue Substitute, Open Approach	PX	ICD-10-CM
0D160JA	Bypass Stomach to Jejunum with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0D160KA	Bypass Stomach to Jejunum with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
0D160ZA	Bypass Stomach to Jejunum, Open Approach	PX	ICD-10-CM
0D1687A	Bypass Stomach to Jejunum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	PX	ICD-10-CM
0D168JA	Bypass Stomach to Jejunum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	PX	ICD-10-CM
0D168KA	Bypass Stomach to Jejunum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	PX	ICD-10-CM
0D168ZA	Bypass Stomach to Jejunum, Via Natural or Artificial Opening Endoscopic	PX	ICD-10-CM
0DQ64ZZ	Repair Stomach, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0DV64CZ	Restriction of Stomach with Extraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
Peptic ulcer disease			
531.0	Acute gastric ulcer with hemorrhage	DX	ICD-9-CM
531.00	Acute gastric ulcer with hemorrhage, without mention of obstruction	DX	ICD-9-CM
531.01	Acute gastric ulcer with hemorrhage and obstruction	DX	ICD-9-CM
531.1	Acute gastric ulcer with perforation	DX	ICD-9-CM
531.10	Acute gastric ulcer with perforation, without mention of obstruction	DX	ICD-9-CM
531.11	Acute gastric ulcer with perforation and obstruction	DX	ICD-9-CM
531.2	Acute gastric ulcer with hemorrhage and perforation	DX	ICD-9-CM
531.20	Acute gastric ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
531.21	Acute gastric ulcer with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
531.3	Acute gastric ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
531.30	Acute gastric ulcer without mention of hemorrhage, perforation, or obstruction	DX	ICD-9-CM
531.31	Acute gastric ulcer without mention of hemorrhage or perforation, with obstruction	DX	ICD-9-CM
531.4	Chronic or unspecified gastric ulcer with hemorrhage	DX	ICD-9-CM
531.40	Chronic or unspecified gastric ulcer with hemorrhage, without mention of obstruction	DX	ICD-9-CM
531.41	Chronic or unspecified gastric ulcer with hemorrhage and obstruction	DX	ICD-9-CM
531.5	Chronic or unspecified gastric ulcer with perforation	DX	ICD-9-CM

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Code	Description	Code Type	Code Category
531.50	Chronic or unspecified gastric ulcer with perforation, without mention of obstruction	DX	ICD-9-CM
531.51	Chronic or unspecified gastric ulcer with perforation and obstruction	DX	ICD-9-CM
531.6	Chronic or unspecified gastric ulcer with hemorrhage and perforation	DX	ICD-9-CM
531.60	Chronic or unspecified gastric ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
531.61	Chronic or unspecified gastric ulcer with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
531.7	Chronic gastric ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
531.70	Chronic gastric ulcer without mention of hemorrhage, perforation, without mention of obstruction	DX	ICD-9-CM
531.71	Chronic gastric ulcer without mention of hemorrhage or perforation, with obstruction	DX	ICD-9-CM
532.0	Acute duodenal ulcer with hemorrhage	DX	ICD-9-CM
532.00	Acute duodenal ulcer with hemorrhage, without mention of obstruction	DX	ICD-9-CM
532.01	Acute duodenal ulcer with hemorrhage and obstruction	DX	ICD-9-CM
532.1	Acute duodenal ulcer with perforation	DX	ICD-9-CM
532.10	Acute duodenal ulcer with perforation, without mention of obstruction	DX	ICD-9-CM
532.11	Acute duodenal ulcer with perforation and obstruction	DX	ICD-9-CM
532.2	Acute duodenal ulcer with hemorrhage and perforation	DX	ICD-9-CM
532.20	Acute duodenal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
532.21	Acute duodenal ulcer with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
532.3	Acute duodenal ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
532.30	Acute duodenal ulcer without mention of hemorrhage, perforation, or obstruction	DX	ICD-9-CM
532.31	Acute duodenal ulcer without mention of hemorrhage or perforation, with obstruction	DX	ICD-9-CM
532.4	Chronic or unspecified duodenal ulcer with hemorrhage	DX	ICD-9-CM
532.40	Duodenal ulcer, chronic or unspecified, with hemorrhage, without mention of obstruction	DX	ICD-9-CM
532.41	Chronic or unspecified duodenal ulcer with hemorrhage and obstruction	DX	ICD-9-CM
532.5	Chronic or unspecified duodenal ulcer with perforation	DX	ICD-9-CM
532.50	Chronic or unspecified duodenal ulcer with perforation, without mention of obstruction	DX	ICD-9-CM
532.51	Chronic or unspecified duodenal ulcer with perforation and obstruction	DX	ICD-9-CM
532.6	Chronic or unspecified duodenal ulcer with hemorrhage and perforation	DX	ICD-9-CM
532.60	Chronic or unspecified duodenal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
532.61	Chronic or unspecified duodenal ulcer with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
532.7	Chronic duodenal ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
532.70	Chronic duodenal ulcer without mention of hemorrhage, perforation, or obstruction	DX	ICD-9-CM
532.71	Chronic duodenal ulcer without mention of hemorrhage or perforation, with obstruction	DX	ICD-9-CM
533.0	Acute peptic ulcer, unspecified site, with hemorrhage	DX	ICD-9-CM
533.00	Acute peptic ulcer, unspecified site, with hemorrhage, without mention of obstruction	DX	ICD-9-CM
533.01	Acute peptic ulcer, unspecified site, with hemorrhage and obstruction	DX	ICD-9-CM
533.1	Acute peptic ulcer, unspecified site, with perforation	DX	ICD-9-CM
533.10	Acute peptic ulcer, unspecified site, with perforation, without mention of obstruction	DX	ICD-9-CM
533.11	Acute peptic ulcer, unspecified site, with perforation and obstruction	DX	ICD-9-CM
533.2	Acute peptic ulcer, unspecified site, with hemorrhage and perforation	DX	ICD-9-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
533.20	Acute peptic ulcer, unspecified site, with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
533.21	Acute peptic ulcer, unspecified site, with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
533.3	Acute peptic ulcer, unspecified site, without mention of hemorrhage and perforation	DX	ICD-9-CM
533.30	Acute peptic ulcer, unspecified site, without mention of hemorrhage, perforation, or obstruction	DX	ICD-9-CM
533.31	Acute peptic ulcer, unspecified site, without mention of hemorrhage and perforation, with obstruction	DX	ICD-9-CM
533.4	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage	DX	ICD-9-CM
533.40	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage, without mention of obstruction	DX	ICD-9-CM
533.41	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage and obstruction	DX	ICD-9-CM
533.5	Chronic or unspecified peptic ulcer, unspecified site, with perforation	DX	ICD-9-CM
533.50	Chronic or unspecified peptic ulcer, unspecified site, with perforation, without mention of obstruction	DX	ICD-9-CM
533.51	Chronic or unspecified peptic ulcer, unspecified site, with perforation and obstruction	DX	ICD-9-CM
533.6	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage and perforation	DX	ICD-9-CM
533.60	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
533.61	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
533.7	Chronic peptic ulcer, unspecified site, without mention of hemorrhage or perforation	DX	ICD-9-CM
533.70	Chronic peptic ulcer, unspecified site, without mention of hemorrhage, perforation, or obstruction	DX	ICD-9-CM
533.71	Chronic peptic ulcer of unspecified site without mention of hemorrhage or perforation, with obstruction	DX	ICD-9-CM
534.0	Acute gastrojejunal ulcer with hemorrhage	DX	ICD-9-CM
534.00	Acute gastrojejunal ulcer with hemorrhage, without mention of obstruction	DX	ICD-9-CM
534.01	Acute gastrojejunal ulcer, with hemorrhage and obstruction	DX	ICD-9-CM
534.1	Acute gastrojejunal ulcer with perforation	DX	ICD-9-CM
534.10	Acute gastrojejunal ulcer with perforation, without mention of obstruction	DX	ICD-9-CM
534.11	Acute gastrojejunal ulcer with perforation and obstruction	DX	ICD-9-CM
534.2	Acute gastrojejunal ulcer with hemorrhage and perforation	DX	ICD-9-CM
534.20	Acute gastrojejunal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
534.21	Acute gastrojejunal ulcer with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
534.3	Acute gastrojejunal ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
534.30	Acute gastrojejunal ulcer without mention of hemorrhage, perforation, or obstruction	DX	ICD-9-CM
534.31	Acute gastrojejunal ulcer without mention of hemorrhage or perforation, with obstruction	DX	ICD-9-CM
534.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage	DX	ICD-9-CM
534.40	Chronic or unspecified gastrojejunal ulcer with hemorrhage, without mention of obstruction	DX	ICD-9-CM
534.41	Chronic or unspecified gastrojejunal ulcer, with hemorrhage and obstruction	DX	ICD-9-CM
534.5	Chronic or unspecified gastrojejunal ulcer with perforation	DX	ICD-9-CM
534.50	Chronic or unspecified gastrojejunal ulcer with perforation, without mention of obstruction	DX	ICD-9-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
534.51	Chronic or unspecified gastrojejunal ulcer with perforation and obstruction	DX	ICD-9-CM
534.6	Chronic or unspecified gastrojejunal ulcer with hemorrhage and perforation	DX	ICD-9-CM
534.60	Chronic or unspecified gastrojejunal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-9-CM
534.61	Chronic or unspecified gastrojejunal ulcer with hemorrhage, perforation, and obstruction	DX	ICD-9-CM
534.7	Chronic gastrojejunal ulcer without mention of hemorrhage or perforation	DX	ICD-9-CM
534.70	Chronic gastrojejunal ulcer without mention of hemorrhage, perforation, or obstruction	DX	ICD-9-CM
534.71	Chronic gastrojejunal ulcer without mention of hemorrhage or perforation, with obstruction	DX	ICD-9-CM
44.4	Control of hemorrhage and suture of ulcer of stomach or duodenum	PX	ICD-9-CM
44.40	Suture of peptic ulcer, not otherwise specified	PX	ICD-9-CM
44.41	Suture of gastric ulcer site	PX	ICD-9-CM
44.42	Suture of duodenal ulcer site	PX	ICD-9-CM
K25.0	Acute gastric ulcer with hemorrhage	DX	ICD-10-CM
K25.1	Acute gastric ulcer with perforation	DX	ICD-10-CM
K25.2	Acute gastric ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K25.3	Acute gastric ulcer without hemorrhage or perforation	DX	ICD-10-CM
K25.4	Chronic or unspecified gastric ulcer with hemorrhage	DX	ICD-10-CM
K25.5	Chronic or unspecified gastric ulcer with perforation	DX	ICD-10-CM
K25.6	Chronic or unspecified gastric ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K25.7	Chronic gastric ulcer without hemorrhage or perforation	DX	ICD-10-CM
K26.0	Acute duodenal ulcer with hemorrhage	DX	ICD-10-CM
K26.1	Acute duodenal ulcer with perforation	DX	ICD-10-CM
K26.2	Acute duodenal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K26.3	Acute duodenal ulcer without hemorrhage or perforation	DX	ICD-10-CM
K26.4	Chronic or unspecified duodenal ulcer with hemorrhage	DX	ICD-10-CM
K26.5	Chronic or unspecified duodenal ulcer with perforation	DX	ICD-10-CM
K26.6	Chronic or unspecified duodenal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K26.7	Chronic duodenal ulcer without hemorrhage or perforation	DX	ICD-10-CM
K27.0	Acute peptic ulcer, site unspecified, with hemorrhage	DX	ICD-10-CM
K27.1	Acute peptic ulcer, site unspecified, with perforation	DX	ICD-10-CM
K27.2	Acute peptic ulcer, site unspecified, with both hemorrhage and perforation	DX	ICD-10-CM
K27.3	Acute peptic ulcer, site unspecified, without hemorrhage or perforation	DX	ICD-10-CM
K27.4	Chronic or unspecified peptic ulcer, site unspecified, with hemorrhage	DX	ICD-10-CM
K27.5	Chronic or unspecified peptic ulcer, site unspecified, with perforation	DX	ICD-10-CM
K27.6	Chronic or unspecified peptic ulcer, site unspecified, with both hemorrhage and perforation	DX	ICD-10-CM
K27.7	Chronic peptic ulcer, site unspecified, without hemorrhage or perforation	DX	ICD-10-CM
K28.0	Acute gastrojejunal ulcer with hemorrhage	DX	ICD-10-CM
K28.1	Acute gastrojejunal ulcer with perforation	DX	ICD-10-CM
K28.2	Acute gastrojejunal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K28.3	Acute gastrojejunal ulcer without hemorrhage or perforation	DX	ICD-10-CM
K28.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage	DX	ICD-10-CM
K28.5	Chronic or unspecified gastrojejunal ulcer with perforation	DX	ICD-10-CM
K28.6	Chronic or unspecified gastrojejunal ulcer with both hemorrhage and perforation	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
K28.7	Chronic gastrojejunal ulcer without hemorrhage or perforation	DX	ICD-10-CM
K56.699	Other intestinal obstruction unspecified as to partial versus complete obstruction	DX	ICD-10-CM
0DQ60ZZ	Repair Stomach, Open Approach	PX	ICD-10-CM
0DQ63ZZ	Repair Stomach, Percutaneous Approach	PX	ICD-10-CM
0DQ64ZZ	Repair Stomach, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0DQ67ZZ	Repair Stomach, Via Natural or Artificial Opening	PX	ICD-10-CM
0DQ68ZZ	Repair Stomach, Via Natural or Artificial Opening Endoscopic	PX	ICD-10-CM
0DQ90ZZ	Repair Duodenum, Open Approach	PX	ICD-10-CM
0DQ93ZZ	Repair Duodenum, Percutaneous Approach	PX	ICD-10-CM
0DQ94ZZ	Repair Duodenum, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0DQ97ZZ	Repair Duodenum, Via Natural or Artificial Opening	PX	ICD-10-CM
0DQ98ZZ	Repair Duodenum, Via Natural or Artificial Opening Endoscopic	PX	ICD-10-CM
Acute myocardial infarction			
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery	DX	ICD-10-CM
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery	DX	ICD-10-CM
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall	DX	ICD-10-CM
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery	DX	ICD-10-CM
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall	DX	ICD-10-CM
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery	DX	ICD-10-CM
I21.29	ST elevation (STEMI) myocardial infarction involving other sites	DX	ICD-10-CM
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site	DX	ICD-10-CM
I21.4	Non-ST elevation (NSTEMI) myocardial infarction	DX	ICD-10-CM
I21.9	Acute myocardial infarction, unspecified	DX	ICD-10-CM
I21.A1	Myocardial infarction type 2	DX	ICD-10-CM
I21.A9	Other myocardial infarction type	DX	ICD-10-CM
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall	DX	ICD-10-CM
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall	DX	ICD-10-CM
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction	DX	ICD-10-CM
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites	DX	ICD-10-CM
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site	DX	ICD-10-CM
410	Acute myocardial infarction	DX	ICD-9-CM
410.0	Acute myocardial infarction of anterolateral wall	DX	ICD-9-CM
410.00	Acute myocardial infarction of anterolateral wall, episode of care unspecified	DX	ICD-9-CM
410.01	Acute myocardial infarction of anterolateral wall, initial episode of care	DX	ICD-9-CM
410.02	Acute myocardial infarction of anterolateral wall, subsequent episode of care	DX	ICD-9-CM
410.1	Acute myocardial infarction of other anterior wall	DX	ICD-9-CM
410.10	Acute myocardial infarction of other anterior wall, episode of care unspecified	DX	ICD-9-CM
410.11	Acute myocardial infarction of other anterior wall, initial episode of care	DX	ICD-9-CM
410.12	Acute myocardial infarction of other anterior wall, subsequent episode of care	DX	ICD-9-CM
410.2	Acute myocardial infarction of inferolateral wall	DX	ICD-9-CM
410.20	Acute myocardial infarction of inferolateral wall, episode of care unspecified	DX	ICD-9-CM
410.21	Acute myocardial infarction of inferolateral wall, initial episode of care	DX	ICD-9-CM
410.22	Acute myocardial infarction of inferolateral wall, subsequent episode of care	DX	ICD-9-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
410.3	Acute myocardial infarction of inferoposterior wall	DX	ICD-9-CM
410.30	Acute myocardial infarction of inferoposterior wall, episode of care unspecified	DX	ICD-9-CM
410.31	Acute myocardial infarction of inferoposterior wall, initial episode of care	DX	ICD-9-CM
410.32	Acute myocardial infarction of inferoposterior wall, subsequent episode of care	DX	ICD-9-CM
410.4	Acute myocardial infarction of other inferior wall	DX	ICD-9-CM
410.40	Acute myocardial infarction of other inferior wall, episode of care unspecified	DX	ICD-9-CM
410.41	Acute myocardial infarction of other inferior wall, initial episode of care	DX	ICD-9-CM
410.42	Acute myocardial infarction of other inferior wall, subsequent episode of care	DX	ICD-9-CM
410.5	Acute myocardial infarction of other lateral wall	DX	ICD-9-CM
410.50	Acute myocardial infarction of other lateral wall, episode of care unspecified	DX	ICD-9-CM
410.51	Acute myocardial infarction of other lateral wall, initial episode of care	DX	ICD-9-CM
410.52	Acute myocardial infarction of other lateral wall, subsequent episode of care	DX	ICD-9-CM
410.6	Acute myocardial infarction, true posterior wall infarction	DX	ICD-9-CM
410.60	Acute myocardial infarction, true posterior wall infarction, episode of care unspecified	DX	ICD-9-CM
410.61	Acute myocardial infarction, true posterior wall infarction, initial episode of care	DX	ICD-9-CM
410.62	Acute myocardial infarction, true posterior wall infarction, subsequent episode of care	DX	ICD-9-CM
410.7	Acute myocardial infarction, subendocardial infarction	DX	ICD-9-CM
410.70	Acute myocardial infarction, subendocardial infarction, episode of care unspecified	DX	ICD-9-CM
410.71	Acute myocardial infarction, subendocardial infarction, initial episode of care	DX	ICD-9-CM
410.72	Acute myocardial infarction, subendocardial infarction, subsequent episode of care	DX	ICD-9-CM
410.8	Acute myocardial infarction of other specified sites	DX	ICD-9-CM
410.80	Acute myocardial infarction of other specified sites, episode of care unspecified	DX	ICD-9-CM
410.81	Acute myocardial infarction of other specified sites, initial episode of care	DX	ICD-9-CM
410.82	Acute myocardial infarction of other specified sites, subsequent episode of care	DX	ICD-9-CM
410.9	Acute myocardial infarction, unspecified site	DX	ICD-9-CM
410.90	Acute myocardial infarction, unspecified site, episode of care unspecified	DX	ICD-9-CM
410.91	Acute myocardial infarction, unspecified site, initial episode of care	DX	ICD-9-CM
410.92	Acute myocardial infarction, unspecified site, subsequent episode of care	DX	ICD-9-CM
410	Acute myocardial infarction	DX	ICD-9-CM
410.0	Acute myocardial infarction of anterolateral wall	DX	ICD-9-CM
410.00	Acute myocardial infarction of anterolateral wall, episode of care unspecified	DX	ICD-9-CM
410.01	Acute myocardial infarction of anterolateral wall, initial episode of care	DX	ICD-9-CM
410.02	Acute myocardial infarction of anterolateral wall, subsequent episode of care	DX	ICD-9-CM
410.1	Acute myocardial infarction of other anterior wall	DX	ICD-9-CM
410.10	Acute myocardial infarction of other anterior wall, episode of care unspecified	DX	ICD-9-CM
410.11	Acute myocardial infarction of other anterior wall, initial episode of care	DX	ICD-9-CM
410.12	Acute myocardial infarction of other anterior wall, subsequent episode of care	DX	ICD-9-CM
410.2	Acute myocardial infarction of inferolateral wall	DX	ICD-9-CM
410.20	Acute myocardial infarction of inferolateral wall, episode of care unspecified	DX	ICD-9-CM
410.21	Acute myocardial infarction of inferolateral wall, initial episode of care	DX	ICD-9-CM
410.22	Acute myocardial infarction of inferolateral wall, subsequent episode of care	DX	ICD-9-CM
410.3	Acute myocardial infarction of inferoposterior wall	DX	ICD-9-CM
410.30	Acute myocardial infarction of inferoposterior wall, episode of care unspecified	DX	ICD-9-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
410.31	Acute myocardial infarction of inferoposterior wall, initial episode of care	DX	ICD-9-CM
410.32	Acute myocardial infarction of inferoposterior wall, subsequent episode of care	DX	ICD-9-CM
410.4	Acute myocardial infarction of other inferior wall	DX	ICD-9-CM
410.40	Acute myocardial infarction of other inferior wall, episode of care unspecified	DX	ICD-9-CM
410.41	Acute myocardial infarction of other inferior wall, initial episode of care	DX	ICD-9-CM
410.42	Acute myocardial infarction of other inferior wall, subsequent episode of care	DX	ICD-9-CM
410.5	Acute myocardial infarction of other lateral wall	DX	ICD-9-CM
410.50	Acute myocardial infarction of other lateral wall, episode of care unspecified	DX	ICD-9-CM
410.51	Acute myocardial infarction of other lateral wall, initial episode of care	DX	ICD-9-CM
410.52	Acute myocardial infarction of other lateral wall, subsequent episode of care	DX	ICD-9-CM
410.6	Acute myocardial infarction, true posterior wall infarction	DX	ICD-9-CM
410.60	Acute myocardial infarction, true posterior wall infarction, episode of care unspecified	DX	ICD-9-CM
410.61	Acute myocardial infarction, true posterior wall infarction, initial episode of care	DX	ICD-9-CM
410.62	Acute myocardial infarction, true posterior wall infarction, subsequent episode of care	DX	ICD-9-CM
410.7	Acute myocardial infarction, subendocardial infarction	DX	ICD-9-CM
410.70	Acute myocardial infarction, subendocardial infarction, episode of care unspecified	DX	ICD-9-CM
410.71	Acute myocardial infarction, subendocardial infarction, initial episode of care	DX	ICD-9-CM
410.72	Acute myocardial infarction, subendocardial infarction, subsequent episode of care	DX	ICD-9-CM
410.8	Acute myocardial infarction of other specified sites	DX	ICD-9-CM
410.80	Acute myocardial infarction of other specified sites, episode of care unspecified	DX	ICD-9-CM
410.81	Acute myocardial infarction of other specified sites, initial episode of care	DX	ICD-9-CM
410.82	Acute myocardial infarction of other specified sites, subsequent episode of care	DX	ICD-9-CM
410.9	Acute myocardial infarction, unspecified site	DX	ICD-9-CM
410.90	Acute myocardial infarction, unspecified site, episode of care unspecified	DX	ICD-9-CM
410.91	Acute myocardial infarction, unspecified site, initial episode of care	DX	ICD-9-CM
410.92	Acute myocardial infarction, unspecified site, subsequent episode of care	DX	ICD-9-CM
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery	DX	ICD-10-CM
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery	DX	ICD-10-CM
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall	DX	ICD-10-CM
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery	DX	ICD-10-CM
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall	DX	ICD-10-CM
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery	DX	ICD-10-CM
I21.29	ST elevation (STEMI) myocardial infarction involving other sites	DX	ICD-10-CM
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site	DX	ICD-10-CM
I21.4	Non-ST elevation (NSTEMI) myocardial infarction	DX	ICD-10-CM
I21.9	Acute myocardial infarction, unspecified	DX	ICD-10-CM
I21.A1	Myocardial infarction type 2	DX	ICD-10-CM
I21.A9	Other myocardial infarction type	DX	ICD-10-CM
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall	DX	ICD-10-CM
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall	DX	ICD-10-CM
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction	DX	ICD-10-CM
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites	DX	ICD-10-CM
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
Coronary revascularization			
V4581	Postprocedural aortocoronary bypass status	DX	ICD-9-CM
V4582	Postprocedural percutaneous transluminal coronary angioplasty status	DX	ICD-9-CM
V4588	Status post administration of tPA (rtPA) in a different facility within the last 24 hours prior to admission to current facility	DX	ICD-9-CM
00.66	Percutaneous transluminal coronary angioplasty [PTCA] or coronary atherectomy	PX	ICD-9-CM
36.0	Removal of coronary artery obstruction and insertion of stent(s)	PX	ICD-9-CM
36.03	Open chest coronary artery angioplasty	PX	ICD-9-CM
36.04	Intracoronary artery thrombolytic infusion	PX	ICD-9-CM
36.06	Insertion of non-drug-eluting coronary artery stent(s)	PX	ICD-9-CM
36.07	Insertion of drug-eluting coronary artery stent(s)	PX	ICD-9-CM
36.09	Other removal of coronary artery obstruction	PX	ICD-9-CM
36.1	Bypass anastomosis for heart revascularization	PX	ICD-9-CM
36.10	Aortocoronary bypass for heart revascularization, not otherwise specified	PX	ICD-9-CM
36.11	(Aorto)coronary bypass of one coronary artery	PX	ICD-9-CM
36.12	(Aorto)coronary bypass of two coronary arteries	PX	ICD-9-CM
36.13	(Aorto)coronary bypass of three coronary arteries	PX	ICD-9-CM
36.14	(Aorto)coronary bypass of four or more coronary arteries	PX	ICD-9-CM
36.15	Single internal mammary-coronary artery bypass	PX	ICD-9-CM
36.16	Double internal mammary-coronary artery bypass	PX	ICD-9-CM
36.17	Abdominal-coronary artery bypass	PX	ICD-9-CM
36.19	Other bypass anastomosis for heart revascularization	PX	ICD-9-CM
36.2	Heart revascularization by arterial implant	PX	ICD-9-CM
36.3	Other heart revascularization	PX	ICD-9-CM
36.31	Open chest transmyocardial revascularization	PX	ICD-9-CM
36.32	Other transmyocardial revascularization	PX	ICD-9-CM
36.33	Endoscopic transmyocardial revascularization	PX	ICD-9-CM
36.34	Percutaneous transmyocardial revascularization	PX	ICD-9-CM
36.39	Other heart revascularization	PX	ICD-9-CM
00566	Anesthesia for direct coronary artery bypass grafting; without pump oxygenator	PX	CPT-4
33508	Endoscopy, surgical, including video-assisted harvest of vein(s) for coronary artery bypass procedure (List separately in addition to code for primary procedure)	PX	CPT-4
33510	Coronary artery bypass, vein only; single coronary venous graft	PX	CPT-4
33511	Coronary artery bypass, vein only; 2 coronary venous grafts	PX	CPT-4
33512	Coronary artery bypass, vein only; 3 coronary venous grafts	PX	CPT-4
33513	Coronary artery bypass, vein only; 4 coronary venous grafts	PX	CPT-4
33514	Coronary artery bypass, vein only; 5 coronary venous grafts	PX	CPT-4
33516	Coronary artery bypass, vein only; 6 or more coronary venous grafts	PX	CPT-4
33517	Coronary artery bypass, using venous graft(s) and arterial graft(s); single vein graft (List separately in addition to code for primary procedure)	PX	CPT-4
33518	Coronary artery bypass, using venous graft(s) and arterial graft(s); 2 venous grafts (List separately in addition to code for primary procedure)	PX	CPT-4

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
33519	Coronary artery bypass, using venous graft(s) and arterial graft(s); 3 venous grafts (List separately in addition to code for primary procedure)	PX	CPT-4
33521	Coronary artery bypass, using venous graft(s) and arterial graft(s); 4 venous grafts (List separately in addition to code for primary procedure)	PX	CPT-4
33522	Coronary artery bypass, using venous graft(s) and arterial graft(s); 5 venous grafts (List separately in addition to code for primary procedure)	PX	CPT-4
33523	Coronary artery bypass, using venous graft(s) and arterial graft(s); 6 or more venous grafts (List separately in addition to code for primary procedure)	PX	CPT-4
33530	Reoperation, coronary artery bypass procedure or valve procedure, more than 1 month after original operation (List separately in addition to code for primary procedure)	PX	CPT-4
33533	Coronary artery bypass, using arterial graft(s); single arterial graft	PX	CPT-4
33534	Coronary artery bypass, using arterial graft(s); 2 coronary arterial grafts	PX	CPT-4
33535	Coronary artery bypass, using arterial graft(s); 3 coronary arterial grafts	PX	CPT-4
33536	Coronary artery bypass, using arterial graft(s); 4 or more coronary arterial grafts	PX	CPT-4
33572	Coronary endarterectomy, open, any method, of left anterior descending, circumflex, or right coronary artery performed in conjunction with coronary artery bypass graft procedure, each vessel (List separately in addition to primary procedure)	PX	CPT-4
35500	Harvest of upper extremity vein, 1 segment, for lower extremity or coronary artery bypass procedure (List separately in addition to code for primary procedure)	PX	CPT-4
92920	Percutaneous transluminal coronary angioplasty; single major coronary artery or branch	PX	CPT-4
92921	Percutaneous transluminal coronary angioplasty; each additional branch of a major coronary artery (List separately in addition to code for primary procedure)	PX	CPT-4
92924	Percutaneous transluminal coronary atherectomy, with coronary angioplasty when performed; single major coronary artery or branch	PX	CPT-4
92925	Percutaneous transluminal coronary atherectomy, with coronary angioplasty when performed; each additional branch of a major coronary artery (List separately in addition to code for primary procedure)	PX	CPT-4
92928	Percutaneous transcatheter placement of intracoronary stent(s), with coronary angioplasty when performed; single major coronary artery or branch	PX	CPT-4
92929	Percutaneous transcatheter placement of intracoronary stent(s), with coronary angioplasty when performed; each additional branch of a major coronary artery (List separately in addition to code for primary procedure)	PX	CPT-4
92933	Percutaneous transluminal coronary atherectomy, with intracoronary stent, with coronary angioplasty when performed; single major coronary artery or branch	PX	CPT-4
92934	Percutaneous transluminal coronary atherectomy, with intracoronary stent, with coronary angioplasty when performed; each additional branch of a major coronary artery (List separately in addition to code for primary procedure)	PX	CPT-4
92937	Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of intracoronary stent, atherectomy and angioplasty, including distal protection when performed; single vessel	PX	CPT-4

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
92938	Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of intracoronary stent, atherectomy and angioplasty, including distal protection when performed; each additional branch subtended by the bypass graft (List separately in addition to code for primary procedure)	PX	CPT-4
92941	Percutaneous transluminal revascularization of acute total/subtotal occlusion during acute myocardial infarction, coronary artery or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty, including aspiration thrombectomy when performed, single vessel	PX	CPT-4
92943	Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty; single vessel	PX	CPT-4
92944	Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty; each additional coronary artery, coronary artery branch, or bypass graft (List separately in addition to code for primary procedure)	PX	CPT-4
92973	Percutaneous transluminal coronary thrombectomy mechanical (List separately in addition to code for primary procedure)	PX	CPT-4
92975	Thrombolysis, coronary; by intracoronary infusion, including selective coronary angiography	PX	CPT-4
92977	Thrombolysis, coronary; by intravenous infusion	PX	CPT-4
92980	Transcatheter placement of an intracoronary stent(s), percutaneous, with or without other therapeutic intervention, any method; single vessel	PX	CPT-4
92981	Transcatheter placement of an intracoronary stent(s), percutaneous, with or without other therapeutic intervention, any method; each additional vessel (List separately in addition to code for primary procedure)	PX	CPT-4
92982	Percutaneous transluminal coronary balloon angioplasty; single vessel	PX	CPT-4
92984	Percutaneous transluminal coronary balloon angioplasty; each additional vessel (List separately in addition to code for primary procedure)	PX	CPT-4
92995	Percutaneous transluminal coronary atherectomy, by mechanical or other method, with or without balloon angioplasty; single vessel	PX	CPT-4
92996	Percutaneous transluminal coronary atherectomy, by mechanical or other method, with or without balloon angioplasty; each additional vessel (List separately in addition to code for primary procedure)	PX	CPT-4
93540	Injection procedure during cardiac catheterization; for selective opacification of aortocoronary venous bypass grafts, 1 or more coronary arteries	PX	CPT-4
93564	Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for selective opacification of aortocoronary venous or arterial bypass graft(s) (eg, aortocoronary saphenous vein, free radial artery, or free mammary artery graft) to one or more coronary arteries and in situ arterial conduits (eg, internal mammary), whether native or used for bypass to one or more coronary arteries during congenital heart catheterization, when performed (List separately in addition to code for primary procedure)	PX	CPT-4
C9600	Percutaneous transcatheter placement of drug eluting intracoronary stent(s), with coronary angioplasty when performed; single major coronary artery or branch	PX	HCPCS

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
C9601	Percutaneous transcatheter placement of drug-eluting intracoronary stent(s), with coronary angioplasty when performed; each additional branch of a major coronary artery (list separately in addition to code for primary procedure)	PX	HCPCS
C9602	Percutaneous transluminal coronary atherectomy, with drug eluting intracoronary stent, with coronary angioplasty when performed; single major coronary artery or branch	PX	HCPCS
C9603	Percutaneous transluminal coronary atherectomy, with drug-eluting intracoronary stent, with coronary angioplasty when performed; each additional branch of a major coronary artery (list separately in addition to code for primary procedure)	PX	HCPCS
C9604	Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of drug-eluting intracoronary stent, atherectomy and angioplasty, including distal protection when performed; single vessel	PX	HCPCS
C9605	Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of drug-eluting intracoronary stent, atherectomy and angioplasty, including distal protection when performed; each additional branch subtended by the bypass graft (list separately in addition to code for primary procedure)	PX	HCPCS
C9606	Percutaneous transluminal revascularization of acute total/subtotal occlusion during acute myocardial infarction, coronary artery or coronary artery bypass graft, any combination of drug-eluting intracoronary stent, atherectomy and angioplasty, including aspiration thrombectomy when performed, single vessel	PX	HCPCS
C9607	Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of drug-eluting intracoronary stent, atherectomy and angioplasty; single vessel	PX	HCPCS
C9608	Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of drug-eluting intracoronary stent, atherectomy and angioplasty; each additional coronary artery, coronary artery branch, or bypass graft (list separately in addition to code for primary procedure)	PX	HCPCS
G0290	Transcatheter placement of a drug eluting intracoronary stent(s), percutaneous, with or without other therapeutic intervention, any method; single vessel	PX	HCPCS
G0291	Transcatheter placement of a drug eluting intracoronary stent(s), percutaneous, with or without other therapeutic intervention, any method; each additional vessel	PX	HCPCS
G8158	Patient documented to have received coronary artery bypass graft with use of internal mammary artery	PX	HCPCS
G8159	Patient documented to have received coronary artery bypass graft without use of internal mammary artery	PX	HCPCS
G8161	Patient with isolated coronary artery bypass graft documented to have received pre-operative beta-blockade	PX	HCPCS
G8162	Patient with isolated coronary artery bypass graft not documented to have received preoperative beta-blockade	PX	HCPCS
G8163	Clinician documented that patient with isolated coronary artery bypass graft was not an eligible candidate for pre-operative beta-blockade measure	PX	HCPCS
G8164	Patient with isolated coronary artery bypass graft documented to have prolonged intubation	PX	HCPCS

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
G8165	Patient with isolated coronary artery bypass graft not documented to have prolonged intubation	PX	HCPCS
G8166	Patient with isolated coronary artery bypass graft documented to have required surgical re-exploration	PX	HCPCS
G8167	Patient with isolated coronary artery bypass graft did not require surgical re-exploration	PX	HCPCS
G8170	Patient with isolated coronary artery bypass graft documented to have been discharged on aspirin or clopidogrel	PX	HCPCS
G8171	Patient with isolated coronary artery bypass graft not documented to have been discharged on aspirin or clopidogrel	PX	HCPCS
G8172	Clinician documented that patient with isolated coronary artery bypass graft was not an eligible candidate for antiplatelet therapy at discharge measure	PX	HCPCS
Z92.82	Status post administration of tPA (rtPA) in a different facility within the last 24 hours prior to admission to current facility	DX	ICD-10-CM
Z95.1	Presence of aortocoronary bypass graft	DX	ICD-10-CM
Z95.5	Presence of coronary angioplasty implant and graft	DX	ICD-10-CM
Z98.61	Coronary angioplasty status	DX	ICD-10-CM
00.66	Percutaneous transluminal coronary angioplasty [PTCA]	PX	ICD-09-CM
0210083	Bypass Coronary Artery, One Artery from Coronary Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
0210088	Bypass Coronary Artery, One Artery from Right Internal Mammary with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
0210089	Bypass Coronary Artery, One Artery from Left Internal Mammary with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021008C	Bypass Coronary Artery, One Artery from Thoracic Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021008F	Bypass Coronary Artery, One Artery from Abdominal Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021008W	Bypass Coronary Artery, One Artery from Aorta with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
0210093	Bypass Coronary Artery, One Artery from Coronary Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
0210098	Bypass Coronary Artery, One Artery from Right Internal Mammary with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
0210099	Bypass Coronary Artery, One Artery from Left Internal Mammary with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021009C	Bypass Coronary Artery, One Artery from Thoracic Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021009F	Bypass Coronary Artery, One Artery from Abdominal Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021009W	Bypass Coronary Artery, One Artery from Aorta with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
02100A3	Bypass Coronary Artery, One Artery from Coronary Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
02100A8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02100A9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02100AC	Bypass Coronary Artery, One Artery from Thoracic Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02100AF	Bypass Coronary Artery, One Artery from Abdominal Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02100AW	Bypass Coronary Artery, One Artery from Aorta with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02100J3	Bypass Coronary Artery, One Artery from Coronary Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02100J8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02100J9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02100JC	Bypass Coronary Artery, One Artery from Thoracic Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02100JF	Bypass Coronary Artery, One Artery from Abdominal Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02100JW	Bypass Coronary Artery, One Artery from Aorta with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02100K3	Bypass Coronary Artery, One Artery from Coronary Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02100K8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02100K9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02100KC	Bypass Coronary Artery, One Artery from Thoracic Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02100KF	Bypass Coronary Artery, One Artery from Abdominal Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02100KW	Bypass Coronary Artery, One Artery from Aorta with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02100Z3	Bypass Coronary Artery, One Artery from Coronary Artery, Open Approach	PX	ICD-10-CM
02100Z8	Bypass Coronary Artery, One Artery from Right Internal Mammary, Open Approach	PX	ICD-10-CM
02100Z9	Bypass Coronary Artery, One Artery from Left Internal Mammary, Open Approach	PX	ICD-10-CM
02100ZC	Bypass Coronary Artery, One Artery from Thoracic Artery, Open Approach	PX	ICD-10-CM
02100ZF	Bypass Coronary Artery, One Artery from Abdominal Artery, Open Approach	PX	ICD-10-CM
0210344	Bypass Coronary Artery, One Artery from Coronary Vein with Drug-eluting Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02103D4	Bypass Coronary Artery, One Artery from Coronary Vein with Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0210444	Bypass Coronary Artery, One Artery from Coronary Vein with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0210483	Bypass Coronary Artery, One Artery from Coronary Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0210488	Bypass Coronary Artery, One Artery from Right Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0210489	Bypass Coronary Artery, One Artery from Left Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021048C	Bypass Coronary Artery, One Artery from Thoracic Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021048F	Bypass Coronary Artery, One Artery from Abdominal Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021048W	Bypass Coronary Artery, One Artery from Aorta with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0210493	Bypass Coronary Artery, One Artery from Coronary Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0210498	Bypass Coronary Artery, One Artery from Right Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0210499	Bypass Coronary Artery, One Artery from Left Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021049C	Bypass Coronary Artery, One Artery from Thoracic Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021049F	Bypass Coronary Artery, One Artery from Abdominal Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021049W	Bypass Coronary Artery, One Artery from Aorta with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104A3	Bypass Coronary Artery, One Artery from Coronary Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104A8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104A9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104AC	Bypass Coronary Artery, One Artery from Thoracic Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104AF	Bypass Coronary Artery, One Artery from Abdominal Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104AW	Bypass Coronary Artery, One Artery from Aorta with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104D4	Bypass Coronary Artery, One Artery from Coronary Vein with Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104J3	Bypass Coronary Artery, One Artery from Coronary Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
02104J8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104J9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104JC	Bypass Coronary Artery, One Artery from Thoracic Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104JF	Bypass Coronary Artery, One Artery from Abdominal Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104JW	Bypass Coronary Artery, One Artery from Aorta with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104K3	Bypass Coronary Artery, One Artery from Coronary Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104K8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104K9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104KC	Bypass Coronary Artery, One Artery from Thoracic Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104KF	Bypass Coronary Artery, One Artery from Abdominal Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104KW	Bypass Coronary Artery, One Artery from Aorta with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104Z3	Bypass Coronary Artery, One Artery from Coronary Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104Z8	Bypass Coronary Artery, One Artery from Right Internal Mammary, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104Z9	Bypass Coronary Artery, One Artery from Left Internal Mammary, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104ZC	Bypass Coronary Artery, One Artery from Thoracic Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02104ZF	Bypass Coronary Artery, One Artery from Abdominal Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0211083	Bypass Coronary Artery, Two Arteries from Coronary Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
0211088	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
0211089	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021108C	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021108F	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021108W	Bypass Coronary Artery, Two Arteries from Aorta with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
0211093	Bypass Coronary Artery, Two Arteries from Coronary Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM

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Code	Description	Code Type	Code Category
0211098	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
0211099	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021109C	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021109F	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021109W	Bypass Coronary Artery, Two Arteries from Aorta with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
02110A3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02110A8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02110A9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02110AC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02110AF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02110AW	Bypass Coronary Artery, Two Arteries from Aorta with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02110J3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02110J8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02110J9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02110JC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02110JF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02110JW	Bypass Coronary Artery, Two Arteries from Aorta with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02110K3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02110K8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02110K9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02110KC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02110KF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM

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Code	Description	Code Type	Code Category
02110KW	Bypass Coronary Artery, Two Arteries from Aorta with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02110Z3	Bypass Coronary Artery, Two Arteries from Coronary Artery, Open Approach	PX	ICD-10-CM

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Code	Description	Code Type	Code Category
02110Z8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary, Open Approach	PX	ICD-10-CM
02110Z9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary, Open Approach	PX	ICD-10-CM
02110ZC	Bypass Coronary Artery, Two Arteries from Thoracic Artery, Open Approach	PX	ICD-10-CM
02110ZF	Bypass Coronary Artery, Two Arteries from Abdominal Artery, Open Approach	PX	ICD-10-CM
0211344	Bypass Coronary Artery, Two Arteries from Coronary Vein with Drug-eluting Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02113D4	Bypass Coronary Artery, Two Arteries from Coronary Vein with Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
0211444	Bypass Coronary Artery, Two Arteries from Coronary Vein with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0211483	Bypass Coronary Artery, Two Arteries from Coronary Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0211488	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0211489	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021148C	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021148F	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021148W	Bypass Coronary Artery, Two Arteries from Aorta with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0211493	Bypass Coronary Artery, Two Arteries from Coronary Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0211498	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0211499	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021149C	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021149F	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021149W	Bypass Coronary Artery, Two Arteries from Aorta with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114A3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114A8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114A9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114AC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
02114AF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114AW	Bypass Coronary Artery, Two Arteries from Aorta with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114D4	Bypass Coronary Artery, Two Arteries from Coronary Vein with Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114J3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114J8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114J9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114JC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114JF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114JW	Bypass Coronary Artery, Two Arteries from Aorta with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114K3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114K8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114K9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114KC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114KF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114KW	Bypass Coronary Artery, Two Arteries from Aorta with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114Z3	Bypass Coronary Artery, Two Arteries from Coronary Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114Z8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114Z9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114ZC	Bypass Coronary Artery, Two Arteries from Thoracic Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02114ZF	Bypass Coronary Artery, Two Arteries from Abdominal Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0212083	Bypass Coronary Artery, Three Arteries from Coronary Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0212088	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
0212089	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021208C	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021208F	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021208W	Bypass Coronary Artery, Three Arteries from Aorta with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
0212093	Bypass Coronary Artery, Three Arteries from Coronary Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
0212098	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
0212099	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021209C	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021209F	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021209W	Bypass Coronary Artery, Three Arteries from Aorta with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
02120A3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02120A8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02120A9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02120AC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02120AF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02120AW	Bypass Coronary Artery, Three Arteries from Aorta with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02120J3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02120J8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02120J9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02120JC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02120JF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
02120JW	Bypass Coronary Artery, Three Arteries from Aorta with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02120K3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02120K8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02120K9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02120KC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02120KF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02120KW	Bypass Coronary Artery, Three Arteries from Aorta with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02120Z3	Bypass Coronary Artery, Three Arteries from Coronary Artery, Open Approach	PX	ICD-10-CM
02120Z8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary, Open Approach	PX	ICD-10-CM
02120Z9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary, Open Approach	PX	ICD-10-CM
02120ZC	Bypass Coronary Artery, Three Arteries from Thoracic Artery, Open Approach	PX	ICD-10-CM
02120ZF	Bypass Coronary Artery, Three Arteries from Abdominal Artery, Open Approach	PX	ICD-10-CM
0212344	Bypass Coronary Artery, Three Arteries from Coronary Vein with Drug-eluting Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02123D4	Bypass Coronary Artery, Three Arteries from Coronary Vein with Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
0212444	Bypass Coronary Artery, Three Arteries from Coronary Vein with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0212483	Bypass Coronary Artery, Three Arteries from Coronary Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0212488	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0212489	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021248C	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021248F	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021248W	Bypass Coronary Artery, Three Arteries from Aorta with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0212493	Bypass Coronary Artery, Three Arteries from Coronary Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0212498	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0212499	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
021249C	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021249F	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021249W	Bypass Coronary Artery, Three Arteries from Aorta with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124A3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124A8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124A9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124AC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124AF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124AW	Bypass Coronary Artery, Three Arteries from Aorta with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124D4	Bypass Coronary Artery, Three Arteries from Coronary Vein with Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124J3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124J8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124J9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124JC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124JF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124JW	Bypass Coronary Artery, Three Arteries from Aorta with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124K3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124K8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124K9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124KC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124KF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
02124KW	Bypass Coronary Artery, Three Arteries from Aorta with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124Z3	Bypass Coronary Artery, Three Arteries from Coronary Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124Z8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124Z9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124ZC	Bypass Coronary Artery, Three Arteries from Thoracic Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02124ZF	Bypass Coronary Artery, Three Arteries from Abdominal Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0213083	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
0213088	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
0213089	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021308C	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021308F	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021308W	Bypass Coronary Artery, Four or More Arteries from Aorta with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
0213093	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
0213098	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
0213099	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021309C	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021309F	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021309W	Bypass Coronary Artery, Four or More Arteries from Aorta with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
02130A3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02130A8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02130A9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
02130AC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02130AF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02130AW	Bypass Coronary Artery, Four or More Arteries from Aorta with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
02130J3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02130J8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02130J9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02130JC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02130JF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02130JW	Bypass Coronary Artery, Four or More Arteries from Aorta with Synthetic Substitute, Open Approach	PX	ICD-10-CM
02130K3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02130K8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02130K9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02130KC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02130KF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02130KW	Bypass Coronary Artery, Four or More Arteries from Aorta with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
02130Z3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery, Open Approach	PX	ICD-10-CM
02130Z8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary, Open Approach	PX	ICD-10-CM
02130Z9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary, Open Approach	PX	ICD-10-CM
02130ZC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery, Open Approach	PX	ICD-10-CM
02130ZF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery, Open Approach	PX	ICD-10-CM
0213344	Bypass Coronary Artery, Four or More Arteries from Coronary Vein with Drug-eluting Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02133D4	Bypass Coronary Artery, Four or More Arteries from Coronary Vein with Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
0213444	Bypass Coronary Artery, Four or More Arteries from Coronary Vein with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0213483	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM

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Code	Description	Code Type	Code Category
0213488	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0213489	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021348C	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021348F	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021348W	Bypass Coronary Artery, Four or More Arteries from Aorta with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0213493	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0213498	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0213499	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021349C	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021349F	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021349W	Bypass Coronary Artery, Four or More Arteries from Aorta with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134A3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134A8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134A9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134AC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134AF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134AW	Bypass Coronary Artery, Four or More Arteries from Aorta with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134D4	Bypass Coronary Artery, Four or More Arteries from Coronary Vein with Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134J3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134J8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134J9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
02134JC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134JF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134JW	Bypass Coronary Artery, Four or More Arteries from Aorta with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134K3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134K8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134K9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134KC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134KF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134KW	Bypass Coronary Artery, Four or More Arteries from Aorta with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134Z3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134Z8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134Z9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134ZC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02134ZF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021K0Z5	Bypass Right Ventricle to Coronary Circulation, Open Approach	PX	ICD-10-CM
021K0Z8	Bypass Right Ventricle to Right Internal Mammary, Open Approach	PX	ICD-10-CM
021K0Z9	Bypass Right Ventricle to Left Internal Mammary, Open Approach	PX	ICD-10-CM
021K0ZC	Bypass Right Ventricle to Thoracic Artery, Open Approach	PX	ICD-10-CM
021K0ZF	Bypass Right Ventricle to Abdominal Artery, Open Approach	PX	ICD-10-CM
021K0ZW	Bypass Right Ventricle to Aorta, Open Approach	PX	ICD-10-CM
021K4Z5	Bypass Right Ventricle to Coronary Circulation, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021K4Z8	Bypass Right Ventricle to Right Internal Mammary, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021K4Z9	Bypass Right Ventricle to Left Internal Mammary, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021K4ZC	Bypass Right Ventricle to Thoracic Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021K4ZF	Bypass Right Ventricle to Abdominal Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021K4ZW	Bypass Right Ventricle to Aorta, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L08P	Bypass Left Ventricle to Pulmonary Trunk with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021L08Q	Bypass Left Ventricle to Right Pulmonary Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM
021L08R	Bypass Left Ventricle to Left Pulmonary Artery with Zooplastic Tissue, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
021L09P	Bypass Left Ventricle to Pulmonary Trunk with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021L09Q	Bypass Left Ventricle to Right Pulmonary Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021L09R	Bypass Left Ventricle to Left Pulmonary Artery with Autologous Venous Tissue, Open Approach	PX	ICD-10-CM
021L0AP	Bypass Left Ventricle to Pulmonary Trunk with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
021L0AQ	Bypass Left Ventricle to Right Pulmonary Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
021L0AR	Bypass Left Ventricle to Left Pulmonary Artery with Autologous Arterial Tissue, Open Approach	PX	ICD-10-CM
021L0JP	Bypass Left Ventricle to Pulmonary Trunk with Synthetic Substitute, Open Approach	PX	ICD-10-CM
021L0JQ	Bypass Left Ventricle to Right Pulmonary Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM
021L0JR	Bypass Left Ventricle to Left Pulmonary Artery with Synthetic Substitute, Open Approach	PX	ICD-10-CM
021L0KP	Bypass Left Ventricle to Pulmonary Trunk with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
021L0KQ	Bypass Left Ventricle to Right Pulmonary Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
021L0KR	Bypass Left Ventricle to Left Pulmonary Artery with Nonautologous Tissue Substitute, Open Approach	PX	ICD-10-CM
021L0Z5	Bypass Left Ventricle to Coronary Circulation, Open Approach	PX	ICD-10-CM
021L0Z8	Bypass Left Ventricle to Right Internal Mammary, Open Approach	PX	ICD-10-CM
021L0Z9	Bypass Left Ventricle to Left Internal Mammary, Open Approach	PX	ICD-10-CM
021L0ZC	Bypass Left Ventricle to Thoracic Artery, Open Approach	PX	ICD-10-CM
021L0ZF	Bypass Left Ventricle to Abdominal Artery, Open Approach	PX	ICD-10-CM
021L0ZP	Bypass Left Ventricle to Pulmonary Trunk, Open Approach	PX	ICD-10-CM
021L0ZQ	Bypass Left Ventricle to Right Pulmonary Artery, Open Approach	PX	ICD-10-CM
021L0ZR	Bypass Left Ventricle to Left Pulmonary Artery, Open Approach	PX	ICD-10-CM
021L48P	Bypass Left Ventricle to Pulmonary Trunk with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L48Q	Bypass Left Ventricle to Right Pulmonary Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L48R	Bypass Left Ventricle to Left Pulmonary Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L49P	Bypass Left Ventricle to Pulmonary Trunk with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L49Q	Bypass Left Ventricle to Right Pulmonary Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L49R	Bypass Left Ventricle to Left Pulmonary Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4AP	Bypass Left Ventricle to Pulmonary Trunk with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4AQ	Bypass Left Ventricle to Right Pulmonary Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4AR	Bypass Left Ventricle to Left Pulmonary Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
021L4JP	Bypass Left Ventricle to Pulmonary Trunk with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4JQ	Bypass Left Ventricle to Right Pulmonary Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4JR	Bypass Left Ventricle to Left Pulmonary Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4KP	Bypass Left Ventricle to Pulmonary Trunk with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4KQ	Bypass Left Ventricle to Right Pulmonary Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4KR	Bypass Left Ventricle to Left Pulmonary Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4Z5	Bypass Left Ventricle to Coronary Circulation, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4Z8	Bypass Left Ventricle to Right Internal Mammary, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4Z9	Bypass Left Ventricle to Left Internal Mammary, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4ZC	Bypass Left Ventricle to Thoracic Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4ZF	Bypass Left Ventricle to Abdominal Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4ZP	Bypass Left Ventricle to Pulmonary Trunk, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4ZQ	Bypass Left Ventricle to Right Pulmonary Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
021L4ZR	Bypass Left Ventricle to Left Pulmonary Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0270046	Dilation of Coronary Artery, One Artery, Bifurcation, with Drug-eluting Intraluminal Device, Open Approach	PX	ICD-10-CM
027004Z	Dilation of Coronary Artery, One Artery with Drug-eluting Intraluminal Device, Open	PX	ICD-10-CM
0270056	Dilation of Coronary Artery, One Artery, Bifurcation, with Two Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
027005Z	Dilation of Coronary Artery, One Artery with Two Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
0270066	Dilation of Coronary Artery, One Artery, Bifurcation, with Three Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
027006Z	Dilation of Coronary Artery, One Artery with Three Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
0270076	Dilation of Coronary Artery, One Artery, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
027007Z	Dilation of Coronary Artery, One Artery with Four or More Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
02700D6	Dilation of Coronary Artery, One Artery, Bifurcation, with Intraluminal Device, Open	PX	ICD-10-CM
02700DZ	Dilation of Coronary Artery, One Artery with Intraluminal Device, Open Approach	PX	ICD-10-CM
02700E6	Dilation of Coronary Artery, One Artery, Bifurcation, with Two Intraluminal Devices, Open Approach	PX	ICD-10-CM
02700EZ	Dilation of Coronary Artery, One Artery with Two Intraluminal Devices, Open Approach	PX	ICD-10-CM
02700F6	Dilation of Coronary Artery, One Artery, Bifurcation, with Three Intraluminal Devices, Open Approach	PX	ICD-10-CM
02700FZ	Dilation of Coronary Artery, One Artery with Three Intraluminal Devices, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
02700G6	Dilation of Coronary Artery, One Artery, Bifurcation, with Four or More Intraluminal Devices, Open Approach	PX	ICD-10-CM
02700GZ	Dilation of Coronary Artery, One Artery with Four or More Intraluminal Devices, Open Approach	PX	ICD-10-CM
02700T6	Dilation of Coronary Artery, One Artery, Bifurcation, with Radioactive Intraluminal Device, Open Approach	PX	ICD-10-CM
02700TZ	Dilation of Coronary Artery, One Artery with Radioactive Intraluminal Device, Open Approach	PX	ICD-10-CM
02700Z6	Dilation of Coronary Artery, One Artery, Bifurcation, Open Approach	PX	ICD-10-CM
02700ZZ	Dilation of Coronary Artery, One Artery, Open Approach	PX	ICD-10-CM
0270346	Dilation of Coronary Artery, One Artery, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
027034Z	Dilation of Coronary Artery, One Artery with Drug-eluting Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
0270356	Dilation of Coronary Artery, One Artery, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
027035Z	Dilation of Coronary Artery, One Artery with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
0270366	Dilation of Coronary Artery, One Artery, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
027036Z	Dilation of Coronary Artery, One Artery with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
0270376	Dilation of Coronary Artery, One Artery, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
027037Z	Dilation of Coronary Artery, One Artery with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02703D6	Dilation of Coronary Artery, One Artery, Bifurcation, with Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02703DZ	Dilation of Coronary Artery, One Artery with Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02703E6	Dilation of Coronary Artery, One Artery, Bifurcation, with Two Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02703EZ	Dilation of Coronary Artery, One Artery with Two Intraluminal Devices, Percutaneous	PX	ICD-10-CM
02703F6	Dilation of Coronary Artery, One Artery, Bifurcation, with Three Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02703FZ	Dilation of Coronary Artery, One Artery with Three Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02703G6	Dilation of Coronary Artery, One Artery, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02703GZ	Dilation of Coronary Artery, One Artery with Four or More Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02703T6	Dilation of Coronary Artery, One Artery, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02703TZ	Dilation of Coronary Artery, One Artery with Radioactive Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
02703Z6	Dilation of Coronary Artery, One Artery, Bifurcation, Percutaneous Approach	PX	ICD-10-CM
02703ZZ	Dilation of Coronary Artery, One Artery, Percutaneous Approach	PX	ICD-10-CM
0270446	Dilation of Coronary Artery, One Artery, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027044Z	Dilation of Coronary Artery, One Artery with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0270456	Dilation of Coronary Artery, One Artery, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027045Z	Dilation of Coronary Artery, One Artery with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0270466	Dilation of Coronary Artery, One Artery, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027046Z	Dilation of Coronary Artery, One Artery with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0270476	Dilation of Coronary Artery, One Artery, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027047Z	Dilation of Coronary Artery, One Artery with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02704D6	Dilation of Coronary Artery, One Artery, Bifurcation, with Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02704DZ	Dilation of Coronary Artery, One Artery with Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02704E6	Dilation of Coronary Artery, One Artery, Bifurcation, with Two Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02704EZ	Dilation of Coronary Artery, One Artery with Two Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02704F6	Dilation of Coronary Artery, One Artery, Bifurcation, with Three Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02704FZ	Dilation of Coronary Artery, One Artery with Three Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02704G6	Dilation of Coronary Artery, One Artery, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02704GZ	Dilation of Coronary Artery, One Artery with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02704T6	Dilation of Coronary Artery, One Artery, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02704TZ	Dilation of Coronary Artery, One Artery with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02704Z6	Dilation of Coronary Artery, One Artery, Bifurcation, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02704ZZ	Dilation of Coronary Artery, One Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0271046	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
027104Z	Dilation of Coronary Artery, Two Arteries with Drug-eluting Intraluminal Device, Open Approach	PX	ICD-10-CM
0271056	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
027105Z	Dilation of Coronary Artery, Two Arteries with Two Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
0271066	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
027106Z	Dilation of Coronary Artery, Two Arteries with Three Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
0271076	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
027107Z	Dilation of Coronary Artery, Two Arteries with Four or More Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
02710D6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Intraluminal Device, Open Approach	PX	ICD-10-CM
02710DZ	Dilation of Coronary Artery, Two Arteries with Intraluminal Device, Open Approach	PX	ICD-10-CM
02710E6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Two Intraluminal Devices, Open Approach	PX	ICD-10-CM
02710EZ	Dilation of Coronary Artery, Two Arteries with Two Intraluminal Devices, Open Approach	PX	ICD-10-CM
02710F6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Three Intraluminal Devices, Open Approach	PX	ICD-10-CM
02710FZ	Dilation of Coronary Artery, Two Arteries with Three Intraluminal Devices, Open Approach	PX	ICD-10-CM
02710G6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Four or More Intraluminal Devices, Open Approach	PX	ICD-10-CM
02710GZ	Dilation of Coronary Artery, Two Arteries with Four or More Intraluminal Devices, Open Approach	PX	ICD-10-CM
02710T6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Radioactive Intraluminal Device, Open Approach	PX	ICD-10-CM
02710TZ	Dilation of Coronary Artery, Two Arteries with Radioactive Intraluminal Device, Open Approach	PX	ICD-10-CM
02710Z6	Dilation of Coronary Artery, Two Arteries, Bifurcation, Open Approach	PX	ICD-10-CM
02710ZZ	Dilation of Coronary Artery, Two Arteries, Open Approach	PX	ICD-10-CM
0271346	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
027134Z	Dilation of Coronary Artery, Two Arteries with Drug-eluting Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
0271356	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
027135Z	Dilation of Coronary Artery, Two Arteries with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
0271366	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
027136Z	Dilation of Coronary Artery, Two Arteries with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
0271376	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
027137Z	Dilation of Coronary Artery, Two Arteries with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02713D6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02713DZ	Dilation of Coronary Artery, Two Arteries with Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02713E6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Two Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02713EZ	Dilation of Coronary Artery, Two Arteries with Two Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02713F6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Three Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02713FZ	Dilation of Coronary Artery, Two Arteries with Three Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02713G6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02713GZ	Dilation of Coronary Artery, Two Arteries with Four or More Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02713T6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02713TZ	Dilation of Coronary Artery, Two Arteries with Radioactive Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02713Z6	Dilation of Coronary Artery, Two Arteries, Bifurcation, Percutaneous Approach	PX	ICD-10-CM
02713ZZ	Dilation of Coronary Artery, Two Arteries, Percutaneous Approach	PX	ICD-10-CM
0271446	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027144Z	Dilation of Coronary Artery, Two Arteries with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0271456	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027145Z	Dilation of Coronary Artery, Two Arteries with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0271466	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027146Z	Dilation of Coronary Artery, Two Arteries with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0271476	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027147Z	Dilation of Coronary Artery, Two Arteries with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM

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Code	Description	Code Type	Code Category
02714D6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02714DZ	Dilation of Coronary Artery, Two Arteries with Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02714E6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Two Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02714EZ	Dilation of Coronary Artery, Two Arteries with Two Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02714F6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Three Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02714FZ	Dilation of Coronary Artery, Two Arteries with Three Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02714G6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02714GZ	Dilation of Coronary Artery, Two Arteries with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02714T6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02714TZ	Dilation of Coronary Artery, Two Arteries with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02714Z6	Dilation of Coronary Artery, Two Arteries, Bifurcation, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02714ZZ	Dilation of Coronary Artery, Two Arteries, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0272046	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Open Approach	PX	ICD-10-CM
027204Z	Dilation of Coronary Artery, Three Arteries with Drug-eluting Intraluminal Device, Open Approach	PX	ICD-10-CM
0272056	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
027205Z	Dilation of Coronary Artery, Three Arteries with Two Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
0272066	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
027206Z	Dilation of Coronary Artery, Three Arteries with Three Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
0272076	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
027207Z	Dilation of Coronary Artery, Three Arteries with Four or More Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
02720D6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Intraluminal Device, Open Approach	PX	ICD-10-CM
02720DZ	Dilation of Coronary Artery, Three Arteries with Intraluminal Device, Open Approach	PX	ICD-10-CM
02720E6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Two Intraluminal Devices, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
02720EZ	Dilation of Coronary Artery, Three Arteries with Two Intraluminal Devices, Open Approach	PX	ICD-10-CM
02720F6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Three Intraluminal Devices, Open Approach	PX	ICD-10-CM
02720FZ	Dilation of Coronary Artery, Three Arteries with Three Intraluminal Devices, Open Approach	PX	ICD-10-CM
02720G6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Four or More Intraluminal Devices, Open Approach	PX	ICD-10-CM
02720GZ	Dilation of Coronary Artery, Three Arteries with Four or More Intraluminal Devices, Open Approach	PX	ICD-10-CM
02720T6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Radioactive Intraluminal Device, Open Approach	PX	ICD-10-CM
02720TZ	Dilation of Coronary Artery, Three Arteries with Radioactive Intraluminal Device, Open Approach	PX	ICD-10-CM
02720Z6	Dilation of Coronary Artery, Three Arteries, Bifurcation, Open Approach	PX	ICD-10-CM
02720ZZ	Dilation of Coronary Artery, Three Arteries, Open Approach	PX	ICD-10-CM
0272346	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
027234Z	Dilation of Coronary Artery, Three Arteries with Drug-eluting Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
0272356	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
027235Z	Dilation of Coronary Artery, Three Arteries with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
0272366	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
027236Z	Dilation of Coronary Artery, Three Arteries with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
0272376	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
027237Z	Dilation of Coronary Artery, Three Arteries with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02723D6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02723DZ	Dilation of Coronary Artery, Three Arteries with Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02723E6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Two Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02723EZ	Dilation of Coronary Artery, Three Arteries with Two Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02723F6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Three Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02723FZ	Dilation of Coronary Artery, Three Arteries with Three Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02723G6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM

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Code	Description	Code Type	Code Category
02723GZ	Dilation of Coronary Artery, Three Arteries with Four or More Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02723T6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02723TZ	Dilation of Coronary Artery, Three Arteries with Radioactive Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02723Z6	Dilation of Coronary Artery, Three Arteries, Bifurcation, Percutaneous Approach	PX	ICD-10-CM
02723ZZ	Dilation of Coronary Artery, Three Arteries, Percutaneous Approach	PX	ICD-10-CM
0272446	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027244Z	Dilation of Coronary Artery, Three Arteries with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0272456	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027245Z	Dilation of Coronary Artery, Three Arteries with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0272466	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027246Z	Dilation of Coronary Artery, Three Arteries with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0272476	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027247Z	Dilation of Coronary Artery, Three Arteries with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02724D6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02724DZ	Dilation of Coronary Artery, Three Arteries with Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02724E6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Two Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02724EZ	Dilation of Coronary Artery, Three Arteries with Two Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02724F6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Three Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02724FZ	Dilation of Coronary Artery, Three Arteries with Three Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02724G6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02724GZ	Dilation of Coronary Artery, Three Arteries with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02724T6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
02724TZ	Dilation of Coronary Artery, Three Arteries with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02724Z6	Dilation of Coronary Artery, Three Arteries, Bifurcation, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02724ZZ	Dilation of Coronary Artery, Three Arteries, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0273046	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Open Approach	PX	ICD-10-CM
027304Z	Dilation of Coronary Artery, Four or More Arteries with Drug-eluting Intraluminal Device, Open Approach	PX	ICD-10-CM
0273056	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
027305Z	Dilation of Coronary Artery, Four or More Arteries with Two Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
0273066	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
027306Z	Dilation of Coronary Artery, Four or More Arteries with Three Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
0273076	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
027307Z	Dilation of Coronary Artery, Four or More Arteries with Four or More Drug-eluting Intraluminal Devices, Open Approach	PX	ICD-10-CM
02730D6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Intraluminal Device, Open Approach	PX	ICD-10-CM
02730DZ	Dilation of Coronary Artery, Four or More Arteries with Intraluminal Device, Open Approach	PX	ICD-10-CM
02730E6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Two Intraluminal Devices, Open Approach	PX	ICD-10-CM
02730EZ	Dilation of Coronary Artery, Four or More Arteries with Two Intraluminal Devices, Open Approach	PX	ICD-10-CM
02730F6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Three Intraluminal Devices, Open Approach	PX	ICD-10-CM
02730FZ	Dilation of Coronary Artery, Four or More Arteries with Three Intraluminal Devices, Open Approach	PX	ICD-10-CM
02730G6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Four or More Intraluminal Devices, Open Approach	PX	ICD-10-CM
02730GZ	Dilation of Coronary Artery, Four or More Arteries with Four or More Intraluminal Devices, Open Approach	PX	ICD-10-CM
02730T6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Radioactive Intraluminal Device, Open Approach	PX	ICD-10-CM
02730TZ	Dilation of Coronary Artery, Four or More Arteries with Radioactive Intraluminal Device, Open Approach	PX	ICD-10-CM
02730Z6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, Open Approach	PX	ICD-10-CM
02730ZZ	Dilation of Coronary Artery, Four or More Arteries, Open Approach	PX	ICD-10-CM
0273346	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
027334Z	Dilation of Coronary Artery, Four or More Arteries with Drug-eluting Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
0273356	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
027335Z	Dilation of Coronary Artery, Four or More Arteries with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
0273366	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
027336Z	Dilation of Coronary Artery, Four or More Arteries with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
0273376	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
027337Z	Dilation of Coronary Artery, Four or More Arteries with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02733D6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02733DZ	Dilation of Coronary Artery, Four or More Arteries with Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02733E6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Two Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02733EZ	Dilation of Coronary Artery, Four or More Arteries with Two Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02733F6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Three Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02733FZ	Dilation of Coronary Artery, Four or More Arteries with Three Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02733G6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02733GZ	Dilation of Coronary Artery, Four or More Arteries with Four or More Intraluminal Devices, Percutaneous Approach	PX	ICD-10-CM
02733T6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02733TZ	Dilation of Coronary Artery, Four or More Arteries with Radioactive Intraluminal Device, Percutaneous Approach	PX	ICD-10-CM
02733Z6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, Percutaneous Approach	PX	ICD-10-CM
02733ZZ	Dilation of Coronary Artery, Four or More Arteries, Percutaneous Approach	PX	ICD-10-CM
0273446	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027344Z	Dilation of Coronary Artery, Four or More Arteries with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0273456	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
027345Z	Dilation of Coronary Artery, Four or More Arteries with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0273466	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027346Z	Dilation of Coronary Artery, Four or More Arteries with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0273476	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
027347Z	Dilation of Coronary Artery, Four or More Arteries with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02734D6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02734DZ	Dilation of Coronary Artery, Four or More Arteries with Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02734E6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Two Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02734EZ	Dilation of Coronary Artery, Four or More Arteries with Two Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02734F6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Three Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02734FZ	Dilation of Coronary Artery, Four or More Arteries with Three Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02734G6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02734GZ	Dilation of Coronary Artery, Four or More Arteries with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02734T6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02734TZ	Dilation of Coronary Artery, Four or More Arteries with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02734Z6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02734ZZ	Dilation of Coronary Artery, Four or More Arteries, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02C00Z6	Extirpation of Matter from Coronary Artery, One Artery, Bifurcation, Open Approach	PX	ICD-10-CM
02C00ZZ	Extirpation of Matter from Coronary Artery, One Artery, Open Approach	PX	ICD-10-CM
02C03Z6	Extirpation of Matter from Coronary Artery, One Artery, Bifurcation, Percutaneous Approach	PX	ICD-10-CM
02C03ZZ	Extirpation of Matter from Coronary Artery, One Artery, Percutaneous Approach	PX	ICD-10-CM

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Code	Description	Code Type	Code Category
02C04Z6	Extirpation of Matter from Coronary Artery, One Artery, Bifurcation, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02C04ZZ	Extirpation of Matter from Coronary Artery, One Artery, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02C10Z6	Extirpation of Matter from Coronary Artery, Two Arteries, Bifurcation, Open Approach	PX	ICD-10-CM
02C10ZZ	Extirpation of Matter from Coronary Artery, Two Arteries, Open Approach	PX	ICD-10-CM
02C13Z6	Extirpation of Matter from Coronary Artery, Two Arteries, Bifurcation, Percutaneous	PX	ICD-10-CM
02C13ZZ	Extirpation of Matter from Coronary Artery, Two Arteries, Percutaneous Approach	PX	ICD-10-CM
02C14Z6	Extirpation of Matter from Coronary Artery, Two Arteries, Bifurcation, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02C14ZZ	Extirpation of Matter from Coronary Artery, Two Arteries, Percutaneous Endoscopic	PX	ICD-10-CM
02C20Z6	Extirpation of Matter from Coronary Artery, Three Arteries, Bifurcation, Open Approach	PX	ICD-10-CM
02C20ZZ	Extirpation of Matter from Coronary Artery, Three Arteries, Open Approach	PX	ICD-10-CM
02C23Z6	Extirpation of Matter from Coronary Artery, Three Arteries, Bifurcation, Percutaneous Approach	PX	ICD-10-CM
02C23ZZ	Extirpation of Matter from Coronary Artery, Three Arteries, Percutaneous Approach	PX	ICD-10-CM
02C24Z6	Extirpation of Matter from Coronary Artery, Three Arteries, Bifurcation, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02C24ZZ	Extirpation of Matter from Coronary Artery, Three Arteries, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02C30Z6	Extirpation of Matter from Coronary Artery, Four or More Arteries, Bifurcation, Open Approach	PX	ICD-10-CM
02C30ZZ	Extirpation of Matter from Coronary Artery, Four or More Arteries, Open Approach	PX	ICD-10-CM
02C33Z6	Extirpation of Matter from Coronary Artery, Four or More Arteries, Bifurcation, Percutaneous Approach	PX	ICD-10-CM
02C33ZZ	Extirpation of Matter from Coronary Artery, Four or More Arteries, Percutaneous Approach	PX	ICD-10-CM
02C34Z6	Extirpation of Matter from Coronary Artery, Four or More Arteries, Bifurcation, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02C34ZZ	Extirpation of Matter from Coronary Artery, Four or More Arteries, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02QA0ZZ	Repair Heart, Open Approach	PX	ICD-10-CM
02QA3ZZ	Repair Heart, Percutaneous Approach	PX	ICD-10-CM
02QA4ZZ	Repair Heart, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02QB0ZZ	Repair Right Heart, Open Approach	PX	ICD-10-CM
02QB3ZZ	Repair Right Heart, Percutaneous Approach	PX	ICD-10-CM
02QB4ZZ	Repair Right Heart, Percutaneous Endoscopic Approach	PX	ICD-10-CM
02QC0ZZ	Repair Left Heart, Open Approach	PX	ICD-10-CM
02QC3ZZ	Repair Left Heart, Percutaneous Approach	PX	ICD-10-CM
02QC4ZZ	Repair Left Heart, Percutaneous Endoscopic Approach	PX	ICD-10-CM
3E07017	Introduction of Other Thrombolytic into Coronary Artery, Open Approach	PX	ICD-10-CM
3E070PZ	Introduction of Platelet Inhibitor into Coronary Artery, Open Approach	PX	ICD-10-CM
3E07317	Introduction of Other Thrombolytic into Coronary Artery, Percutaneous Approach	PX	ICD-10-CM
3E073PZ	Introduction of Platelet Inhibitor into Coronary Artery, Percutaneous Approach	PX	ICD-10-CM
00567	Anesthesia for direct coronary artery bypass grafting; with pump oxygenator	PX	CPT-4

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Code	Description	Code Type	Code Category
35600	Harvest of upper extremity artery, 1 segment, for coronary artery bypass procedure (List separately in addition to code for primary procedure)	PX	CPT-4
93455	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) including intraprocedural injection(s) for bypass graft angiography	PX	CPT-4
93457	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) including intraprocedural injection(s) for bypass graft angiography and right heart catheterization	PX	CPT-4
93459	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography	PX	CPT-4
93461	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography	PX	CPT-4
93508	Catheter placement in coronary artery(s), arterial coronary conduit(s), and/or venous coronary bypass graft(s) for coronary angiography without concomitant left heart	PX	CPT-4
93556	Imaging supervision, interpretation and report for injection procedure(s) during cardiac catheterization; pulmonary angiography, aortography, and/or selective coronary angiography including venous bypass grafts and arterial conduits (whether native or used in bypass)	PX	CPT-4
Heart failure			
402.01	Malignant hypertensive heart disease with heart failure	DX	ICD-9-CM
402.11	Benign hypertensive heart disease with heart failure	DX	ICD-9-CM
402.91	Hypertensive heart disease, unspecified, with heart failure	DX	ICD-9-CM
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-9-CM
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	DX	ICD-9-CM
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-9-CM
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	DX	ICD-9-CM
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-9-CM
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	DX	ICD-9-CM
428	Heart failure	DX	ICD-9-CM
428.0	Congestive heart failure, unspecified	DX	ICD-9-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
428.1	Left heart failure	DX	ICD-9-CM
428.2	Systolic heart failure	DX	ICD-9-CM
428.20	Unspecified systolic heart failure	DX	ICD-9-CM
428.21	Acute systolic heart failure	DX	ICD-9-CM
428.22	Chronic systolic heart failure	DX	ICD-9-CM
428.23	Acute on chronic systolic heart failure	DX	ICD-9-CM
428.3	Diastolic heart failure	DX	ICD-9-CM
428.30	Unspecified diastolic heart failure	DX	ICD-9-CM
428.31	Acute diastolic heart failure	DX	ICD-9-CM
428.32	Chronic diastolic heart failure	DX	ICD-9-CM
428.33	Acute on chronic diastolic heart failure	DX	ICD-9-CM
428.4	Combined systolic and diastolic heart failure	DX	ICD-9-CM
428.40	Unspecified combined systolic and diastolic heart failure	DX	ICD-9-CM
428.41	Acute combined systolic and diastolic heart failure	DX	ICD-9-CM
428.42	Chronic combined systolic and diastolic heart failure	DX	ICD-9-CM
428.43	Acute on chronic combined systolic and diastolic heart failure	DX	ICD-9-CM
428.9	Unspecified heart failure	DX	ICD-9-CM
37.66	Insertion of implantable heart assist system	PX	ICD-9-CM
33980	Removal of ventricular assist device, implantable intracorporeal, single ventricle	PX	CPT-4
92970	Cardioassist-method of circulatory assist; internal	PX	CPT-4
92971	Cardioassist-method of circulatory assist; external	PX	CPT-4
G8027	Heart failure patient with left ventricular systolic dysfunction (LVSD) documented to be on either angiotensin-converting enzyme-inhibitor or angiotensin-receptor blocker (ACE-1 or ARB) therapy	PX	HCPCS
G8028	Heart failure patient with left ventricular systolic dysfunction (LVSD) not documented to be on either angiotensin-converting enzyme-inhibitor or angiotensin-receptor blocker (ACE-1 or ARB) therapy	PX	HCPCS
G8029	Clinician documented that heart failure patient was not an eligible candidate for either angiotensin-converting enzyme-inhibitor or angiotensin-receptor blocker (ACE-1 or ARB) therapy measure	PX	HCPCS
G8030	Heart failure patient with left ventricular systolic dysfunction (LVSD) documented to be on beta-blocker therapy	PX	HCPCS
G8031	Heart failure patient with left ventricular systolic dysfunction (LVSD) not documented to be on beta-blocker therapy	PX	HCPCS
G8032	Clinician documented that heart failure patient was not eligible candidate for beta-blocker therapy measure	PX	HCPCS
G8184	Clinician documented that patient with heart failure and atrial fibrillation was not an eligible candidate for warfarin therapy measure	PX	HCPCS
I11.0	Hypertensive heart disease with heart failure	DX	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	DX	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
I50.1	Left ventricular failure, unspecified	DX	ICD-10-CM
I50.20	Unspecified systolic (congestive) heart failure	DX	ICD-10-CM
I50.21	Acute systolic (congestive) heart failure	DX	ICD-10-CM
I50.22	Chronic systolic (congestive) heart failure	DX	ICD-10-CM
I50.23	Acute on chronic systolic (congestive) heart failure	DX	ICD-10-CM
I50.30	Unspecified diastolic (congestive) heart failure	DX	ICD-10-CM
I50.31	Acute diastolic (congestive) heart failure	DX	ICD-10-CM
I50.32	Chronic diastolic (congestive) heart failure	DX	ICD-10-CM
I50.33	Acute on chronic diastolic (congestive) heart failure	DX	ICD-10-CM
I50.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure	DX	ICD-10-CM
I50.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	DX	ICD-10-CM
I50.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	DX	ICD-10-CM
I50.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	DX	ICD-10-CM
I50.810	Right heart failure, unspecified	DX	ICD-10-CM
I50.811	Acute right heart failure	DX	ICD-10-CM
I50.812	Chronic right heart failure	DX	ICD-10-CM
I50.813	Acute on chronic right heart failure	DX	ICD-10-CM
I50.814	Right heart failure due to left heart failure	DX	ICD-10-CM
I50.82	Biventricular heart failure	DX	ICD-10-CM
I50.83	High output heart failure	DX	ICD-10-CM
I50.84	End stage heart failure	DX	ICD-10-CM
I50.89	Other heart failure	DX	ICD-10-CM
I50.9	Heart failure, unspecified	DX	ICD-10-CM
02HA0QZ	Insertion of Implantable Heart Assist System into Heart, Open Approach	PX	ICD-10-CM
02HA3QZ	Insertion of Implantable Heart Assist System into Heart, Percutaneous Approach	PX	ICD-10-CM
02HA4QZ	Insertion of Implantable Heart Assist System into Heart, Percutaneous Endoscopic Approach	PX	ICD-10-CM
G8183	Patient with heart failure and atrial fibrillation documented to be on warfarin therapy	PX	HCPCS
G8184	Clinician documented that patient with heart failure and atrial fibrillation was not an eligible candidate for warfarin therapy measure	PX	HCPCS
402.01	Malignant hypertensive heart disease with heart failure	DX	ICD-09-CM
402.11	Benign hypertensive heart disease with heart failure	DX	ICD-09-CM
402.91	Hypertensive heart disease, unspecified, with heart failure	DX	ICD-09-CM
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-09-CM
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	DX	ICD-09-CM
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-09-CM
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	DX	ICD-09-CM
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	DX	ICD-09-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	DX	ICD-09-CM
428	Heart failure	DX	ICD-09-CM
428.0	Congestive heart failure, unspecified	DX	ICD-09-CM
428.1	Left heart failure	DX	ICD-09-CM
428.2	Systolic heart failure	DX	ICD-09-CM
428.20	Unspecified systolic heart failure	DX	ICD-09-CM
428.21	Acute systolic heart failure	DX	ICD-09-CM
428.22	Chronic systolic heart failure	DX	ICD-09-CM
428.23	Acute on chronic systolic heart failure	DX	ICD-09-CM
428.3	Diastolic heart failure	DX	ICD-09-CM
428.30	Unspecified diastolic heart failure	DX	ICD-09-CM
428.31	Acute diastolic heart failure	DX	ICD-09-CM
428.32	Chronic diastolic heart failure	DX	ICD-09-CM
428.33	Acute on chronic diastolic heart failure	DX	ICD-09-CM
428.4	Combined systolic and diastolic heart failure	DX	ICD-09-CM
428.40	Unspecified combined systolic and diastolic heart failure	DX	ICD-09-CM
428.41	Acute combined systolic and diastolic heart failure	DX	ICD-09-CM
428.42	Chronic combined systolic and diastolic heart failure	DX	ICD-09-CM
428.43	Acute on chronic combined systolic and diastolic heart failure	DX	ICD-09-CM
428.9	Unspecified heart failure	DX	ICD-09-CM
37.66	Insertion of implantable heart assist system	PX	ICD-09-CM
33980	Removal of ventricular assist device, implantable intracorporeal, single ventricle	PX	CPT-4
92970	Cardioassist-method of circulatory assist; internal	PX	CPT-4
92971	Cardioassist-method of circulatory assist; external	PX	CPT-4
G8027	Heart failure patient with left ventricular systolic dysfunction (LVSD) documented to be on either angiotensin-converting enzyme-inhibitor or angiotensin-receptor blocker (ACE-1 or ARB) therapy	PX	HCPCS
G8028	Heart failure patient with left ventricular systolic dysfunction (LVSD) not documented to be on either angiotensin-converting enzyme-inhibitor or angiotensin-receptor blocker (ACE-1 or ARB) therapy	PX	HCPCS
G8029	Clinician documented that heart failure patient was not an eligible candidate for either angiotensin-converting enzyme-inhibitor or angiotensin-receptor blocker (ACE-1 or ARB) therapy measure	PX	HCPCS
G8030	Heart failure patient with left ventricular systolic dysfunction (LVSD) documented to be on beta-blocker therapy	PX	HCPCS
G8031	Heart failure patient with left ventricular systolic dysfunction (LVSD) not documented to be on beta-blocker therapy	PX	HCPCS
G8032	Clinician documented that heart failure patient was not eligible candidate for beta-blocker therapy measure	PX	HCPCS
G8184	Clinician documented that patient with heart failure and atrial fibrillation was not an eligible candidate for warfarin therapy measure	PX	HCPCS
I11.0	Hypertensive heart disease with heart failure	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	DX	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	DX	ICD-10-CM
I50.1	Left ventricular failure, unspecified	DX	ICD-10-CM
I50.20	Unspecified systolic (congestive) heart failure	DX	ICD-10-CM
I50.21	Acute systolic (congestive) heart failure	DX	ICD-10-CM
I50.22	Chronic systolic (congestive) heart failure	DX	ICD-10-CM
I50.23	Acute on chronic systolic (congestive) heart failure	DX	ICD-10-CM
I50.30	Unspecified diastolic (congestive) heart failure	DX	ICD-10-CM
I50.31	Acute diastolic (congestive) heart failure	DX	ICD-10-CM
I50.32	Chronic diastolic (congestive) heart failure	DX	ICD-10-CM
I50.33	Acute on chronic diastolic (congestive) heart failure	DX	ICD-10-CM
I50.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure	DX	ICD-10-CM
I50.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	DX	ICD-10-CM
I50.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	DX	ICD-10-CM
I50.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	DX	ICD-10-CM
I50.810	Right heart failure, unspecified	DX	ICD-10-CM
I50.811	Acute right heart failure	DX	ICD-10-CM
I50.812	Chronic right heart failure	DX	ICD-10-CM
I50.813	Acute on chronic right heart failure	DX	ICD-10-CM
I50.814	Right heart failure due to left heart failure	DX	ICD-10-CM
I50.82	Biventricular heart failure	DX	ICD-10-CM
I50.83	High output heart failure	DX	ICD-10-CM
I50.84	End stage heart failure	DX	ICD-10-CM
I50.89	Other heart failure	DX	ICD-10-CM
I50.9	Heart failure, unspecified	DX	ICD-10-CM
02HA0QZ	Insertion of Implantable Heart Assist System into Heart, Open Approach	PX	ICD-10-CM
02HA3QZ	Insertion of Implantable Heart Assist System into Heart, Percutaneous Approach	PX	ICD-10-CM
02HA4QZ	Insertion of Implantable Heart Assist System into Heart, Percutaneous Endoscopic Approach	PX	ICD-10-CM
G8183	Patient with heart failure and atrial fibrillation documented to be on warfarin therapy	PX	HCPCS
G8184	Clinician documented that patient with heart failure and atrial fibrillation was not an eligible candidate for warfarin therapy measure	PX	HCPCS
G8681	Patient hospitalized with principal diagnosis of heart failure during the measurement period	PX	HCPCS
Other ischemic heart disease			
411	Other acute and subacute forms of ischemic heart disease	DX	ICD-09-CM
411.0	Postmyocardial infarction syndrome	DX	ICD-09-CM
411.1	Intermediate coronary syndrome	DX	ICD-09-CM
411.8	Other acute and subacute forms of ischemic heart disease	DX	ICD-09-CM
411.81	Acute coronary occlusion without myocardial infarction	DX	ICD-09-CM
411.89	Other acute and subacute form of ischemic heart disease	DX	ICD-09-CM
413	Angina pectoris	DX	ICD-09-CM
413.0	Angina decubitus	DX	ICD-09-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
413.1	Prinzmetal angina	DX	ICD-09-CM
413.9	Other and unspecified angina pectoris	DX	ICD-09-CM
414	Other forms of chronic ischemic heart disease	DX	ICD-09-CM
414.0	Coronary atherosclerosis	DX	ICD-09-CM
414.00	Coronary atherosclerosis of unspecified type of vessel, native or graft	DX	ICD-09-CM
414.01	Coronary atherosclerosis of native coronary artery	DX	ICD-09-CM
414.02	Coronary atherosclerosis of autologous vein bypass graft	DX	ICD-09-CM
414.03	Coronary atherosclerosis of nonautologous biological bypass graft	DX	ICD-09-CM
414.04	Coronary atherosclerosis of artery bypass graft	DX	ICD-09-CM
414.05	Coronary atherosclerosis of unspecified type of bypass graft	DX	ICD-09-CM
414.06	Coronary atherosclerosis, of native coronary artery of transplanted heart	DX	ICD-09-CM
414.07	Coronary atherosclerosis, of bypass graft (artery) (vein) of transplanted heart	DX	ICD-09-CM
414.1	Aneurysm and dissection of heart	DX	ICD-09-CM
414.10	Aneurysm of heart	DX	ICD-09-CM
414.11	Aneurysm of coronary vessels	DX	ICD-09-CM
414.12	Dissection of coronary artery	DX	ICD-09-CM
414.19	Other aneurysm of heart	DX	ICD-09-CM
414.2	Chronic total occlusion of coronary artery	DX	ICD-09-CM
414.3	Coronary atherosclerosis due to lipid rich plaque	DX	ICD-09-CM
414.4	Coronary atherosclerosis due to calcified coronary lesion	DX	ICD-09-CM
414.8	Other specified forms of chronic ischemic heart disease	DX	ICD-09-CM
414.9	Unspecified chronic ischemic heart disease	DX	ICD-09-CM
429.2	Unspecified cardiovascular disease	DX	ICD-09-CM
429.5	Rupture of chordae tendineae	DX	ICD-09-CM
429.6	Rupture of papillary muscle	DX	ICD-09-CM
429.7	Certain sequelae of myocardial infarction, not elsewhere classified	DX	ICD-09-CM
429.71	Acquired cardiac septal defect	DX	ICD-09-CM
429.79	Other certain sequelae of myocardial infarction, not elsewhere classified	DX	ICD-09-CM
429.9	Unspecified heart disease	DX	ICD-09-CM
G8033	Prior myocardial infarction, coronary artery disease patient documented to be on beta-blocker therapy	PX	HCPCS
G8034	Prior myocardial infarction, coronary artery disease patient not documented to be on beta-blocker therapy	PX	HCPCS
G8035	Clinician documented that prior myocardial infarction, coronary artery disease patient was not eligible candidate for beta-blocker therapy measure	PX	HCPCS
G8036	Coronary artery disease patient documented to be on antiplatelet therapy	PX	HCPCS
G8037	Coronary artery disease patient not documented to be on antiplatelet therapy	PX	HCPCS
G8038	Clinician documented that coronary artery disease patient was not eligible candidate for antiplatelet therapy measure	PX	HCPCS
G8039	Coronary artery disease patient with low-density lipoprotein documented to be greater than 100 mg/dl	PX	HCPCS
G8040	Coronary artery disease patient with low-density lipoprotein documented to be less than or equal to 100 mg/dl	PX	HCPCS

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
G8041	Clinician documented that coronary artery disease patient was not eligible candidate for low-density lipoprotein measure	PX	HCPCS
I20.0	Unstable angina	DX	ICD-10-CM
I20.1	Angina pectoris with documented spasm	DX	ICD-10-CM
I20.8	Other forms of angina pectoris	DX	ICD-10-CM
I20.9	Angina pectoris, unspecified	DX	ICD-10-CM
I23.0	Hemopericardium as current complication following acute myocardial infarction	DX	ICD-10-CM
I23.1	Atrial septal defect as current complication following acute myocardial infarction	DX	ICD-10-CM
I23.2	Ventricular septal defect as current complication following acute myocardial infarction	DX	ICD-10-CM
I23.3	Rupture of cardiac wall without hemopericardium as current complication following acute myocardial infarction	DX	ICD-10-CM
I23.4	Rupture of chordae tendineae as current complication following acute myocardial infarction	DX	ICD-10-CM
I23.5	Rupture of papillary muscle as current complication following acute myocardial infarction	DX	ICD-10-CM
I23.6	Thrombosis of atrium, auricular appendage, and ventricle as current complications following acute myocardial infarction	DX	ICD-10-CM
I23.7	Postinfarction angina	DX	ICD-10-CM
I23.8	Other current complications following acute myocardial infarction	DX	ICD-10-CM
I24.0	Acute coronary thrombosis not resulting in myocardial infarction	DX	ICD-10-CM
I24.1	Dressler's syndrome	DX	ICD-10-CM
I24.8	Other forms of acute ischemic heart disease	DX	ICD-10-CM
I24.9	Acute ischemic heart disease, unspecified	DX	ICD-10-CM
I25.10	Atherosclerotic heart disease of native coronary artery without angina pectoris	DX	ICD-10-CM
I25.110	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris	DX	ICD-10-CM
I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm	DX	ICD-10-CM
I25.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris	DX	ICD-10-CM
I25.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris	DX	ICD-10-CM
I25.3	Aneurysm of heart	DX	ICD-10-CM
I25.41	Coronary artery aneurysm	DX	ICD-10-CM
I25.42	Coronary artery dissection	DX	ICD-10-CM
I25.5	Ischemic cardiomyopathy	DX	ICD-10-CM
I25.6	Silent myocardial ischemia	DX	ICD-10-CM
I25.700	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unstable angina pectoris	DX	ICD-10-CM
I25.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm	DX	ICD-10-CM
I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris	DX	ICD-10-CM
I25.709	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unspecified angina pectoris	DX	ICD-10-CM
I25.710	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unstable angina pectoris	DX	ICD-10-CM
I25.711	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of angina pectoris	DX	ICD-10-CM
I25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unspecified angina pectoris	DX	ICD-10-CM
I25.720	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unstable angina pectoris	DX	ICD-10-CM
I25.721	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris with documented spasm	DX	ICD-10-CM
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pectoris	DX	ICD-10-CM
I25.729	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unspecified angina pectoris	DX	ICD-10-CM
I25.730	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unstable angina pectoris	DX	ICD-10-CM
I25.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented spasm	DX	ICD-10-CM
I25.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of angina pectoris	DX	ICD-10-CM
I25.739	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unspecified angina pectoris	DX	ICD-10-CM
I25.750	Atherosclerosis of native coronary artery of transplanted heart with unstable angina	DX	ICD-10-CM
I25.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm	DX	ICD-10-CM
I25.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris	DX	ICD-10-CM
I25.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris	DX	ICD-10-CM
I25.760	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina	DX	ICD-10-CM
I25.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm	DX	ICD-10-CM
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris	DX	ICD-10-CM
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris	DX	ICD-10-CM
I25.790	Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris	DX	ICD-10-CM
I25.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm	DX	ICD-10-CM
I25.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of angina pectoris	DX	ICD-10-CM
I25.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris	DX	ICD-10-CM
I25.810	Atherosclerosis of coronary artery bypass graft(s) without angina pectoris	DX	ICD-10-CM
I25.811	Atherosclerosis of native coronary artery of transplanted heart without angina pectoris	DX	ICD-10-CM
I25.812	Atherosclerosis of bypass graft of coronary artery of transplanted heart without angina pectoris	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
I25.82	Chronic total occlusion of coronary artery	DX	ICD-10-CM
I25.83	Coronary atherosclerosis due to lipid rich plaque	DX	ICD-10-CM
I25.84	Coronary atherosclerosis due to calcified coronary lesion	DX	ICD-10-CM
I25.89	Other forms of chronic ischemic heart disease	DX	ICD-10-CM
I25.9	Chronic ischemic heart disease, unspecified	DX	ICD-10-CM
I51.0	Cardiac septal defect, acquired	DX	ICD-10-CM
I51.1	Rupture of chordae tendineae, not elsewhere classified	DX	ICD-10-CM
I51.2	Rupture of papillary muscle, not elsewhere classified	DX	ICD-10-CM
I51.9	Heart disease, unspecified	DX	ICD-10-CM
I52	Other heart disorders in diseases classified elsewhere	DX	ICD-10-CM
Stroke			
430	Subarachnoid hemorrhage	DX	ICD-09-CM
431	Intracerebral hemorrhage	DX	ICD-09-CM
433.01	Occlusion and stenosis of basilar artery with cerebral infarction	DX	ICD-09-CM
433.11	Occlusion and stenosis of carotid artery with cerebral infarction	DX	ICD-09-CM
433.21	Occlusion and stenosis of vertebral artery with cerebral infarction	DX	ICD-09-CM
433.31	Occlusion and stenosis of multiple and bilateral precerebral arteries with cerebral infarction	DX	ICD-09-CM
433.81	Occlusion and stenosis of other specified precerebral artery with cerebral infarction	DX	ICD-09-CM
433.91	Occlusion and stenosis of unspecified precerebral artery with cerebral infarction	DX	ICD-09-CM
434.01	Cerebral thrombosis with cerebral infarction	DX	ICD-09-CM
434.11	Cerebral embolism with cerebral infarction	DX	ICD-09-CM
434.91	Unspecified cerebral artery occlusion with cerebral infarction	DX	ICD-09-CM
436	Acute, but ill-defined, cerebrovascular disease	DX	ICD-09-CM
430	Subarachnoid hemorrhage	DX	ICD-09-CM
431	Intracerebral hemorrhage	DX	ICD-09-CM
433.01	Occlusion and stenosis of basilar artery with cerebral infarction	DX	ICD-09-CM
433.11	Occlusion and stenosis of carotid artery with cerebral infarction	DX	ICD-09-CM
433.21	Occlusion and stenosis of vertebral artery with cerebral infarction	DX	ICD-09-CM
433.31	Occlusion and stenosis of multiple and bilateral precerebral arteries with cerebral infarction	DX	ICD-09-CM
433.81	Occlusion and stenosis of other specified precerebral artery with cerebral infarction	DX	ICD-09-CM
433.91	Occlusion and stenosis of unspecified precerebral artery with cerebral infarction	DX	ICD-09-CM
434.01	Cerebral thrombosis with cerebral infarction	DX	ICD-09-CM
434.11	Cerebral embolism with cerebral infarction	DX	ICD-09-CM
434.91	Unspecified cerebral artery occlusion with cerebral infarction	DX	ICD-09-CM
436	Acute, but ill-defined, cerebrovascular disease	DX	ICD-09-CM
I60.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation	DX	ICD-10-CM
I60.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation	DX	ICD-10-CM
I60.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation	DX	ICD-10-CM
I60.10	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery	DX	ICD-10-CM
I60.11	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery	DX	ICD-10-CM
I60.12	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery	DX	ICD-10-CM
I60.2	Nontraumatic subarachnoid hemorrhage from anterior communicating artery	DX	ICD-10-CM
I60.30	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
I60.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery	DX	ICD-10-CM
I60.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery	DX	ICD-10-CM
I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery	DX	ICD-10-CM
I60.50	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery	DX	ICD-10-CM
I60.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery	DX	ICD-10-CM
I60.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery	DX	ICD-10-CM
I60.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries	DX	ICD-10-CM
I60.7	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery	DX	ICD-10-CM
I60.8	Other nontraumatic subarachnoid hemorrhage	DX	ICD-10-CM
I60.9	Nontraumatic subarachnoid hemorrhage, unspecified	DX	ICD-10-CM
I61.0	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical	DX	ICD-10-CM
I61.1	Nontraumatic intracerebral hemorrhage in hemisphere, cortical	DX	ICD-10-CM
I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified	DX	ICD-10-CM
I61.3	Nontraumatic intracerebral hemorrhage in brain stem	DX	ICD-10-CM
I61.4	Nontraumatic intracerebral hemorrhage in cerebellum	DX	ICD-10-CM
I61.5	Nontraumatic intracerebral hemorrhage, intraventricular	DX	ICD-10-CM
I61.6	Nontraumatic intracerebral hemorrhage, multiple localized	DX	ICD-10-CM
I61.8	Other nontraumatic intracerebral hemorrhage	DX	ICD-10-CM
I61.9	Nontraumatic intracerebral hemorrhage, unspecified	DX	ICD-10-CM
I63.00	Cerebral infarction due to thrombosis of unspecified precerebral artery	DX	ICD-10-CM
I63.011	Cerebral infarction due to thrombosis of right vertebral artery	DX	ICD-10-CM
I63.012	Cerebral infarction due to thrombosis of left vertebral artery	DX	ICD-10-CM
I63.013	Cerebral infarction due to thrombosis of bilateral vertebral arteries	DX	ICD-10-CM
I63.019	Cerebral infarction due to thrombosis of unspecified vertebral artery	DX	ICD-10-CM
I63.02	Cerebral infarction due to thrombosis of basilar artery	DX	ICD-10-CM
I63.031	Cerebral infarction due to thrombosis of right carotid artery	DX	ICD-10-CM
I63.032	Cerebral infarction due to thrombosis of left carotid artery	DX	ICD-10-CM
I63.033	Cerebral infarction due to thrombosis of bilateral carotid arteries	DX	ICD-10-CM
I63.039	Cerebral infarction due to thrombosis of unspecified carotid artery	DX	ICD-10-CM
I63.09	Cerebral infarction due to thrombosis of other precerebral artery	DX	ICD-10-CM
I63.10	Cerebral infarction due to embolism of unspecified precerebral artery	DX	ICD-10-CM
I63.111	Cerebral infarction due to embolism of right vertebral artery	DX	ICD-10-CM
I63.112	Cerebral infarction due to embolism of left vertebral artery	DX	ICD-10-CM
I63.113	Cerebral infarction due to embolism of bilateral vertebral arteries	DX	ICD-10-CM
I63.119	Cerebral infarction due to embolism of unspecified vertebral artery	DX	ICD-10-CM
I63.12	Cerebral infarction due to embolism of basilar artery	DX	ICD-10-CM
I63.131	Cerebral infarction due to embolism of right carotid artery	DX	ICD-10-CM
I63.132	Cerebral infarction due to embolism of left carotid artery	DX	ICD-10-CM
I63.133	Cerebral infarction due to embolism of bilateral carotid arteries	DX	ICD-10-CM
I63.139	Cerebral infarction due to embolism of unspecified carotid artery	DX	ICD-10-CM
I63.19	Cerebral infarction due to embolism of other precerebral artery	DX	ICD-10-CM
I63.20	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral	DX	ICD-10-CM
I63.211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral artery	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
I63.212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral artery	DX	ICD-10-CM
I63.213	Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries	DX	ICD-10-CM
I63.219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral artery	DX	ICD-10-CM
I63.22	Cerebral infarction due to unspecified occlusion or stenosis of basilar artery	DX	ICD-10-CM
I63.231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries	DX	ICD-10-CM
I63.232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries	DX	ICD-10-CM
I63.233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries	DX	ICD-10-CM
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid artery	DX	ICD-10-CM
I63.29	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries	DX	ICD-10-CM
I63.30	Cerebral infarction due to thrombosis of unspecified cerebral artery	DX	ICD-10-CM
I63.311	Cerebral infarction due to thrombosis of right middle cerebral artery	DX	ICD-10-CM
I63.312	Cerebral infarction due to thrombosis of left middle cerebral artery	DX	ICD-10-CM
I63.313	Cerebral infarction due to thrombosis of bilateral middle cerebral arteries	DX	ICD-10-CM
I63.319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery	DX	ICD-10-CM
I63.321	Cerebral infarction due to thrombosis of right anterior cerebral artery	DX	ICD-10-CM
I63.322	Cerebral infarction due to thrombosis of left anterior cerebral artery	DX	ICD-10-CM
I63.323	Cerebral infarction due to thrombosis of bilateral anterior cerebral arteries	DX	ICD-10-CM
I63.329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery	DX	ICD-10-CM
I63.331	Cerebral infarction due to thrombosis of right posterior cerebral artery	DX	ICD-10-CM
I63.332	Cerebral infarction due to thrombosis of left posterior cerebral artery	DX	ICD-10-CM
I63.333	Cerebral infarction due to thrombosis of bilateral posterior cerebral arteries	DX	ICD-10-CM
I63.339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery	DX	ICD-10-CM
I63.341	Cerebral infarction due to thrombosis of right cerebellar artery	DX	ICD-10-CM
I63.342	Cerebral infarction due to thrombosis of left cerebellar artery	DX	ICD-10-CM
I63.343	Cerebral infarction due to thrombosis of bilateral cerebellar arteries	DX	ICD-10-CM
I63.349	Cerebral infarction due to thrombosis of unspecified cerebellar artery	DX	ICD-10-CM
I63.39	Cerebral infarction due to thrombosis of other cerebral artery	DX	ICD-10-CM
I63.40	Cerebral infarction due to embolism of unspecified cerebral artery	DX	ICD-10-CM
I63.411	Cerebral infarction due to embolism of right middle cerebral artery	DX	ICD-10-CM
I63.412	Cerebral infarction due to embolism of left middle cerebral artery	DX	ICD-10-CM
I63.413	Cerebral infarction due to embolism of bilateral middle cerebral arteries	DX	ICD-10-CM
I63.419	Cerebral infarction due to embolism of unspecified middle cerebral artery	DX	ICD-10-CM
I63.421	Cerebral infarction due to embolism of right anterior cerebral artery	DX	ICD-10-CM
I63.422	Cerebral infarction due to embolism of left anterior cerebral artery	DX	ICD-10-CM
I63.423	Cerebral infarction due to embolism of bilateral anterior cerebral arteries	DX	ICD-10-CM
I63.429	Cerebral infarction due to embolism of unspecified anterior cerebral artery	DX	ICD-10-CM
I63.431	Cerebral infarction due to embolism of right posterior cerebral artery	DX	ICD-10-CM
I63.432	Cerebral infarction due to embolism of left posterior cerebral artery	DX	ICD-10-CM
I63.433	Cerebral infarction due to embolism of bilateral posterior cerebral arteries	DX	ICD-10-CM
I63.439	Cerebral infarction due to embolism of unspecified posterior cerebral artery	DX	ICD-10-CM
I63.441	Cerebral infarction due to embolism of right cerebellar artery	DX	ICD-10-CM
I63.442	Cerebral infarction due to embolism of left cerebellar artery	DX	ICD-10-CM
I63.443	Cerebral infarction due to embolism of bilateral cerebellar arteries	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
I63.449	Cerebral infarction due to embolism of unspecified cerebellar artery	DX	ICD-10-CM
I63.49	Cerebral infarction due to embolism of other cerebral artery	DX	ICD-10-CM
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	DX	ICD-10-CM
I63.511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery	DX	ICD-10-CM
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery	DX	ICD-10-CM
I63.513	Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle cerebral	DX	ICD-10-CM
I63.519	Cerebral infarction due to unspecified occlusion or stenosis of unspecified middle cerebral artery	DX	ICD-10-CM
I63.521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery	DX	ICD-10-CM
I63.522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery	DX	ICD-10-CM
I63.523	Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior cerebral arteries	DX	ICD-10-CM
I63.529	Cerebral infarction due to unspecified occlusion or stenosis of unspecified anterior cerebral artery	DX	ICD-10-CM
I63.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery	DX	ICD-10-CM
I63.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery	DX	ICD-10-CM
I63.533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior cerebral arteries	DX	ICD-10-CM
I63.539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery	DX	ICD-10-CM
I63.541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery	DX	ICD-10-CM
I63.542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery	DX	ICD-10-CM
I63.543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries	DX	ICD-10-CM
I63.549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery	DX	ICD-10-CM
I63.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery	DX	ICD-10-CM
I63.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic	DX	ICD-10-CM
I63.8	Other cerebral infarction	DX	ICD-10-CM
I63.9	Cerebral infarction, unspecified	DX	ICD-10-CM
I67.89	Other cerebrovascular disease	DX	ICD-10-CM
I60.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation	DX	ICD-10-CM
I60.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation	DX	ICD-10-CM
I60.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation	DX	ICD-10-CM
I60.10	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery	DX	ICD-10-CM
I60.11	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery	DX	ICD-10-CM
I60.12	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery	DX	ICD-10-CM
I60.2	Nontraumatic subarachnoid hemorrhage from anterior communicating artery	DX	ICD-10-CM
I60.30	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery	DX	ICD-10-CM
I60.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery	DX	ICD-10-CM
I60.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery	DX	ICD-10-CM
I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery	DX	ICD-10-CM
I60.50	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery	DX	ICD-10-CM
I60.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery	DX	ICD-10-CM
I60.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
I60.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries	DX	ICD-10-CM
I60.7	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery	DX	ICD-10-CM
I60.8	Other nontraumatic subarachnoid hemorrhage	DX	ICD-10-CM
I60.9	Nontraumatic subarachnoid hemorrhage, unspecified	DX	ICD-10-CM
I61.0	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical	DX	ICD-10-CM
I61.1	Nontraumatic intracerebral hemorrhage in hemisphere, cortical	DX	ICD-10-CM
I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified	DX	ICD-10-CM
I61.3	Nontraumatic intracerebral hemorrhage in brain stem	DX	ICD-10-CM
I61.4	Nontraumatic intracerebral hemorrhage in cerebellum	DX	ICD-10-CM
I61.5	Nontraumatic intracerebral hemorrhage, intraventricular	DX	ICD-10-CM
I61.6	Nontraumatic intracerebral hemorrhage, multiple localized	DX	ICD-10-CM
I61.8	Other nontraumatic intracerebral hemorrhage	DX	ICD-10-CM
I61.9	Nontraumatic intracerebral hemorrhage, unspecified	DX	ICD-10-CM
I63.00	Cerebral infarction due to thrombosis of unspecified precerebral artery	DX	ICD-10-CM
I63.011	Cerebral infarction due to thrombosis of right vertebral artery	DX	ICD-10-CM
I63.012	Cerebral infarction due to thrombosis of left vertebral artery	DX	ICD-10-CM
I63.013	Cerebral infarction due to thrombosis of bilateral vertebral arteries	DX	ICD-10-CM
I63.019	Cerebral infarction due to thrombosis of unspecified vertebral artery	DX	ICD-10-CM
I63.02	Cerebral infarction due to thrombosis of basilar artery	DX	ICD-10-CM
I63.031	Cerebral infarction due to thrombosis of right carotid artery	DX	ICD-10-CM
I63.032	Cerebral infarction due to thrombosis of left carotid artery	DX	ICD-10-CM
I63.033	Cerebral infarction due to thrombosis of bilateral carotid arteries	DX	ICD-10-CM
I63.039	Cerebral infarction due to thrombosis of unspecified carotid artery	DX	ICD-10-CM
I63.09	Cerebral infarction due to thrombosis of other precerebral artery	DX	ICD-10-CM
I63.10	Cerebral infarction due to embolism of unspecified precerebral artery	DX	ICD-10-CM
I63.111	Cerebral infarction due to embolism of right vertebral artery	DX	ICD-10-CM
I63.112	Cerebral infarction due to embolism of left vertebral artery	DX	ICD-10-CM
I63.113	Cerebral infarction due to embolism of bilateral vertebral arteries	DX	ICD-10-CM
I63.119	Cerebral infarction due to embolism of unspecified vertebral artery	DX	ICD-10-CM
I63.12	Cerebral infarction due to embolism of basilar artery	DX	ICD-10-CM
I63.131	Cerebral infarction due to embolism of right carotid artery	DX	ICD-10-CM
I63.132	Cerebral infarction due to embolism of left carotid artery	DX	ICD-10-CM
I63.133	Cerebral infarction due to embolism of bilateral carotid arteries	DX	ICD-10-CM
I63.139	Cerebral infarction due to embolism of unspecified carotid artery	DX	ICD-10-CM
I63.19	Cerebral infarction due to embolism of other precerebral artery	DX	ICD-10-CM
I63.20	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral	DX	ICD-10-CM
I63.211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral artery	DX	ICD-10-CM
I63.212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral artery	DX	ICD-10-CM
I63.213	Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries	DX	ICD-10-CM
I63.219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral artery	DX	ICD-10-CM
I63.22	Cerebral infarction due to unspecified occlusion or stenosis of basilar artery	DX	ICD-10-CM
I63.231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries	DX	ICD-10-CM
I63.232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
I63.233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries	DX	ICD-10-CM
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid artery	DX	ICD-10-CM
I63.29	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries	DX	ICD-10-CM
I63.30	Cerebral infarction due to thrombosis of unspecified cerebral artery	DX	ICD-10-CM
I63.311	Cerebral infarction due to thrombosis of right middle cerebral artery	DX	ICD-10-CM
I63.312	Cerebral infarction due to thrombosis of left middle cerebral artery	DX	ICD-10-CM
I63.313	Cerebral infarction due to thrombosis of bilateral middle cerebral arteries	DX	ICD-10-CM
I63.319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery	DX	ICD-10-CM
I63.321	Cerebral infarction due to thrombosis of right anterior cerebral artery	DX	ICD-10-CM
I63.322	Cerebral infarction due to thrombosis of left anterior cerebral artery	DX	ICD-10-CM
I63.323	Cerebral infarction due to thrombosis of bilateral anterior cerebral arteries	DX	ICD-10-CM
I63.329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery	DX	ICD-10-CM
I63.331	Cerebral infarction due to thrombosis of right posterior cerebral artery	DX	ICD-10-CM
I63.332	Cerebral infarction due to thrombosis of left posterior cerebral artery	DX	ICD-10-CM
I63.333	Cerebral infarction due to thrombosis of bilateral posterior cerebral arteries	DX	ICD-10-CM
I63.339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery	DX	ICD-10-CM
I63.341	Cerebral infarction due to thrombosis of right cerebellar artery	DX	ICD-10-CM
I63.342	Cerebral infarction due to thrombosis of left cerebellar artery	DX	ICD-10-CM
I63.343	Cerebral infarction due to thrombosis of bilateral cerebellar arteries	DX	ICD-10-CM
I63.349	Cerebral infarction due to thrombosis of unspecified cerebellar artery	DX	ICD-10-CM
I63.39	Cerebral infarction due to thrombosis of other cerebral artery	DX	ICD-10-CM
I63.40	Cerebral infarction due to embolism of unspecified cerebral artery	DX	ICD-10-CM
I63.411	Cerebral infarction due to embolism of right middle cerebral artery	DX	ICD-10-CM
I63.412	Cerebral infarction due to embolism of left middle cerebral artery	DX	ICD-10-CM
I63.413	Cerebral infarction due to embolism of bilateral middle cerebral arteries	DX	ICD-10-CM
I63.419	Cerebral infarction due to embolism of unspecified middle cerebral artery	DX	ICD-10-CM
I63.421	Cerebral infarction due to embolism of right anterior cerebral artery	DX	ICD-10-CM
I63.422	Cerebral infarction due to embolism of left anterior cerebral artery	DX	ICD-10-CM
I63.423	Cerebral infarction due to embolism of bilateral anterior cerebral arteries	DX	ICD-10-CM
I63.429	Cerebral infarction due to embolism of unspecified anterior cerebral artery	DX	ICD-10-CM
I63.431	Cerebral infarction due to embolism of right posterior cerebral artery	DX	ICD-10-CM
I63.432	Cerebral infarction due to embolism of left posterior cerebral artery	DX	ICD-10-CM
I63.433	Cerebral infarction due to embolism of bilateral posterior cerebral arteries	DX	ICD-10-CM
I63.439	Cerebral infarction due to embolism of unspecified posterior cerebral artery	DX	ICD-10-CM
I63.441	Cerebral infarction due to embolism of right cerebellar artery	DX	ICD-10-CM
I63.442	Cerebral infarction due to embolism of left cerebellar artery	DX	ICD-10-CM
I63.443	Cerebral infarction due to embolism of bilateral cerebellar arteries	DX	ICD-10-CM
I63.449	Cerebral infarction due to embolism of unspecified cerebellar artery	DX	ICD-10-CM
I63.49	Cerebral infarction due to embolism of other cerebral artery	DX	ICD-10-CM
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	DX	ICD-10-CM
I63.511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery	DX	ICD-10-CM
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery	DX	ICD-10-CM
I63.513	Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle cerebral	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
I63.519	Cerebral infarction due to unspecified occlusion or stenosis of unspecified middle cerebral artery	DX	ICD-10-CM
I63.521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery	DX	ICD-10-CM
I63.522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery	DX	ICD-10-CM
I63.523	Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior cerebral arteries	DX	ICD-10-CM
I63.529	Cerebral infarction due to unspecified occlusion or stenosis of unspecified anterior cerebral artery	DX	ICD-10-CM
I63.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery	DX	ICD-10-CM
I63.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery	DX	ICD-10-CM
I63.533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior cerebral arteries	DX	ICD-10-CM
I63.539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery	DX	ICD-10-CM
I63.541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery	DX	ICD-10-CM
I63.542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery	DX	ICD-10-CM
I63.543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries	DX	ICD-10-CM
I63.549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery	DX	ICD-10-CM
I63.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery	DX	ICD-10-CM
I63.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic	DX	ICD-10-CM
I63.8	Other cerebral infarction	DX	ICD-10-CM
I63.9	Cerebral infarction, unspecified	DX	ICD-10-CM
I67.89	Other cerebrovascular disease	DX	ICD-10-CM
Transient ischemic attack			
435	Transient cerebral ischemia	DX	ICD-09-CM
435.0	Basilar artery syndrome	DX	ICD-09-CM
435.1	Vertebral artery syndrome	DX	ICD-09-CM
435.2	Subclavian steal syndrome	DX	ICD-09-CM
435.3	Vertebrobasilar artery syndrome	DX	ICD-09-CM
435.8	Other specified transient cerebral ischemias	DX	ICD-09-CM
435.9	Unspecified transient cerebral ischemia	DX	ICD-09-CM
G45.0	Vertebro-basilar artery syndrome	DX	ICD-10-CM
G45.1	Carotid artery syndrome (hemispheric)	DX	ICD-10-CM
G45.2	Multiple and bilateral precerebral artery syndromes	DX	ICD-10-CM
G45.8	Other transient cerebral ischemic attacks and related syndromes	DX	ICD-10-CM
G45.9	Transient cerebral ischemic attack, unspecified	DX	ICD-10-CM
G46.0	Middle cerebral artery syndrome	DX	ICD-10-CM
G46.1	Anterior cerebral artery syndrome	DX	ICD-10-CM
G46.2	Posterior cerebral artery syndrome	DX	ICD-10-CM
I67.841	Reversible cerebrovascular vasoconstriction syndrome	DX	ICD-10-CM
I67.848	Other cerebrovascular vasospasm and vasoconstriction	DX	ICD-10-CM
Other medical conditions (falls, fractures, syncope, walker use)			
E880	Accidental fall on or from stairs or steps	DX	ICD-09-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
E8800	Accidental fall on or from escalator	DX	ICD-09-CM
E8801	Accidental fall on or from sidewalk curb	DX	ICD-09-CM
E8809	Accidental fall on or from other stairs or steps	DX	ICD-09-CM
E881	Accidental fall on or from ladders or scaffolding	DX	ICD-09-CM
E8810	Accidental fall from ladder	DX	ICD-09-CM
E8811	Accidental fall from scaffolding	DX	ICD-09-CM
E882	Accidental fall from or out of building or other structure	DX	ICD-09-CM
E883	Accidental fall into hole or other opening in surface	DX	ICD-09-CM
E8830	Accident from diving or jumping into water (swimming pool)	DX	ICD-09-CM
E8831	Accidental fall into well	DX	ICD-09-CM
E8832	Accidental fall into storm drain or manhole	DX	ICD-09-CM
E8839	Accidental fall into other hole or other opening in surface	DX	ICD-09-CM
E884	Other accidental fall from one level to another	DX	ICD-09-CM
E8840	Accidental fall from playground equipment	DX	ICD-09-CM
E8841	Accidental fall from cliff	DX	ICD-09-CM
E8842	Accidental fall from chair	DX	ICD-09-CM
E8843	Accidental fall from wheelchair	DX	ICD-09-CM
E8844	Accidental fall from bed	DX	ICD-09-CM
E8845	Accidental fall from other furniture	DX	ICD-09-CM
E8846	Accidental fall from commode	DX	ICD-09-CM
E8849	Other accidental fall from one level to another	DX	ICD-09-CM
E885	Accidental fall on same level from slipping, tripping, or stumbling	DX	ICD-09-CM
E8850	Fall on same level from (nonmotorized) scooter	DX	ICD-09-CM
E8851	Fall from roller skates	DX	ICD-09-CM
E8852	Fall from skateboard	DX	ICD-09-CM
E8853	Fall from skis	DX	ICD-09-CM
E8854	Fall from snowboard	DX	ICD-09-CM
E8859	Fall from other slipping, tripping, or stumbling	DX	ICD-09-CM
E886	Accidental fall on same level from collision, pushing, or shoving, by or with other person	DX	ICD-09-CM
E8860	Accidental fall on same level from collision, pushing, or shoving, by or with other person in sports	DX	ICD-09-CM
E8869	Other and unspecified accidental falls on same level from collision, pushing, or shoving, by or with other person	DX	ICD-09-CM
E887	Fracture in accidental fall, cause unspecified	DX	ICD-09-CM
E888	Other and unspecified accidental fall	DX	ICD-09-CM
E8880	Fall resulting in striking against sharp object	DX	ICD-09-CM
E8881	Fall resulting in striking against other object	DX	ICD-09-CM
E8888	Other fall	DX	ICD-09-CM
E8889	Unspecified fall	DX	ICD-09-CM
E9176	Strike against or struck accidentally by crowd, by collective fear or panic with subsequent fall	DX	ICD-09-CM
E9177	Strike against or struck accidentally by furniture with subsequent fall	DX	ICD-09-CM
E9178	Strike against or struck accidentally by other stationary object with subsequent fall	DX	ICD-09-CM
E9179	Other accident caused by striking against or being struck accidentally by objects or persons	DX	ICD-09-CM

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Code	Description	Code Type	Code Category
E9293	Late effects of accidental fall	DX	ICD-09-CM
807	Closed fracture of rib(s)	DX	ICD-09-CM
807	Closed fracture of rib(s), unspecified	DX	ICD-09-CM
807.01	Closed fracture of one rib	DX	ICD-09-CM
807.02	Closed fracture of two ribs	DX	ICD-09-CM
807.03	Closed fracture of three ribs	DX	ICD-09-CM
807.04	Closed fracture of four ribs	DX	ICD-09-CM
807.05	Closed fracture of five ribs	DX	ICD-09-CM
807.06	Closed fracture of six ribs	DX	ICD-09-CM
807.07	Closed fracture of seven ribs	DX	ICD-09-CM
807.08	Closed fracture of eight or more ribs	DX	ICD-09-CM
807.09	Closed fracture of multiple ribs, unspecified	DX	ICD-09-CM
807.1	Open fracture of rib(s)	DX	ICD-09-CM
807.1	Open fracture of rib(s), unspecified	DX	ICD-09-CM
807.11	Open fracture of one rib	DX	ICD-09-CM
807.12	Open fracture of two ribs	DX	ICD-09-CM
807.13	Open fracture of three ribs	DX	ICD-09-CM
807.14	Open fracture of four ribs	DX	ICD-09-CM
807.15	Open fracture of five ribs	DX	ICD-09-CM
807.16	Open fracture of six ribs	DX	ICD-09-CM
807.17	Open fracture of seven ribs	DX	ICD-09-CM
807.18	Open fracture of eight or more ribs	DX	ICD-09-CM
807.19	Open fracture of multiple ribs, unspecified	DX	ICD-09-CM
810	Fracture of clavicle	DX	ICD-09-CM
810	Closed fracture of clavicle	DX	ICD-09-CM
810	Unspecified part of closed fracture of clavicle	DX	ICD-09-CM
810.01	Closed fracture of sternal end of clavicle	DX	ICD-09-CM
810.02	Closed fracture of shaft of clavicle	DX	ICD-09-CM
810.03	Closed fracture of acromial end of clavicle	DX	ICD-09-CM
810.1	Open fracture of clavicle	DX	ICD-09-CM
810.1	Unspecified part of open fracture of clavicle	DX	ICD-09-CM
810.11	Open fracture of sternal end of clavicle	DX	ICD-09-CM
810.12	Open fracture of shaft of clavicle	DX	ICD-09-CM
810.13	Open fracture of acromial end of clavicle	DX	ICD-09-CM
813	Fracture of radius and ulna	DX	ICD-09-CM
813	Closed fracture of upper end of radius and ulna	DX	ICD-09-CM
813	Unspecified fracture of radius and ulna, upper end of forearm, closed	DX	ICD-09-CM
813.01	Closed fracture of olecranon process of ulna	DX	ICD-09-CM
813.02	Closed fracture of coronoid process of ulna	DX	ICD-09-CM
813.03	Closed Monteggia's fracture	DX	ICD-09-CM
813.04	Other and unspecified closed fractures of proximal end of ulna (alone)	DX	ICD-09-CM
813.05	Closed fracture of head of radius	DX	ICD-09-CM
813.06	Closed fracture of neck of radius	DX	ICD-09-CM

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Code	Description	Code Type	Code Category
813.07	Other and unspecified closed fractures of proximal end of radius (alone)	DX	ICD-09-CM
813.08	Closed fracture of radius with ulna, upper end (any part)	DX	ICD-09-CM
813.1	Open fracture of upper end of radius and ulna	DX	ICD-09-CM
813.1	Unspecified open fracture of upper end of forearm	DX	ICD-09-CM
813.11	Open fracture of olecranon process of ulna	DX	ICD-09-CM
813.12	Open fracture of coronoid process of ulna	DX	ICD-09-CM
813.13	Open Monteggia's fracture	DX	ICD-09-CM
813.14	Other and unspecified open fractures of proximal end of ulna (alone)	DX	ICD-09-CM
813.15	Open fracture of head of radius	DX	ICD-09-CM
813.16	Open fracture of neck of radius	DX	ICD-09-CM
813.17	Other and unspecified open fractures of proximal end of radius (alone)	DX	ICD-09-CM
813.18	Open fracture of radius with ulna, upper end (any part)	DX	ICD-09-CM
813.2	Closed fracture of shaft of radius and ulna	DX	ICD-09-CM
813.2	Unspecified closed fracture of shaft of radius or ulna	DX	ICD-09-CM
813.21	Closed fracture of shaft of radius (alone)	DX	ICD-09-CM
813.22	Closed fracture of shaft of ulna (alone)	DX	ICD-09-CM
813.23	Closed fracture of shaft of radius with ulna	DX	ICD-09-CM
813.3	Open fracture of shaft of radius and ulna	DX	ICD-09-CM
813.3	Unspecified open fracture of shaft of radius or ulna	DX	ICD-09-CM
813.31	Open fracture of shaft of radius (alone)	DX	ICD-09-CM
813.32	Open fracture of shaft of ulna (alone)	DX	ICD-09-CM
813.33	Open fracture of shaft of radius with ulna	DX	ICD-09-CM
813.4	Closed fracture of lower end of radius and ulna	DX	ICD-09-CM
813.4	Unspecified closed fracture of lower end of forearm	DX	ICD-09-CM
813.41	Closed Colles' fracture	DX	ICD-09-CM
813.42	Other closed fractures of distal end of radius (alone)	DX	ICD-09-CM
813.43	Closed fracture of distal end of ulna (alone)	DX	ICD-09-CM
813.44	Closed fracture of lower end of radius with ulna	DX	ICD-09-CM
813.45	Torus fracture of radius (alone)	DX	ICD-09-CM
813.46	Torus fracture of ulna (alone)	DX	ICD-09-CM
813.47	Torus fracture of radius and ulna	DX	ICD-09-CM
813.5	Open fracture of lower end of radius and ulna	DX	ICD-09-CM
813.5	Unspecified open fracture of lower end of forearm	DX	ICD-09-CM
813.51	Open Colles' fracture	DX	ICD-09-CM
813.52	Other open fractures of distal end of radius (alone)	DX	ICD-09-CM
813.53	Open fracture of distal end of ulna (alone)	DX	ICD-09-CM
813.54	Open fracture of lower end of radius with ulna	DX	ICD-09-CM
813.8	Closed fracture of unspecified part of radius with ulna	DX	ICD-09-CM
813.8	Closed fracture of unspecified part of forearm	DX	ICD-09-CM
813.81	Closed fracture of unspecified part of radius (alone)	DX	ICD-09-CM
813.82	Closed fracture of unspecified part of ulna (alone)	DX	ICD-09-CM
813.83	Closed fracture of unspecified part of radius with ulna	DX	ICD-09-CM
813.9	Open fracture of unspecified part of radius with ulna	DX	ICD-09-CM

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Code	Description	Code Type	Code Category
813.9	Open fracture of unspecified part of forearm	DX	ICD-09-CM
813.91	Open fracture of unspecified part of radius (alone)	DX	ICD-09-CM
813.92	Open fracture of unspecified part of ulna (alone)	DX	ICD-09-CM
813.93	Open fracture of unspecified part of radius with ulna	DX	ICD-09-CM
820	Fracture of neck of femur	DX	ICD-09-CM
820	Closed transcervical fracture	DX	ICD-09-CM
820	Closed fracture of unspecified intracapsular section of neck of femur	DX	ICD-09-CM
820.01	Closed fracture of epiphysis (separation) (upper) of neck of femur	DX	ICD-09-CM
820.02	Closed fracture of midcervical section of femur	DX	ICD-09-CM
820.03	Closed fracture of base of neck of femur	DX	ICD-09-CM
820.09	Other closed transcervical fracture of femur	DX	ICD-09-CM
820.1	Open transcervical fracture	DX	ICD-09-CM
820.1	Open fracture of unspecified intracapsular section of neck of femur	DX	ICD-09-CM
820.11	Open fracture of epiphysis (separation) (upper) of neck of femur	DX	ICD-09-CM
820.12	Open fracture of midcervical section of femur	DX	ICD-09-CM
820.13	Open fracture of base of neck of femur	DX	ICD-09-CM
820.19	Other open transcervical fracture of femur	DX	ICD-09-CM
820.2	Closed pertrochanteric fracture of femur	DX	ICD-09-CM
820.2	Closed fracture of unspecified trochanteric section of femur	DX	ICD-09-CM
820.21	Closed fracture of intertrochanteric section of femur	DX	ICD-09-CM
820.22	Closed fracture of subtrochanteric section of femur	DX	ICD-09-CM
820.3	Open pertrochanteric fracture of femur	DX	ICD-09-CM
820.3	Open fracture of unspecified trochanteric section of femur	DX	ICD-09-CM
820.31	Open fracture of intertrochanteric section of femur	DX	ICD-09-CM
820.32	Open fracture of subtrochanteric section of femur	DX	ICD-09-CM
820.8	Closed fracture of unspecified part of neck of femur	DX	ICD-09-CM
820.9	Open fracture of unspecified part of neck of femur	DX	ICD-09-CM
78.11	Application of external fixator device, scapula, clavicle, and thorax [ribs and sternum]	PX	ICD-09-CM
78.13	Application of external fixator device, radius and ulna	PX	ICD-09-CM
78.15	Application of external fixator device, femur	PX	ICD-09-CM
78.41	Other repair or plastic operations on scapula, clavicle, and thorax (ribs and sternum)	PX	ICD-09-CM
78.43	Other repair or plastic operations on radius and ulna	PX	ICD-09-CM
78.45	Other repair or plastic operations on femur	PX	ICD-09-CM
78.51	Internal fixation of scapula, clavicle, and thorax (ribs and sternum) without fracture reduction	PX	ICD-09-CM
78.53	Internal fixation of radius and ulna without fracture reduction	PX	ICD-09-CM
78.55	Internal fixation of femur without fracture reduction	PX	ICD-09-CM
78.61	Removal of implanted device from scapula, clavicle, and thorax (ribs and sternum)	PX	ICD-09-CM
78.63	Removal of implanted device from radius and ulna	PX	ICD-09-CM
78.65	Removal of implanted device from femur	PX	ICD-09-CM
79.02	Closed reduction of fracture of radius and ulna without internal fixation	PX	ICD-09-CM
79.05	Closed reduction of fracture of femur without internal fixation	PX	ICD-09-CM
79.12	Closed reduction of fracture of radius and ulna with internal fixation	PX	ICD-09-CM
79.15	Closed reduction of fracture of femur with internal fixation	PX	ICD-09-CM

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Code	Description	Code Type	Code Category
79.22	Open reduction of fracture of radius and ulna without internal fixation	PX	ICD-09-CM
79.25	Open reduction of fracture of femur without internal fixation	PX	ICD-09-CM
79.32	Open reduction of fracture of radius and ulna with internal fixation	PX	ICD-09-CM
79.35	Open reduction of fracture of femur with internal fixation	PX	ICD-09-CM
79.62	Debridement of open fracture of radius and ulna	PX	ICD-09-CM
79.65	Debridement of open fracture of femur	PX	ICD-09-CM
21800	Closed treatment of broken rib	PX	CPT-4
21805	Open treatment of broken rib	PX	CPT-4
21810	Treatment of broken rib	PX	CPT-4
21812	Open treatment of broken ribs with insertion of hardware	PX	CPT-4
21813	Open treatment of broken ribs with insertion of hardware	PX	CPT-4
23485	Incision to repair collar bone for nonunion of fracture with bone graft	PX	CPT-4
23500	Closed treatment of collar bone fracture	PX	CPT-4
23505	Closed treatment of collar bone broken with manipulation	PX	CPT-4
23515	Open treatment of collar bone broken	PX	CPT-4
24586	Open treatment of broken and/or dislocated upper or lower arm bones at elbow	PX	CPT-4
24587	Open treatment of broken and/or dislocated upper or lower arm bones at elbow with	PX	CPT-4
24620	Closed treatment of broken and dislocated forearm bones at elbow with manipulation	PX	CPT-4
24635	Open treatment of broken and dislocated forearm bones at elbow	PX	CPT-4
24650	Closed treatment of broken forearm bone at elbow	PX	CPT-4
24655	Closed treatment of broken forearm bone at elbow with manipulation	PX	CPT-4
24665	Open treatment of broken forearm bone at elbow	PX	CPT-4
24666	Open treatment of broken forearm bone at elbow with prosthetic replacement	PX	CPT-4
24670	Closed treatment of broken forearm bone at elbow	PX	CPT-4
24675	Closed treatment of broken forearm bone at elbow with manipulation	PX	CPT-4
24685	Open treatment of broken forearm bone at elbow	PX	CPT-4
25500	Closed treatment of broken forearm bone	PX	CPT-4
25505	Closed treatment of broken forearm bone with manipulation	PX	CPT-4
25515	Open treatment of broken forearm bone	PX	CPT-4
25520	Closed treatment of broken forearm and dislocated wrist bones	PX	CPT-4
25525	Open treatment of broken forearm bone and closed treatment of joint dislocation	PX	CPT-4
25526	Open treatment of broken forearm bone	PX	CPT-4
25530	Closed treatment of broken forearm bone	PX	CPT-4
25535	Closed treatment of broken forearm bone with manipulation	PX	CPT-4
25545	Open treatment of broken forearm bone	PX	CPT-4
25560	Closed treatment of broken forearm bones	PX	CPT-4
25565	Closed treatment of broken forearm bones with manipulation	PX	CPT-4
25574	Open treatment of broken forearm bones	PX	CPT-4
25575	Open treatment of broken forearm bones	PX	CPT-4
25600	Closed treatment of broken forearm bones	PX	CPT-4
25605	Closed treatment of broken or growth plate separate of forearm bone at wrist with manipulation	PX	CPT-4

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Code	Description	Code Type	Code Category
25606	Insertion of hardware to lower forearm bone broken or growth plate separation, accessed through the skin	PX	CPT-4
25607	Open treatment of broken or lower forearm bone or growth plate separation with insertion of hardware	PX	CPT-4
25608	Open treatment of broken of lower forearm or growth plate separation with insertion of hardware of 2 fragments	PX	CPT-4
25609	Open treatment of broken of lower forearm or growth plate separation with insertion of hardware of 3 or more fragments	PX	CPT-4
25611	Percutaneous skeletal fixation of distal radial fracture (eg, colles or smith type) or epiphyseal separation, with or without fracture of ulnar styloid, requiring manipulation, with or without external fixation	PX	CPT-4
25620	Open treatment of distal radial fracture (eg, colles or smith type) or epiphyseal separation, with or without fracture of ulnar styloid, with or without internal or external fixation	PX	CPT-4
25650	Closed treatment of broken forearm bone at wrist bone	PX	CPT-4
25651	Insertion of hardware broken bone of forearm at wrist, accessed through the skin	PX	CPT-4
25652	Open treatment of broken wrist	PX	CPT-4
27230	Closed treatment of upper thigh bone fracture	PX	CPT-4
27232	Closed treatment of thigh bone fracture with manipulation	PX	CPT-4
27235	Insertion of hardware to broken thigh bone, accessed through the skin	PX	CPT-4
27236	Open treatment of broken thigh bone with insertion of hardware or prosthetic replacement	PX	CPT-4
27238	Closed treatment of fracture below neck of upper thigh bone	PX	CPT-4
27240	Closed treatment of broken thigh bone with manipulation	PX	CPT-4
27244	Surgical treatment of broken thigh bone	PX	CPT-4
27245	Surgical treatment of broken thigh bone	PX	CPT-4
27246	Closed treatment of broken thigh bone	PX	CPT-4
27248	Open treatment of broken thigh bone	PX	CPT-4
27254	Open treatment of fracture and traumatic dislocation of hip socket and thigh bone	PX	CPT-4
27267	Closed treatment of broken thigh bone	PX	CPT-4
27268	Closed treatment of fracture of upper portion and head of thigh bone with manipulation	PX	CPT-4
27269	Open treatment of fracture of thigh bone	PX	CPT-4
27500	Closed treatment of thigh bone fracture	PX	CPT-4
27501	Closed treatment of broken thigh bone	PX	CPT-4
27502	Closed treatment of broken thigh bone with manipulation	PX	CPT-4
27503	Closed treatment of broken thigh bone with manipulation	PX	CPT-4
27506	Open treatment of broken thigh bone	PX	CPT-4
27507	Open treatment of broken thigh bone	PX	CPT-4
27508	Closed treatment of broken thigh bone	PX	CPT-4
27509	Insertion of hardware to stabilize broken thigh bone or separated growth plate, accessed through the skin	PX	CPT-4
27510	Closed treatment of broken thigh bone with manipulation	PX	CPT-4
27511	Open treatment of broken thigh bone	PX	CPT-4
27513	Open treatment of broken thigh bone	PX	CPT-4
27514	Open treatment of broken thigh bone	PX	CPT-4

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Code	Description	Code Type	Code Category
E0130	Walker, rigid (pickup), adjustable or fixed height	PX	HCPCS
E0135	Walker, folding (pickup), adjustable or fixed height	PX	HCPCS
E0140	Walker, with trunk support, adjustable or fixed height, any type	PX	HCPCS
E0141	Walker, rigid, wheeled, adjustable or fixed height	PX	HCPCS
E0142	Rigid walker, wheeled, with seat	PX	HCPCS
E0143	Walker, folding, wheeled, adjustable or fixed height	PX	HCPCS
E0144	Walker, enclosed, 4 sided framed, rigid or folding, wheeled with posterior seat	PX	HCPCS
E0145	Walker, wheeled, with seat and crutch attachments	PX	HCPCS
E0146	Folding walker, wheeled, with seat	PX	HCPCS
E0147	Walker, heavy duty, multiple braking system, variable wheel resistance	PX	HCPCS
E0148	Walker, heavy-duty, without wheels, rigid or folding, any type, each	PX	HCPCS
E0149	Walker, heavy-duty, wheeled, rigid or folding, any type	PX	HCPCS
E0154	Platform attachment, walker, each	PX	HCPCS
E0155	Wheel attachment, rigid pick-up walker, per pair	PX	HCPCS
E0156	Seat attachment, walker	PX	HCPCS
E0157	Crutch attachment, walker, each	PX	HCPCS
E0158	Leg extensions for walker, per set of 4	PX	HCPCS
E0159	Brake attachment for wheeled walker, replacement, each	PX	HCPCS
K0458	Heavy duty walker, without wheels, each	PX	HCPCS
K0459	Heavy duty wheeled walker, each	PX	HCPCS
L1520	Thkao, swivel walker	PX	HCPCS
780.2	Syncope and collapse	DX	ICD-09-CM
V00.01XA	Pedestrian on foot injured in collision with roller-skater, initial encounter	DX	ICD-10-CM
V00.01XD	Pedestrian on foot injured in collision with roller-skater, subsequent encounter	DX	ICD-10-CM
V00.02XA	Pedestrian on foot injured in collision with skateboarder, initial encounter	DX	ICD-10-CM
V00.02XD	Pedestrian on foot injured in collision with skateboarder, subsequent encounter	DX	ICD-10-CM
V00.09XA	Pedestrian on foot injured in collision with other pedestrian conveyance, initial encounter	DX	ICD-10-CM
V00.09XD	Pedestrian on foot injured in collision with other pedestrian conveyance, subsequent encounter	DX	ICD-10-CM
V00.111A	Fall from in-line roller-skates, initial encounter	DX	ICD-10-CM
V00.111D	Fall from in-line roller-skates, subsequent encounter	DX	ICD-10-CM
V00.111S	Fall from in-line roller-skates, sequela	DX	ICD-10-CM
V00.112A	In-line roller-skater colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.112D	In-line roller-skater colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.112S	In-line roller-skater colliding with stationary object, sequela	DX	ICD-10-CM
V00.118A	Other in-line roller-skate accident, initial encounter	DX	ICD-10-CM
V00.118D	Other in-line roller-skate accident, subsequent encounter	DX	ICD-10-CM
V00.118S	Other in-line roller-skate accident, sequela	DX	ICD-10-CM
V00.121A	Fall from non-in-line roller-skates, initial encounter	DX	ICD-10-CM
V00.121D	Fall from non-in-line roller-skates, subsequent encounter	DX	ICD-10-CM
V00.121S	Fall from non-in-line roller-skates, sequela	DX	ICD-10-CM
V00.122A	Non-in-line roller-skater colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.122D	Non-in-line roller-skater colliding with stationary object, subsequent encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
V00.122S	Non-in-line roller-skater colliding with stationary object, sequela	DX	ICD-10-CM
V00.128A	Other non-in-line roller-skating accident, initial encounter	DX	ICD-10-CM
V00.128D	Other non-in-line roller-skating accident, subsequent encounter	DX	ICD-10-CM
V00.128S	Other non-in-line roller-skating accident, sequela	DX	ICD-10-CM
V00.131A	Fall from skateboard, initial encounter	DX	ICD-10-CM
V00.131D	Fall from skateboard, subsequent encounter	DX	ICD-10-CM
V00.131S	Fall from skateboard, sequela	DX	ICD-10-CM
V00.132A	Skateboarder colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.132D	Skateboarder colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.132S	Skateboarder colliding with stationary object, sequela	DX	ICD-10-CM
V00.138A	Other skateboard accident, initial encounter	DX	ICD-10-CM
V00.138D	Other skateboard accident, subsequent encounter	DX	ICD-10-CM
V00.138S	Other skateboard accident, sequela	DX	ICD-10-CM
V00.141A	Fall from scooter (nonmotorized), initial encounter	DX	ICD-10-CM
V00.141D	Fall from scooter (nonmotorized), subsequent encounter	DX	ICD-10-CM
V00.141S	Fall from scooter (nonmotorized), sequela	DX	ICD-10-CM
V00.142A	Scooter (nonmotorized) colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.142D	Scooter (nonmotorized) colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.142S	Scooter (nonmotorized) colliding with stationary object, sequela	DX	ICD-10-CM
V00.148A	Other scooter (nonmotorized) accident, initial encounter	DX	ICD-10-CM
V00.148D	Other scooter (nonmotorized) accident, subsequent encounter	DX	ICD-10-CM
V00.148S	Other scooter (nonmotorized) accident, sequela	DX	ICD-10-CM
V00.151A	Fall from heeies, initial encounter	DX	ICD-10-CM
V00.151D	Fall from heeies, subsequent encounter	DX	ICD-10-CM
V00.151S	Fall from heeies, sequela	DX	ICD-10-CM
V00.152A	Heelies colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.152D	Heelies colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.152S	Heelies colliding with stationary object, sequela	DX	ICD-10-CM
V00.158A	Other heeies accident, initial encounter	DX	ICD-10-CM
V00.158D	Other heeies accident, subsequent encounter	DX	ICD-10-CM
V00.158S	Other heeies accident, sequela	DX	ICD-10-CM
V00.181A	Fall from other rolling-type pedestrian conveyance, initial encounter	DX	ICD-10-CM
V00.181D	Fall from other rolling-type pedestrian conveyance, subsequent encounter	DX	ICD-10-CM
V00.181S	Fall from other rolling-type pedestrian conveyance, sequela	DX	ICD-10-CM
V00.182A	Pedestrian on other rolling-type pedestrian conveyance colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.182D	Pedestrian on other rolling-type pedestrian conveyance colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.182S	Pedestrian on other rolling-type pedestrian conveyance colliding with stationary object, sequela	DX	ICD-10-CM
V00.188A	Other accident on other rolling-type pedestrian conveyance, initial encounter	DX	ICD-10-CM
V00.188D	Other accident on other rolling-type pedestrian conveyance, subsequent encounter	DX	ICD-10-CM
V00.188S	Other accident on other rolling-type pedestrian conveyance, sequela	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
V00.211A	Fall from ice-skates, initial encounter	DX	ICD-10-CM
V00.211D	Fall from ice-skates, subsequent encounter	DX	ICD-10-CM
V00.211S	Fall from ice-skates, sequela	DX	ICD-10-CM
V00.212A	Ice-skater colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.212D	Ice-skater colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.212S	Ice-skater colliding with stationary object, sequela	DX	ICD-10-CM
V00.218A	Other ice-skates accident, initial encounter	DX	ICD-10-CM
V00.218D	Other ice-skates accident, subsequent encounter	DX	ICD-10-CM
V00.218S	Other ice-skates accident, sequela	DX	ICD-10-CM
V00.221A	Fall from sled, initial encounter	DX	ICD-10-CM
V00.221D	Fall from sled, subsequent encounter	DX	ICD-10-CM
V00.221S	Fall from sled, sequela	DX	ICD-10-CM
V00.222A	Sledder colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.222D	Sledder colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.222S	Sledder colliding with stationary object, sequela	DX	ICD-10-CM
V00.228A	Other sled accident, initial encounter	DX	ICD-10-CM
V00.228D	Other sled accident, subsequent encounter	DX	ICD-10-CM
V00.228S	Other sled accident, sequela	DX	ICD-10-CM
V00.281A	Fall from other gliding-type pedestrian conveyance, initial encounter	DX	ICD-10-CM
V00.281D	Fall from other gliding-type pedestrian conveyance, subsequent encounter	DX	ICD-10-CM
V00.281S	Fall from other gliding-type pedestrian conveyance, sequela	DX	ICD-10-CM
V00.282A	Pedestrian on other gliding-type pedestrian conveyance colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.282D	Pedestrian on other gliding-type pedestrian conveyance colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.282S	Pedestrian on other gliding-type pedestrian conveyance colliding with stationary object, sequela	DX	ICD-10-CM
V00.288A	Other accident on other gliding-type pedestrian conveyance, initial encounter	DX	ICD-10-CM
V00.288D	Other accident on other gliding-type pedestrian conveyance, subsequent encounter	DX	ICD-10-CM
V00.288S	Other accident on other gliding-type pedestrian conveyance, sequela	DX	ICD-10-CM
V00.311A	Fall from snowboard, initial encounter	DX	ICD-10-CM
V00.311D	Fall from snowboard, subsequent encounter	DX	ICD-10-CM
V00.311S	Fall from snowboard, sequela	DX	ICD-10-CM
V00.312A	Snowboarder colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.312D	Snowboarder colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.312S	Snowboarder colliding with stationary object, sequela	DX	ICD-10-CM
V00.318A	Other snowboard accident, initial encounter	DX	ICD-10-CM
V00.318D	Other snowboard accident, subsequent encounter	DX	ICD-10-CM
V00.318S	Other snowboard accident, sequela	DX	ICD-10-CM
V00.321A	Fall from snow-skis, initial encounter	DX	ICD-10-CM
V00.321D	Fall from snow-skis, subsequent encounter	DX	ICD-10-CM
V00.321S	Fall from snow-skis, sequela	DX	ICD-10-CM
V00.322A	Snow-skier colliding with stationary object, initial encounter	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
V00.322D	Snow-skier colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.322S	Snow-skier colliding with stationary object, sequela	DX	ICD-10-CM
V00.328A	Other snow-ski accident, initial encounter	DX	ICD-10-CM
V00.328D	Other snow-ski accident, subsequent encounter	DX	ICD-10-CM
V00.328S	Other snow-ski accident, sequela	DX	ICD-10-CM
V00.381A	Fall from other flat-bottomed pedestrian conveyance, initial encounter	DX	ICD-10-CM
V00.381D	Fall from other flat-bottomed pedestrian conveyance, subsequent encounter	DX	ICD-10-CM
V00.381S	Fall from other flat-bottomed pedestrian conveyance, sequela	DX	ICD-10-CM
V00.382A	Pedestrian on other flat-bottomed pedestrian conveyance colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.382D	Pedestrian on other flat-bottomed pedestrian conveyance colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.382S	Pedestrian on other flat-bottomed pedestrian conveyance colliding with stationary object, sequela	DX	ICD-10-CM
V00.388A	Other accident on other flat-bottomed pedestrian conveyance, initial encounter	DX	ICD-10-CM
V00.388D	Other accident on other flat-bottomed pedestrian conveyance, subsequent encounter	DX	ICD-10-CM
V00.388S	Other accident on other flat-bottomed pedestrian conveyance, sequela	DX	ICD-10-CM
V00.811A	Fall from moving wheelchair (powered), initial encounter	DX	ICD-10-CM
V00.811D	Fall from moving wheelchair (powered), subsequent encounter	DX	ICD-10-CM
V00.811S	Fall from moving wheelchair (powered), sequela	DX	ICD-10-CM
V00.812A	Wheelchair (powered) colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.812D	Wheelchair (powered) colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.812S	Wheelchair (powered) colliding with stationary object, sequela	DX	ICD-10-CM
V00.818A	Other accident with wheelchair (powered), initial encounter	DX	ICD-10-CM
V00.818D	Other accident with wheelchair (powered), subsequent encounter	DX	ICD-10-CM
V00.818S	Other accident with wheelchair (powered), sequela	DX	ICD-10-CM
V00.821A	Fall from baby stroller, initial encounter	DX	ICD-10-CM
V00.821D	Fall from baby stroller, subsequent encounter	DX	ICD-10-CM
V00.821S	Fall from baby stroller, sequela	DX	ICD-10-CM
V00.822A	Baby stroller colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.822D	Baby stroller colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.822S	Baby stroller colliding with stationary object, sequela	DX	ICD-10-CM
V00.828A	Other accident with baby stroller, initial encounter	DX	ICD-10-CM
V00.828D	Other accident with baby stroller, subsequent encounter	DX	ICD-10-CM
V00.828S	Other accident with baby stroller, sequela	DX	ICD-10-CM
V00.831A	Fall from motorized mobility scooter, initial encounter	DX	ICD-10-CM
V00.831D	Fall from motorized mobility scooter, subsequent encounter	DX	ICD-10-CM
V00.831S	Fall from motorized mobility scooter, sequela	DX	ICD-10-CM
V00.832A	Motorized mobility scooter colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.832D	Motorized mobility scooter colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.832S	Motorized mobility scooter colliding with stationary object, sequela	DX	ICD-10-CM
V00.838A	Other accident with motorized mobility scooter, initial encounter	DX	ICD-10-CM
V00.838D	Other accident with motorized mobility scooter, subsequent encounter	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
V00.838S	Other accident with motorized mobility scooter, sequela	DX	ICD-10-CM
V00.891A	Fall from other pedestrian conveyance, initial encounter	DX	ICD-10-CM
V00.891D	Fall from other pedestrian conveyance, subsequent encounter	DX	ICD-10-CM
V00.891S	Fall from other pedestrian conveyance, sequela	DX	ICD-10-CM
V00.892A	Pedestrian on other pedestrian conveyance colliding with stationary object, initial encounter	DX	ICD-10-CM
V00.892D	Pedestrian on other pedestrian conveyance colliding with stationary object, subsequent encounter	DX	ICD-10-CM
V00.892S	Pedestrian on other pedestrian conveyance colliding with stationary object, sequela	DX	ICD-10-CM
V00.898A	Other accident on other pedestrian conveyance, initial encounter	DX	ICD-10-CM
V00.898D	Other accident on other pedestrian conveyance, subsequent encounter	DX	ICD-10-CM
V00.898S	Other accident on other pedestrian conveyance, sequela	DX	ICD-10-CM
W00.0XXA	Fall on same level due to ice and snow, initial encounter	DX	ICD-10-CM
W00.0XXD	Fall on same level due to ice and snow, subsequent encounter	DX	ICD-10-CM
W00.0XXS	Fall on same level due to ice and snow, sequela	DX	ICD-10-CM
W00.1XXA	Fall from stairs and steps due to ice and snow, initial encounter	DX	ICD-10-CM
W00.1XXD	Fall from stairs and steps due to ice and snow, subsequent encounter	DX	ICD-10-CM
W00.1XXS	Fall from stairs and steps due to ice and snow, sequela	DX	ICD-10-CM
W00.2XXA	Other fall from one level to another due to ice and snow, initial encounter	DX	ICD-10-CM
W00.2XXD	Other fall from one level to another due to ice and snow, subsequent encounter	DX	ICD-10-CM
W00.2XXS	Other fall from one level to another due to ice and snow, sequela	DX	ICD-10-CM
W00.9XXA	Unspecified fall due to ice and snow, initial encounter	DX	ICD-10-CM
W00.9XXD	Unspecified fall due to ice and snow, subsequent encounter	DX	ICD-10-CM
W00.9XXS	Unspecified fall due to ice and snow, sequela	DX	ICD-10-CM
W01.0XXA	Fall on same level from slipping, tripping and stumbling without subsequent striking against object, initial encounter	DX	ICD-10-CM
W01.0XXD	Fall on same level from slipping, tripping and stumbling without subsequent striking against object, subsequent encounter	DX	ICD-10-CM
W01.0XXS	Fall on same level from slipping, tripping and stumbling without subsequent striking against object, sequela	DX	ICD-10-CM
W01.10XA	Fall on same level from slipping, tripping and stumbling with subsequent striking against unspecified object, initial encounter	DX	ICD-10-CM
W01.10XD	Fall on same level from slipping, tripping and stumbling with subsequent striking against unspecified object, subsequent encounter	DX	ICD-10-CM
W01.10XS	Fall on same level from slipping, tripping and stumbling with subsequent striking against unspecified object, sequela	DX	ICD-10-CM
W01.110A	Fall on same level from slipping, tripping and stumbling with subsequent striking against sharp glass, initial encounter	DX	ICD-10-CM
W01.110D	Fall on same level from slipping, tripping and stumbling with subsequent striking against sharp glass, subsequent encounter	DX	ICD-10-CM
W01.110S	Fall on same level from slipping, tripping and stumbling with subsequent striking against sharp glass, sequela	DX	ICD-10-CM
W01.111A	Fall on same level from slipping, tripping and stumbling with subsequent striking against power tool or machine, initial encounter	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
W01.111D	Fall on same level from slipping, tripping and stumbling with subsequent striking against power tool or machine, subsequent encounter	DX	ICD-10-CM
W01.111S	Fall on same level from slipping, tripping and stumbling with subsequent striking against power tool or machine, sequela	DX	ICD-10-CM
W01.118A	Fall on same level from slipping, tripping and stumbling with subsequent striking against other sharp object, initial encounter	DX	ICD-10-CM
W01.118D	Fall on same level from slipping, tripping and stumbling with subsequent striking against other sharp object, subsequent encounter	DX	ICD-10-CM
W01.118S	Fall on same level from slipping, tripping and stumbling with subsequent striking against other sharp object, sequela	DX	ICD-10-CM
W01.119A	Fall on same level from slipping, tripping and stumbling with subsequent striking against unspecified sharp object, initial encounter	DX	ICD-10-CM
W01.119D	Fall on same level from slipping, tripping and stumbling with subsequent striking against unspecified sharp object, subsequent encounter	DX	ICD-10-CM
W01.119S	Fall on same level from slipping, tripping and stumbling with subsequent striking against unspecified sharp object, sequela	DX	ICD-10-CM
W01.190A	Fall on same level from slipping, tripping and stumbling with subsequent striking against furniture, initial encounter	DX	ICD-10-CM
W01.190D	Fall on same level from slipping, tripping and stumbling with subsequent striking against furniture, subsequent encounter	DX	ICD-10-CM
W01.190S	Fall on same level from slipping, tripping and stumbling with subsequent striking against furniture, sequela	DX	ICD-10-CM
W01.198A	Fall on same level from slipping, tripping and stumbling with subsequent striking against other object, initial encounter	DX	ICD-10-CM
W01.198D	Fall on same level from slipping, tripping and stumbling with subsequent striking against other object, subsequent encounter	DX	ICD-10-CM
W01.198S	Fall on same level from slipping, tripping and stumbling with subsequent striking against other object, sequela	DX	ICD-10-CM
W03.XXXA	Other fall on same level due to collision with another person, initial encounter	DX	ICD-10-CM
W03.XXXD	Other fall on same level due to collision with another person, subsequent encounter	DX	ICD-10-CM
W03.XXXS	Other fall on same level due to collision with another person, sequela	DX	ICD-10-CM
W04.XXXA	Fall while being carried or supported by other persons, initial encounter	DX	ICD-10-CM
W04.XXXD	Fall while being carried or supported by other persons, subsequent encounter	DX	ICD-10-CM
W04.XXXS	Fall while being carried or supported by other persons, sequela	DX	ICD-10-CM
W05.0XXA	Fall from non-moving wheelchair, initial encounter	DX	ICD-10-CM
W05.0XXD	Fall from non-moving wheelchair, subsequent encounter	DX	ICD-10-CM
W05.0XXS	Fall from non-moving wheelchair, sequela	DX	ICD-10-CM
W05.1XXA	Fall from non-moving nonmotorized scooter, initial encounter	DX	ICD-10-CM
W05.1XXD	Fall from non-moving nonmotorized scooter, subsequent encounter	DX	ICD-10-CM
W05.1XXS	Fall from non-moving nonmotorized scooter, sequela	DX	ICD-10-CM
W05.2XXA	Fall from non-moving motorized mobility scooter, initial encounter	DX	ICD-10-CM
W05.2XXD	Fall from non-moving motorized mobility scooter, subsequent encounter	DX	ICD-10-CM
W05.2XXS	Fall from non-moving motorized mobility scooter, sequela	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
W06.XXXA	Fall from bed, initial encounter	DX	ICD-10-CM
W06.XXXD	Fall from bed, subsequent encounter	DX	ICD-10-CM
W06.XXXS	Fall from bed, sequela	DX	ICD-10-CM
W07.XXXA	Fall from chair, initial encounter	DX	ICD-10-CM
W07.XXXD	Fall from chair, subsequent encounter	DX	ICD-10-CM
W07.XXXS	Fall from chair, sequela	DX	ICD-10-CM
W08.XXXA	Fall from other furniture, initial encounter	DX	ICD-10-CM
W08.XXXD	Fall from other furniture, subsequent encounter	DX	ICD-10-CM
W08.XXXS	Fall from other furniture, sequela	DX	ICD-10-CM
W09.0XXA	Fall on or from playground slide, initial encounter	DX	ICD-10-CM
W09.0XXD	Fall on or from playground slide, subsequent encounter	DX	ICD-10-CM
W09.0XXS	Fall on or from playground slide, sequela	DX	ICD-10-CM
W09.1XXA	Fall from playground swing, initial encounter	DX	ICD-10-CM
W09.1XXD	Fall from playground swing, subsequent encounter	DX	ICD-10-CM
W09.1XXS	Fall from playground swing, sequela	DX	ICD-10-CM
W09.2XXA	Fall on or from jungle gym, initial encounter	DX	ICD-10-CM
W09.2XXD	Fall on or from jungle gym, subsequent encounter	DX	ICD-10-CM
W09.2XXS	Fall on or from jungle gym, sequela	DX	ICD-10-CM
W09.8XXA	Fall on or from other playground equipment, initial encounter	DX	ICD-10-CM
W09.8XXD	Fall on or from other playground equipment, subsequent encounter	DX	ICD-10-CM
W09.8XXS	Fall on or from other playground equipment, sequela	DX	ICD-10-CM
W10.0XXA	Fall (on)(from) escalator, initial encounter	DX	ICD-10-CM
W10.0XXD	Fall (on)(from) escalator, subsequent encounter	DX	ICD-10-CM
W10.0XXS	Fall (on)(from) escalator, sequela	DX	ICD-10-CM
W10.1XXA	Fall (on)(from) sidewalk curb, initial encounter	DX	ICD-10-CM
W10.1XXD	Fall (on)(from) sidewalk curb, subsequent encounter	DX	ICD-10-CM
W10.1XXS	Fall (on)(from) sidewalk curb, sequela	DX	ICD-10-CM
W10.2XXA	Fall (on)(from) incline, initial encounter	DX	ICD-10-CM
W10.2XXD	Fall (on)(from) incline, subsequent encounter	DX	ICD-10-CM
W10.2XXS	Fall (on)(from) incline, sequela	DX	ICD-10-CM
W10.8XXA	Fall (on) (from) other stairs and steps, initial encounter	DX	ICD-10-CM
W10.8XXD	Fall (on) (from) other stairs and steps, subsequent encounter	DX	ICD-10-CM
W10.8XXS	Fall (on) (from) other stairs and steps, sequela	DX	ICD-10-CM
W10.9XXA	Fall (on) (from) unspecified stairs and steps, initial encounter	DX	ICD-10-CM
W10.9XXD	Fall (on) (from) unspecified stairs and steps, subsequent encounter	DX	ICD-10-CM
W10.9XXS	Fall (on) (from) unspecified stairs and steps, sequela	DX	ICD-10-CM
W11.XXXA	Fall on and from ladder, initial encounter	DX	ICD-10-CM
W11.XXXD	Fall on and from ladder, subsequent encounter	DX	ICD-10-CM
W11.XXXS	Fall on and from ladder, sequela	DX	ICD-10-CM
W12.XXXA	Fall on and from scaffolding, initial encounter	DX	ICD-10-CM
W12.XXXD	Fall on and from scaffolding, subsequent encounter	DX	ICD-10-CM
W12.XXXS	Fall on and from scaffolding, sequela	DX	ICD-10-CM
W13.0XXA	Fall from, out of or through balcony, initial encounter	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
W13.0XXD	Fall from, out of or through balcony, subsequent encounter	DX	ICD-10-CM
W13.0XXS	Fall from, out of or through balcony, sequela	DX	ICD-10-CM
W13.1XXA	Fall from, out of or through bridge, initial encounter	DX	ICD-10-CM
W13.1XXD	Fall from, out of or through bridge, subsequent encounter	DX	ICD-10-CM
W13.1XXS	Fall from, out of or through bridge, sequela	DX	ICD-10-CM
W13.2XXA	Fall from, out of or through roof, initial encounter	DX	ICD-10-CM
W13.2XXD	Fall from, out of or through roof, subsequent encounter	DX	ICD-10-CM
W13.2XXS	Fall from, out of or through roof, sequela	DX	ICD-10-CM
W13.3XXA	Fall through floor, initial encounter	DX	ICD-10-CM
W13.3XXD	Fall through floor, subsequent encounter	DX	ICD-10-CM
W13.3XXS	Fall through floor, sequela	DX	ICD-10-CM
W13.4XXA	Fall from, out of or through window, initial encounter	DX	ICD-10-CM
W13.4XXD	Fall from, out of or through window, subsequent encounter	DX	ICD-10-CM
W13.4XXS	Fall from, out of or through window, sequela	DX	ICD-10-CM
W13.8XXA	Fall from, out of or through other building or structure, initial encounter	DX	ICD-10-CM
W13.8XXD	Fall from, out of or through other building or structure, subsequent encounter	DX	ICD-10-CM
W13.8XXS	Fall from, out of or through other building or structure, sequela	DX	ICD-10-CM
W13.9XXA	Fall from, out of or through building, not otherwise specified, initial encounter	DX	ICD-10-CM
W13.9XXD	Fall from, out of or through building, not otherwise specified, subsequent encounter	DX	ICD-10-CM
W13.9XXS	Fall from, out of or through building, not otherwise specified, sequela	DX	ICD-10-CM
W14.XXXA	Fall from tree, initial encounter	DX	ICD-10-CM
W14.XXXD	Fall from tree, subsequent encounter	DX	ICD-10-CM
W14.XXXS	Fall from tree, sequela	DX	ICD-10-CM
W15.XXXA	Fall from cliff, initial encounter	DX	ICD-10-CM
W15.XXXD	Fall from cliff, subsequent encounter	DX	ICD-10-CM
W15.XXXS	Fall from cliff, sequela	DX	ICD-10-CM
W16.011A	Fall into swimming pool striking water surface causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.011D	Fall into swimming pool striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.011S	Fall into swimming pool striking water surface causing drowning and submersion, sequela	DX	ICD-10-CM
W16.012A	Fall into swimming pool striking water surface causing other injury, initial encounter	DX	ICD-10-CM
W16.012D	Fall into swimming pool striking water surface causing other injury, subsequent encounter	DX	ICD-10-CM
W16.012S	Fall into swimming pool striking water surface causing other injury, sequela	DX	ICD-10-CM
W16.021A	Fall into swimming pool striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.021D	Fall into swimming pool striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.021S	Fall into swimming pool striking bottom causing drowning and submersion, sequela	DX	ICD-10-CM
W16.022A	Fall into swimming pool striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.022D	Fall into swimming pool striking bottom causing other injury, subsequent encounter	DX	ICD-10-CM
W16.022S	Fall into swimming pool striking bottom causing other injury, sequela	DX	ICD-10-CM
W16.031A	Fall into swimming pool striking wall causing drowning and submersion, initial encounter	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
W16.031D	Fall into swimming pool striking wall causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.031S	Fall into swimming pool striking wall causing drowning and submersion, sequela	DX	ICD-10-CM
W16.032A	Fall into swimming pool striking wall causing other injury, initial encounter	DX	ICD-10-CM
W16.032D	Fall into swimming pool striking wall causing other injury, subsequent encounter	DX	ICD-10-CM
W16.032S	Fall into swimming pool striking wall causing other injury, sequela	DX	ICD-10-CM
W16.111A	Fall into natural body of water striking water surface causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.111D	Fall into natural body of water striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.111S	Fall into natural body of water striking water surface causing drowning and submersion, sequela	DX	ICD-10-CM
W16.112A	Fall into natural body of water striking water surface causing other injury, initial encounter	DX	ICD-10-CM
W16.112D	Fall into natural body of water striking water surface causing other injury, subsequent encounter	DX	ICD-10-CM
W16.112S	Fall into natural body of water striking water surface causing other injury, sequela	DX	ICD-10-CM
W16.121A	Fall into natural body of water striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.121D	Fall into natural body of water striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.121S	Fall into natural body of water striking bottom causing drowning and submersion, sequela	DX	ICD-10-CM
W16.122A	Fall into natural body of water striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.122D	Fall into natural body of water striking bottom causing other injury, subsequent encounter	DX	ICD-10-CM
W16.122S	Fall into natural body of water striking bottom causing other injury, sequela	DX	ICD-10-CM
W16.131A	Fall into natural body of water striking side causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.131D	Fall into natural body of water striking side causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.131S	Fall into natural body of water striking side causing drowning and submersion, sequela	DX	ICD-10-CM
W16.132A	Fall into natural body of water striking side causing other injury, initial encounter	DX	ICD-10-CM
W16.132D	Fall into natural body of water striking side causing other injury, subsequent encounter	DX	ICD-10-CM
W16.132S	Fall into natural body of water striking side causing other injury, sequela	DX	ICD-10-CM
W16.211A	Fall in (into) filled bathtub causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.211D	Fall in (into) filled bathtub causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.211S	Fall in (into) filled bathtub causing drowning and submersion, sequela	DX	ICD-10-CM
W16.212A	Fall in (into) filled bathtub causing other injury, initial encounter	DX	ICD-10-CM
W16.212D	Fall in (into) filled bathtub causing other injury, subsequent encounter	DX	ICD-10-CM
W16.212S	Fall in (into) filled bathtub causing other injury, sequela	DX	ICD-10-CM
W16.221A	Fall in (into) bucket of water causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.221D	Fall in (into) bucket of water causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.221S	Fall in (into) bucket of water causing drowning and submersion, sequela	DX	ICD-10-CM
W16.222A	Fall in (into) bucket of water causing other injury, initial encounter	DX	ICD-10-CM
W16.222D	Fall in (into) bucket of water causing other injury, subsequent encounter	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
W16.222S	Fall in (into) bucket of water causing other injury, sequela	DX	ICD-10-CM
W16.311A	Fall into other water striking water surface causing drowning and submersion, initial	DX	ICD-10-CM
W16.311D	Fall into other water striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.311S	Fall into other water striking water surface causing drowning and submersion, sequela	DX	ICD-10-CM
W16.312A	Fall into other water striking water surface causing other injury, initial encounter	DX	ICD-10-CM
W16.312D	Fall into other water striking water surface causing other injury, subsequent encounter	DX	ICD-10-CM
W16.312S	Fall into other water striking water surface causing other injury, sequela	DX	ICD-10-CM
W16.321A	Fall into other water striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.321D	Fall into other water striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.321S	Fall into other water striking bottom causing drowning and submersion, sequela	DX	ICD-10-CM
W16.322A	Fall into other water striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.322D	Fall into other water striking bottom causing other injury, subsequent encounter	DX	ICD-10-CM
W16.322S	Fall into other water striking bottom causing other injury, sequela	DX	ICD-10-CM
W16.331A	Fall into other water striking wall causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.331D	Fall into other water striking wall causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.331S	Fall into other water striking wall causing drowning and submersion, sequela	DX	ICD-10-CM
W16.332A	Fall into other water striking wall causing other injury, initial encounter	DX	ICD-10-CM
W16.332D	Fall into other water striking wall causing other injury, subsequent encounter	DX	ICD-10-CM
W16.332S	Fall into other water striking wall causing other injury, sequela	DX	ICD-10-CM
W16.41XA	Fall into unspecified water causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.41XD	Fall into unspecified water causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.41XS	Fall into unspecified water causing drowning and submersion, sequela	DX	ICD-10-CM
W16.42XA	Fall into unspecified water causing other injury, initial encounter	DX	ICD-10-CM
W16.42XD	Fall into unspecified water causing other injury, subsequent encounter	DX	ICD-10-CM
W16.42XS	Fall into unspecified water causing other injury, sequela	DX	ICD-10-CM
W16.511A	Jumping or diving into swimming pool striking water surface causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.511D	Jumping or diving into swimming pool striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.511S	Jumping or diving into swimming pool striking water surface causing drowning and submersion, sequela	DX	ICD-10-CM
W16.512A	Jumping or diving into swimming pool striking water surface causing other injury, initial encounter	DX	ICD-10-CM
W16.512D	Jumping or diving into swimming pool striking water surface causing other injury, subsequent encounter	DX	ICD-10-CM
W16.512S	Jumping or diving into swimming pool striking water surface causing other injury, sequela	DX	ICD-10-CM
W16.521A	Jumping or diving into swimming pool striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.521D	Jumping or diving into swimming pool striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
W16.521S	Jumping or diving into swimming pool striking bottom causing drowning and submersion, sequela	DX	ICD-10-CM
W16.522A	Jumping or diving into swimming pool striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.522D	Jumping or diving into swimming pool striking bottom causing other injury, subsequent encounter	DX	ICD-10-CM
W16.522S	Jumping or diving into swimming pool striking bottom causing other injury, sequela	DX	ICD-10-CM
W16.531A	Jumping or diving into swimming pool striking wall causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.531D	Jumping or diving into swimming pool striking wall causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.531S	Jumping or diving into swimming pool striking wall causing drowning and submersion, sequela	DX	ICD-10-CM
W16.532A	Jumping or diving into swimming pool striking wall causing other injury, initial encounter	DX	ICD-10-CM
W16.532D	Jumping or diving into swimming pool striking wall causing other injury, subsequent encounter	DX	ICD-10-CM
W16.532S	Jumping or diving into swimming pool striking wall causing other injury, sequela	DX	ICD-10-CM
W16.611A	Jumping or diving into natural body of water striking water surface causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.611D	Jumping or diving into natural body of water striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.611S	Jumping or diving into natural body of water striking water surface causing drowning and submersion, sequela	DX	ICD-10-CM
W16.612A	Jumping or diving into natural body of water striking water surface causing other injury, initial encounter	DX	ICD-10-CM
W16.612D	Jumping or diving into natural body of water striking water surface causing other injury, subsequent encounter	DX	ICD-10-CM
W16.612S	Jumping or diving into natural body of water striking water surface causing other injury, sequela	DX	ICD-10-CM
W16.621A	Jumping or diving into natural body of water striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.621D	Jumping or diving into natural body of water striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.621S	Jumping or diving into natural body of water striking bottom causing drowning and submersion, sequela	DX	ICD-10-CM
W16.622A	Jumping or diving into natural body of water striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.622D	Jumping or diving into natural body of water striking bottom causing other injury, subsequent encounter	DX	ICD-10-CM
W16.622S	Jumping or diving into natural body of water striking bottom causing other injury, sequela	DX	ICD-10-CM
W16.711A	Jumping or diving from boat striking water surface causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.711D	Jumping or diving from boat striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.711S	Jumping or diving from boat striking water surface causing drowning and submersion, sequela	DX	ICD-10-CM
W16.712A	Jumping or diving from boat striking water surface causing other injury, initial encounter	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
W16.712D	Jumping or diving from boat striking water surface causing other injury, subsequent	DX	ICD-10-CM
W16.712S	Jumping or diving from boat striking water surface causing other injury, sequela	DX	ICD-10-CM
W16.721A	Jumping or diving from boat striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.721D	Jumping or diving from boat striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.721S	Jumping or diving from boat striking bottom causing drowning and submersion, sequela	DX	ICD-10-CM
W16.722A	Jumping or diving from boat striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.722D	Jumping or diving from boat striking bottom causing other injury, subsequent encounter	DX	ICD-10-CM
W16.722S	Jumping or diving from boat striking bottom causing other injury, sequela	DX	ICD-10-CM
W16.811A	Jumping or diving into other water striking water surface causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.811D	Jumping or diving into other water striking water surface causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.811S	Jumping or diving into other water striking water surface causing drowning and submersion, sequela	DX	ICD-10-CM
W16.812A	Jumping or diving into other water striking water surface causing other injury, initial	DX	ICD-10-CM
W16.812D	Jumping or diving into other water striking water surface causing other injury, subsequent encounter	DX	ICD-10-CM
W16.812S	Jumping or diving into other water striking water surface causing other injury, sequela	DX	ICD-10-CM
W16.821A	Jumping or diving into other water striking bottom causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.821D	Jumping or diving into other water striking bottom causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.821S	Jumping or diving into other water striking bottom causing drowning and submersion, sequela	DX	ICD-10-CM
W16.822A	Jumping or diving into other water striking bottom causing other injury, initial encounter	DX	ICD-10-CM
W16.822D	Jumping or diving into other water striking bottom causing other injury, subsequent	DX	ICD-10-CM
W16.822S	Jumping or diving into other water striking bottom causing other injury, sequela	DX	ICD-10-CM
W16.831A	Jumping or diving into other water striking wall causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.831D	Jumping or diving into other water striking wall causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.831S	Jumping or diving into other water striking wall causing drowning and submersion, sequela	DX	ICD-10-CM
W16.832A	Jumping or diving into other water striking wall causing other injury, initial encounter	DX	ICD-10-CM
W16.832D	Jumping or diving into other water striking wall causing other injury, subsequent encounter	DX	ICD-10-CM
W16.832S	Jumping or diving into other water striking wall causing other injury, sequela	DX	ICD-10-CM
W16.91XA	Jumping or diving into unspecified water causing drowning and submersion, initial encounter	DX	ICD-10-CM
W16.91XD	Jumping or diving into unspecified water causing drowning and submersion, subsequent encounter	DX	ICD-10-CM
W16.91XS	Jumping or diving into unspecified water causing drowning and submersion, sequela	DX	ICD-10-CM
W16.92XA	Jumping or diving into unspecified water causing other injury, initial encounter	DX	ICD-10-CM
W16.92XD	Jumping or diving into unspecified water causing other injury, subsequent encounter	DX	ICD-10-CM
W16.92XS	Jumping or diving into unspecified water causing other injury, sequela	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
W17.0XXA	Fall into well, initial encounter	DX	ICD-10-CM
W17.0XXD	Fall into well, subsequent encounter	DX	ICD-10-CM
W17.0XXS	Fall into well, sequela	DX	ICD-10-CM
W17.1XXA	Fall into storm drain or manhole, initial encounter	DX	ICD-10-CM
W17.1XXD	Fall into storm drain or manhole, subsequent encounter	DX	ICD-10-CM
W17.1XXS	Fall into storm drain or manhole, sequela	DX	ICD-10-CM
W17.2XXA	Fall into hole, initial encounter	DX	ICD-10-CM
W17.2XXD	Fall into hole, subsequent encounter	DX	ICD-10-CM
W17.2XXS	Fall into hole, sequela	DX	ICD-10-CM
W17.3XXA	Fall into empty swimming pool, initial encounter	DX	ICD-10-CM
W17.3XXD	Fall into empty swimming pool, subsequent encounter	DX	ICD-10-CM
W17.3XXS	Fall into empty swimming pool, sequela	DX	ICD-10-CM
W17.4XXA	Fall from dock, initial encounter	DX	ICD-10-CM
W17.4XXD	Fall from dock, subsequent encounter	DX	ICD-10-CM
W17.4XXS	Fall from dock, sequela	DX	ICD-10-CM
W17.81XA	Fall down embankment (hill), initial encounter	DX	ICD-10-CM
W17.81XD	Fall down embankment (hill), subsequent encounter	DX	ICD-10-CM
W17.81XS	Fall down embankment (hill), sequela	DX	ICD-10-CM
W17.82XA	Fall from (out of) grocery cart, initial encounter	DX	ICD-10-CM
W17.82XD	Fall from (out of) grocery cart, subsequent encounter	DX	ICD-10-CM
W17.82XS	Fall from (out of) grocery cart, sequela	DX	ICD-10-CM
W17.89XA	Other fall from one level to another, initial encounter	DX	ICD-10-CM
W17.89XD	Other fall from one level to another, subsequent encounter	DX	ICD-10-CM
W17.89XS	Other fall from one level to another, sequela	DX	ICD-10-CM
W18.00XA	Striking against unspecified object with subsequent fall, initial encounter	DX	ICD-10-CM
W18.00XD	Striking against unspecified object with subsequent fall, subsequent encounter	DX	ICD-10-CM
W18.00XS	Striking against unspecified object with subsequent fall, sequela	DX	ICD-10-CM
W18.01XA	Striking against sports equipment with subsequent fall, initial encounter	DX	ICD-10-CM
W18.01XD	Striking against sports equipment with subsequent fall, subsequent encounter	DX	ICD-10-CM
W18.01XS	Striking against sports equipment with subsequent fall, sequela	DX	ICD-10-CM
W18.02XA	Striking against glass with subsequent fall, initial encounter	DX	ICD-10-CM
W18.02XD	Striking against glass with subsequent fall, subsequent encounter	DX	ICD-10-CM
W18.02XS	Striking against glass with subsequent fall, sequela	DX	ICD-10-CM
W18.09XA	Striking against other object with subsequent fall, initial encounter	DX	ICD-10-CM
W18.09XD	Striking against other object with subsequent fall, subsequent encounter	DX	ICD-10-CM
W18.09XS	Striking against other object with subsequent fall, sequela	DX	ICD-10-CM
W18.11XA	Fall from or off toilet without subsequent striking against object, initial encounter	DX	ICD-10-CM
W18.11XD	Fall from or off toilet without subsequent striking against object, subsequent encounter	DX	ICD-10-CM
W18.11XS	Fall from or off toilet without subsequent striking against object, sequela	DX	ICD-10-CM
W18.12XA	Fall from or off toilet with subsequent striking against object, initial encounter	DX	ICD-10-CM
W18.12XD	Fall from or off toilet with subsequent striking against object, subsequent encounter	DX	ICD-10-CM
W18.12XS	Fall from or off toilet with subsequent striking against object, sequela	DX	ICD-10-CM
W18.2XXA	Fall in (into) shower or empty bathtub, initial encounter	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
W18.2XXD	Fall in (into) shower or empty bathtub, subsequent encounter	DX	ICD-10-CM
W18.2XXS	Fall in (into) shower or empty bathtub, sequela	DX	ICD-10-CM
W18.30XA	Fall on same level, unspecified, initial encounter	DX	ICD-10-CM
W18.30XD	Fall on same level, unspecified, subsequent encounter	DX	ICD-10-CM
W18.30XS	Fall on same level, unspecified, sequela	DX	ICD-10-CM
W18.31XA	Fall on same level due to stepping on an object, initial encounter	DX	ICD-10-CM
W18.31XD	Fall on same level due to stepping on an object, subsequent encounter	DX	ICD-10-CM
W18.31XS	Fall on same level due to stepping on an object, sequela	DX	ICD-10-CM
W18.39XA	Other fall on same level, initial encounter	DX	ICD-10-CM
W18.39XD	Other fall on same level, subsequent encounter	DX	ICD-10-CM
W18.39XS	Other fall on same level, sequela	DX	ICD-10-CM
W18.40XA	Slipping, tripping and stumbling without falling, unspecified, initial encounter	DX	ICD-10-CM
W18.40XD	Slipping, tripping and stumbling without falling, unspecified, subsequent encounter	DX	ICD-10-CM
W18.40XS	Slipping, tripping and stumbling without falling, unspecified, sequela	DX	ICD-10-CM
W18.41XA	Slipping, tripping and stumbling without falling due to stepping on object, initial encounter	DX	ICD-10-CM
W18.41XD	Slipping, tripping and stumbling without falling due to stepping on object, subsequent encounter	DX	ICD-10-CM
W18.41XS	Slipping, tripping and stumbling without falling due to stepping on object, sequela	DX	ICD-10-CM
W18.42XA	Slipping, tripping and stumbling without falling due to stepping into hole or opening, initial encounter	DX	ICD-10-CM
W18.42XD	Slipping, tripping and stumbling without falling due to stepping into hole or opening, subsequent encounter	DX	ICD-10-CM
W18.42XS	Slipping, tripping and stumbling without falling due to stepping into hole or opening, sequela	DX	ICD-10-CM
W18.43XA	Slipping, tripping and stumbling without falling due to stepping from one level to another, initial encounter	DX	ICD-10-CM
W18.43XD	Slipping, tripping and stumbling without falling due to stepping from one level to another, subsequent encounter	DX	ICD-10-CM
W18.43XS	Slipping, tripping and stumbling without falling due to stepping from one level to another, sequela	DX	ICD-10-CM
W18.49XA	Other slipping, tripping and stumbling without falling, initial encounter	DX	ICD-10-CM
W18.49XD	Other slipping, tripping and stumbling without falling, subsequent encounter	DX	ICD-10-CM
W18.49XS	Other slipping, tripping and stumbling without falling, sequela	DX	ICD-10-CM
W19.XXXA	Unspecified fall, initial encounter	DX	ICD-10-CM
W19.XXXD	Unspecified fall, subsequent encounter	DX	ICD-10-CM
W19.XXXS	Unspecified fall, sequela	DX	ICD-10-CM
W50.0XXA	Accidental hit or strike by another person, initial encounter	DX	ICD-10-CM
W50.0XXD	Accidental hit or strike by another person, subsequent encounter	DX	ICD-10-CM
W50.1XXA	Accidental kick by another person, initial encounter	DX	ICD-10-CM
W50.1XXD	Accidental kick by another person, subsequent encounter	DX	ICD-10-CM
W50.2XXA	Accidental twist by another person, initial encounter	DX	ICD-10-CM
W50.2XXD	Accidental twist by another person, subsequent encounter	DX	ICD-10-CM
W50.4XXA	Accidental scratch by another person, initial encounter	DX	ICD-10-CM
W50.4XXD	Accidental scratch by another person, subsequent encounter	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
W51.XXXA	Accidental striking against or bumped into by another person, initial encounter	DX	ICD-10-CM
W51.XXXD	Accidental striking against or bumped into by another person, subsequent encounter	DX	ICD-10-CM
W52.XXXA	Crushed, pushed or stepped on by crowd or human stampede, initial encounter	DX	ICD-10-CM
S22.31XA	Fracture of one rib, right side, initial encounter for closed fracture	DX	ICD-10-CM
S22.31XB	Fracture of one rib, right side, initial encounter for open fracture	DX	ICD-10-CM
S22.32XA	Fracture of one rib, left side, initial encounter for closed fracture	DX	ICD-10-CM
S22.32XB	Fracture of one rib, left side, initial encounter for open fracture	DX	ICD-10-CM
S22.39XA	Fracture of one rib, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S22.39XB	Fracture of one rib, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S22.41XA	Multiple fractures of ribs, right side, initial encounter for closed fracture	DX	ICD-10-CM
S22.41XB	Multiple fractures of ribs, right side, initial encounter for open fracture	DX	ICD-10-CM
S22.42XA	Multiple fractures of ribs, left side, initial encounter for closed fracture	DX	ICD-10-CM
S22.42XB	Multiple fractures of ribs, left side, initial encounter for open fracture	DX	ICD-10-CM
S22.43XA	Multiple fractures of ribs, bilateral, initial encounter for closed fracture	DX	ICD-10-CM
S22.43XB	Multiple fractures of ribs, bilateral, initial encounter for open fracture	DX	ICD-10-CM
S22.49XA	Multiple fractures of ribs, unspecified side, initial encounter for closed fracture	DX	ICD-10-CM
S22.49XB	Multiple fractures of ribs, unspecified side, initial encounter for open fracture	DX	ICD-10-CM
S42.001A	Fracture of unspecified part of right clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.001B	Fracture of unspecified part of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.002A	Fracture of unspecified part of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.002B	Fracture of unspecified part of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.009A	Fracture of unspecified part of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.009B	Fracture of unspecified part of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.011A	Anterior displaced fracture of sternal end of right clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.011B	Anterior displaced fracture of sternal end of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.012A	Anterior displaced fracture of sternal end of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.012B	Anterior displaced fracture of sternal end of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.013A	Anterior displaced fracture of sternal end of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.013B	Anterior displaced fracture of sternal end of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.014A	Posterior displaced fracture of sternal end of right clavicle, initial encounter for closed	DX	ICD-10-CM
S42.014B	Posterior displaced fracture of sternal end of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.015A	Posterior displaced fracture of sternal end of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.015B	Posterior displaced fracture of sternal end of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.016A	Posterior displaced fracture of sternal end of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.016B	Posterior displaced fracture of sternal end of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.017A	Nondisplaced fracture of sternal end of right clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.017B	Nondisplaced fracture of sternal end of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.018A	Nondisplaced fracture of sternal end of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.018B	Nondisplaced fracture of sternal end of left clavicle, initial encounter for open fracture	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S42.019A	Nondisplaced fracture of sternal end of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.019B	Nondisplaced fracture of sternal end of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.021A	Displaced fracture of shaft of right clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.021B	Displaced fracture of shaft of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.022A	Displaced fracture of shaft of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.022B	Displaced fracture of shaft of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.023A	Displaced fracture of shaft of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.023B	Displaced fracture of shaft of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.024A	Nondisplaced fracture of shaft of right clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.024B	Nondisplaced fracture of shaft of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.025A	Nondisplaced fracture of shaft of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.025B	Nondisplaced fracture of shaft of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.026A	Nondisplaced fracture of shaft of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.026B	Nondisplaced fracture of shaft of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.031A	Displaced fracture of lateral end of right clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.031B	Displaced fracture of lateral end of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.032A	Displaced fracture of lateral end of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.032B	Displaced fracture of lateral end of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.033A	Displaced fracture of lateral end of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.033B	Displaced fracture of lateral end of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.034A	Nondisplaced fracture of lateral end of right clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.034B	Nondisplaced fracture of lateral end of right clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.035A	Nondisplaced fracture of lateral end of left clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.035B	Nondisplaced fracture of lateral end of left clavicle, initial encounter for open fracture	DX	ICD-10-CM
S42.036A	Nondisplaced fracture of lateral end of unspecified clavicle, initial encounter for closed fracture	DX	ICD-10-CM
S42.036B	Nondisplaced fracture of lateral end of unspecified clavicle, initial encounter for open fracture	DX	ICD-10-CM
S52.001A	Unspecified fracture of upper end of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.001B	Unspecified fracture of upper end of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.001C	Unspecified fracture of upper end of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.002A	Unspecified fracture of upper end of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.002B	Unspecified fracture of upper end of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.002C	Unspecified fracture of upper end of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.009A	Unspecified fracture of upper end of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.009B	Unspecified fracture of upper end of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.009C	Unspecified fracture of upper end of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.011A	Torus fracture of upper end of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.012A	Torus fracture of upper end of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.019A	Torus fracture of upper end of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.021A	Displaced fracture of olecranon process without intraarticular extension of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.021B	Displaced fracture of olecranon process without intraarticular extension of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.021C	Displaced fracture of olecranon process without intraarticular extension of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.022A	Displaced fracture of olecranon process without intraarticular extension of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.022B	Displaced fracture of olecranon process without intraarticular extension of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.022C	Displaced fracture of olecranon process without intraarticular extension of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.023A	Displaced fracture of olecranon process without intraarticular extension of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.023B	Displaced fracture of olecranon process without intraarticular extension of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.023C	Displaced fracture of olecranon process without intraarticular extension of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.024A	Nondisplaced fracture of olecranon process without intraarticular extension of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.024B	Nondisplaced fracture of olecranon process without intraarticular extension of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.024C	Nondisplaced fracture of olecranon process without intraarticular extension of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.025A	Nondisplaced fracture of olecranon process without intraarticular extension of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.025B	Nondisplaced fracture of olecranon process without intraarticular extension of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.025C	Nondisplaced fracture of olecranon process without intraarticular extension of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.026A	Nondisplaced fracture of olecranon process without intraarticular extension of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.026B	Nondisplaced fracture of olecranon process without intraarticular extension of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.026C	Nondisplaced fracture of olecranon process without intraarticular extension of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.031A	Displaced fracture of olecranon process with intraarticular extension of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.031B	Displaced fracture of olecranon process with intraarticular extension of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.031C	Displaced fracture of olecranon process with intraarticular extension of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.032A	Displaced fracture of olecranon process with intraarticular extension of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.032B	Displaced fracture of olecranon process with intraarticular extension of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.032C	Displaced fracture of olecranon process with intraarticular extension of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.033A	Displaced fracture of olecranon process with intraarticular extension of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.033B	Displaced fracture of olecranon process with intraarticular extension of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.033C	Displaced fracture of olecranon process with intraarticular extension of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.034A	Nondisplaced fracture of olecranon process with intraarticular extension of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.034B	Nondisplaced fracture of olecranon process with intraarticular extension of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.034C	Nondisplaced fracture of olecranon process with intraarticular extension of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.035A	Nondisplaced fracture of olecranon process with intraarticular extension of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.035B	Nondisplaced fracture of olecranon process with intraarticular extension of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.035C	Nondisplaced fracture of olecranon process with intraarticular extension of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.036A	Nondisplaced fracture of olecranon process with intraarticular extension of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.036B	Nondisplaced fracture of olecranon process with intraarticular extension of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.036C	Nondisplaced fracture of olecranon process with intraarticular extension of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.041A	Displaced fracture of coronoid process of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.041B	Displaced fracture of coronoid process of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.041C	Displaced fracture of coronoid process of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.042A	Displaced fracture of coronoid process of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.042B	Displaced fracture of coronoid process of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.042C	Displaced fracture of coronoid process of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.043A	Displaced fracture of coronoid process of unspecified ulna, initial encounter for closed	DX	ICD-10-CM
S52.043B	Displaced fracture of coronoid process of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.043C	Displaced fracture of coronoid process of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.044A	Nondisplaced fracture of coronoid process of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.044B	Nondisplaced fracture of coronoid process of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.044C	Nondisplaced fracture of coronoid process of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.045A	Nondisplaced fracture of coronoid process of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.045B	Nondisplaced fracture of coronoid process of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.045C	Nondisplaced fracture of coronoid process of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.046A	Nondisplaced fracture of coronoid process of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.046B	Nondisplaced fracture of coronoid process of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.046C	Nondisplaced fracture of coronoid process of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.091A	Other fracture of upper end of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.091B	Other fracture of upper end of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.091C	Other fracture of upper end of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.092A	Other fracture of upper end of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.092B	Other fracture of upper end of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.092C	Other fracture of upper end of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.099A	Other fracture of upper end of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.099B	Other fracture of upper end of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.099C	Other fracture of upper end of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.101A	Unspecified fracture of upper end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.101B	Unspecified fracture of upper end of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.101C	Unspecified fracture of upper end of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.102A	Unspecified fracture of upper end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.102B	Unspecified fracture of upper end of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.102C	Unspecified fracture of upper end of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.109A	Unspecified fracture of upper end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.109B	Unspecified fracture of upper end of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.109C	Unspecified fracture of upper end of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.111A	Torus fracture of upper end of right radius, initial encounter for closed fracture	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.112A	Torus fracture of upper end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.119A	Torus fracture of upper end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.121A	Displaced fracture of head of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.121B	Displaced fracture of head of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.121C	Displaced fracture of head of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.122A	Displaced fracture of head of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.122B	Displaced fracture of head of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.122C	Displaced fracture of head of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.123A	Displaced fracture of head of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.123B	Displaced fracture of head of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.123C	Displaced fracture of head of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.124A	Nondisplaced fracture of head of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.124B	Nondisplaced fracture of head of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.124C	Nondisplaced fracture of head of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.125A	Nondisplaced fracture of head of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.125B	Nondisplaced fracture of head of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.125C	Nondisplaced fracture of head of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.126A	Nondisplaced fracture of head of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.126B	Nondisplaced fracture of head of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.126C	Nondisplaced fracture of head of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.131A	Displaced fracture of neck of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.131B	Displaced fracture of neck of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.131C	Displaced fracture of neck of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.132A	Displaced fracture of neck of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.132B	Displaced fracture of neck of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.132C	Displaced fracture of neck of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.133A	Displaced fracture of neck of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.133B	Displaced fracture of neck of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.133C	Displaced fracture of neck of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.134A	Nondisplaced fracture of neck of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.134B	Nondisplaced fracture of neck of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.134C	Nondisplaced fracture of neck of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.135A	Nondisplaced fracture of neck of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.135B	Nondisplaced fracture of neck of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S52.135C	Nondisplaced fracture of neck of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.136A	Nondisplaced fracture of neck of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.136B	Nondisplaced fracture of neck of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.136C	Nondisplaced fracture of neck of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.181A	Other fracture of upper end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.181B	Other fracture of upper end of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.181C	Other fracture of upper end of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.182A	Other fracture of upper end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.182B	Other fracture of upper end of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.182C	Other fracture of upper end of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.189A	Other fracture of upper end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.189B	Other fracture of upper end of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.189C	Other fracture of upper end of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.201A	Unspecified fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.201B	Unspecified fracture of shaft of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.201C	Unspecified fracture of shaft of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.202A	Unspecified fracture of shaft of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.202B	Unspecified fracture of shaft of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.202C	Unspecified fracture of shaft of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.209A	Unspecified fracture of shaft of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.209B	Unspecified fracture of shaft of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.209C	Unspecified fracture of shaft of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.211A	Greenstick fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.212A	Greenstick fracture of shaft of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.219A	Greenstick fracture of shaft of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.221A	Displaced transverse fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.221B	Displaced transverse fracture of shaft of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.221C	Displaced transverse fracture of shaft of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.222A	Displaced transverse fracture of shaft of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.222B	Displaced transverse fracture of shaft of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.222C	Displaced transverse fracture of shaft of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.223A	Displaced transverse fracture of shaft of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S52.223B	Displaced transverse fracture of shaft of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.223C	Displaced transverse fracture of shaft of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.224A	Nondisplaced transverse fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.224B	Nondisplaced transverse fracture of shaft of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.224C	Nondisplaced transverse fracture of shaft of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.225A	Nondisplaced transverse fracture of shaft of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.225B	Nondisplaced transverse fracture of shaft of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.225C	Nondisplaced transverse fracture of shaft of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.226A	Nondisplaced transverse fracture of shaft of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.226B	Nondisplaced transverse fracture of shaft of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.226C	Nondisplaced transverse fracture of shaft of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.231A	Displaced oblique fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.231B	Displaced oblique fracture of shaft of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.231C	Displaced oblique fracture of shaft of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.232A	Displaced oblique fracture of shaft of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.232B	Displaced oblique fracture of shaft of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.232C	Displaced oblique fracture of shaft of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.233A	Displaced oblique fracture of shaft of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.233B	Displaced oblique fracture of shaft of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.233C	Displaced oblique fracture of shaft of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.234A	Nondisplaced oblique fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.234B	Nondisplaced oblique fracture of shaft of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.234C	Nondisplaced oblique fracture of shaft of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.235A	Nondisplaced oblique fracture of shaft of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.235B	Nondisplaced oblique fracture of shaft of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.235C	Nondisplaced oblique fracture of shaft of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.236A	Nondisplaced oblique fracture of shaft of unspecified ulna, initial encounter for closed	DX	ICD-10-CM
S52.236B	Nondisplaced oblique fracture of shaft of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.236C	Nondisplaced oblique fracture of shaft of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.241A	Displaced spiral fracture of shaft of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.241B	Displaced spiral fracture of shaft of ulna, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.241C	Displaced spiral fracture of shaft of ulna, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.242A	Displaced spiral fracture of shaft of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.242B	Displaced spiral fracture of shaft of ulna, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.242C	Displaced spiral fracture of shaft of ulna, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.243A	Displaced spiral fracture of shaft of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.243B	Displaced spiral fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.243C	Displaced spiral fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.244A	Nondisplaced spiral fracture of shaft of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.244B	Nondisplaced spiral fracture of shaft of ulna, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.244C	Nondisplaced spiral fracture of shaft of ulna, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.245A	Nondisplaced spiral fracture of shaft of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.245B	Nondisplaced spiral fracture of shaft of ulna, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.245C	Nondisplaced spiral fracture of shaft of ulna, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.246A	Nondisplaced spiral fracture of shaft of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.246B	Nondisplaced spiral fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.246C	Nondisplaced spiral fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.251A	Displaced comminuted fracture of shaft of ulna, right arm, initial encounter for closed	DX	ICD-10-CM
S52.251B	Displaced comminuted fracture of shaft of ulna, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.251C	Displaced comminuted fracture of shaft of ulna, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.252A	Displaced comminuted fracture of shaft of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.252B	Displaced comminuted fracture of shaft of ulna, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.252C	Displaced comminuted fracture of shaft of ulna, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.253A	Displaced comminuted fracture of shaft of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.253B	Displaced comminuted fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.253C	Displaced comminuted fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.254A	Nondisplaced comminuted fracture of shaft of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.254B	Nondisplaced comminuted fracture of shaft of ulna, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.254C	Nondisplaced comminuted fracture of shaft of ulna, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.255A	Nondisplaced comminuted fracture of shaft of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.255B	Nondisplaced comminuted fracture of shaft of ulna, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.255C	Nondisplaced comminuted fracture of shaft of ulna, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.256A	Nondisplaced comminuted fracture of shaft of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.256B	Nondisplaced comminuted fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.256C	Nondisplaced comminuted fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.261A	Displaced segmental fracture of shaft of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.261B	Displaced segmental fracture of shaft of ulna, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.261C	Displaced segmental fracture of shaft of ulna, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.262A	Displaced segmental fracture of shaft of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.262B	Displaced segmental fracture of shaft of ulna, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.262C	Displaced segmental fracture of shaft of ulna, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.263A	Displaced segmental fracture of shaft of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.263B	Displaced segmental fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.263C	Displaced segmental fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.264A	Nondisplaced segmental fracture of shaft of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.264B	Nondisplaced segmental fracture of shaft of ulna, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.264C	Nondisplaced segmental fracture of shaft of ulna, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.265A	Nondisplaced segmental fracture of shaft of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.265B	Nondisplaced segmental fracture of shaft of ulna, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.265C	Nondisplaced segmental fracture of shaft of ulna, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.266A	Nondisplaced segmental fracture of shaft of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.266B	Nondisplaced segmental fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.266C	Nondisplaced segmental fracture of shaft of ulna, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.271A	Monteggia's fracture of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.271B	Monteggia's fracture of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.271C	Monteggia's fracture of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.272A	Monteggia's fracture of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.272B	Monteggia's fracture of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.272C	Monteggia's fracture of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.279A	Monteggia's fracture of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.279B	Monteggia's fracture of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.279C	Monteggia's fracture of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.281A	Bent bone of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.281B	Bent bone of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.281C	Bent bone of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.282A	Bent bone of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.282B	Bent bone of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.282C	Bent bone of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.283A	Bent bone of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.283B	Bent bone of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.283C	Bent bone of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.291A	Other fracture of shaft of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.291B	Other fracture of shaft of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.291C	Other fracture of shaft of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.292A	Other fracture of shaft of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.292B	Other fracture of shaft of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.292C	Other fracture of shaft of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.299A	Other fracture of shaft of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.299B	Other fracture of shaft of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.299C	Other fracture of shaft of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.301A	Unspecified fracture of shaft of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.301B	Unspecified fracture of shaft of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.301C	Unspecified fracture of shaft of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.302A	Unspecified fracture of shaft of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.302B	Unspecified fracture of shaft of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.302C	Unspecified fracture of shaft of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.309A	Unspecified fracture of shaft of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.309B	Unspecified fracture of shaft of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.309C	Unspecified fracture of shaft of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.311A	Greenstick fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.312A	Greenstick fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.319A	Greenstick fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.321A	Displaced transverse fracture of shaft of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.321B	Displaced transverse fracture of shaft of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.321C	Displaced transverse fracture of shaft of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.322A	Displaced transverse fracture of shaft of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.322B	Displaced transverse fracture of shaft of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.322C	Displaced transverse fracture of shaft of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.323A	Displaced transverse fracture of shaft of unspecified radius, initial encounter for closed	DX	ICD-10-CM
S52.323B	Displaced transverse fracture of shaft of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.323C	Displaced transverse fracture of shaft of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.324A	Nondisplaced transverse fracture of shaft of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.324B	Nondisplaced transverse fracture of shaft of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.324C	Nondisplaced transverse fracture of shaft of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.325A	Nondisplaced transverse fracture of shaft of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.325B	Nondisplaced transverse fracture of shaft of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.325C	Nondisplaced transverse fracture of shaft of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.326A	Nondisplaced transverse fracture of shaft of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.326B	Nondisplaced transverse fracture of shaft of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.326C	Nondisplaced transverse fracture of shaft of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.331A	Displaced oblique fracture of shaft of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.331B	Displaced oblique fracture of shaft of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.331C	Displaced oblique fracture of shaft of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.332A	Displaced oblique fracture of shaft of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.332B	Displaced oblique fracture of shaft of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.332C	Displaced oblique fracture of shaft of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.333A	Displaced oblique fracture of shaft of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.333B	Displaced oblique fracture of shaft of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.333C	Displaced oblique fracture of shaft of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.334A	Nondisplaced oblique fracture of shaft of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.334B	Nondisplaced oblique fracture of shaft of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.334C	Nondisplaced oblique fracture of shaft of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.335A	Nondisplaced oblique fracture of shaft of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.335B	Nondisplaced oblique fracture of shaft of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.335C	Nondisplaced oblique fracture of shaft of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.336A	Nondisplaced oblique fracture of shaft of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.336B	Nondisplaced oblique fracture of shaft of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.336C	Nondisplaced oblique fracture of shaft of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.341A	Displaced spiral fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.341B	Displaced spiral fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.341C	Displaced spiral fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.342A	Displaced spiral fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.342B	Displaced spiral fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.342C	Displaced spiral fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.343A	Displaced spiral fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.343B	Displaced spiral fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.343C	Displaced spiral fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.344A	Nondisplaced spiral fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.344B	Nondisplaced spiral fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.344C	Nondisplaced spiral fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.345A	Nondisplaced spiral fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.345B	Nondisplaced spiral fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.345C	Nondisplaced spiral fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.346A	Nondisplaced spiral fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.346B	Nondisplaced spiral fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.346C	Nondisplaced spiral fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.351A	Displaced comminuted fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.351B	Displaced comminuted fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.351C	Displaced comminuted fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.352A	Displaced comminuted fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.352B	Displaced comminuted fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.352C	Displaced comminuted fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.353A	Displaced comminuted fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.353B	Displaced comminuted fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.353C	Displaced comminuted fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.354A	Nondisplaced comminuted fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.354B	Nondisplaced comminuted fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.354C	Nondisplaced comminuted fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.355A	Nondisplaced comminuted fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.355B	Nondisplaced comminuted fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.355C	Nondisplaced comminuted fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.356A	Nondisplaced comminuted fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.356B	Nondisplaced comminuted fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.356C	Nondisplaced comminuted fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.361A	Displaced segmental fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.361B	Displaced segmental fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.361C	Displaced segmental fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.362A	Displaced segmental fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.362B	Displaced segmental fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.362C	Displaced segmental fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.363A	Displaced segmental fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.363B	Displaced segmental fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.363C	Displaced segmental fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.364A	Nondisplaced segmental fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.364B	Nondisplaced segmental fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.364C	Nondisplaced segmental fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.365A	Nondisplaced segmental fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S52.365B	Nondisplaced segmental fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.365C	Nondisplaced segmental fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.366A	Nondisplaced segmental fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.366B	Nondisplaced segmental fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.366C	Nondisplaced segmental fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.371A	Galeazzi's fracture of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.371B	Galeazzi's fracture of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.371C	Galeazzi's fracture of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.372A	Galeazzi's fracture of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.372B	Galeazzi's fracture of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.372C	Galeazzi's fracture of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.379A	Galeazzi's fracture of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.379B	Galeazzi's fracture of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.379C	Galeazzi's fracture of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.381A	Bent bone of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.381B	Bent bone of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.381C	Bent bone of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.382A	Bent bone of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.382B	Bent bone of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.382C	Bent bone of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.389A	Bent bone of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.389B	Bent bone of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.389C	Bent bone of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.391A	Other fracture of shaft of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.391B	Other fracture of shaft of radius, right arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.391C	Other fracture of shaft of radius, right arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.392A	Other fracture of shaft of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.392B	Other fracture of shaft of radius, left arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.392C	Other fracture of shaft of radius, left arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.399A	Other fracture of shaft of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S52.399B	Other fracture of shaft of radius, unspecified arm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.399C	Other fracture of shaft of radius, unspecified arm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.501A	Unspecified fracture of the lower end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.501B	Unspecified fracture of the lower end of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.501C	Unspecified fracture of the lower end of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.502A	Unspecified fracture of the lower end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.502B	Unspecified fracture of the lower end of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.502C	Unspecified fracture of the lower end of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.509A	Unspecified fracture of the lower end of unspecified radius, initial encounter for closed	DX	ICD-10-CM
S52.509B	Unspecified fracture of the lower end of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.509C	Unspecified fracture of the lower end of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.511A	Displaced fracture of right radial styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.511B	Displaced fracture of right radial styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.511C	Displaced fracture of right radial styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.512A	Displaced fracture of left radial styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.512B	Displaced fracture of left radial styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.512C	Displaced fracture of left radial styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.513A	Displaced fracture of unspecified radial styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.513B	Displaced fracture of unspecified radial styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.513C	Displaced fracture of unspecified radial styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.514A	Nondisplaced fracture of right radial styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.514B	Nondisplaced fracture of right radial styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.514C	Nondisplaced fracture of right radial styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.515A	Nondisplaced fracture of left radial styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.515B	Nondisplaced fracture of left radial styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.515C	Nondisplaced fracture of left radial styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.516A	Nondisplaced fracture of unspecified radial styloid process, initial encounter for closed	DX	ICD-10-CM
S52.516B	Nondisplaced fracture of unspecified radial styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.516C	Nondisplaced fracture of unspecified radial styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.521A	Torus fracture of lower end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.522A	Torus fracture of lower end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.529A	Torus fracture of lower end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S52.531A	Colles' fracture of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.531B	Colles' fracture of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.531C	Colles' fracture of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.532A	Colles' fracture of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.532B	Colles' fracture of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.532C	Colles' fracture of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.539A	Colles' fracture of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.539B	Colles' fracture of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.539C	Colles' fracture of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.541A	Smith's fracture of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.541B	Smith's fracture of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.541C	Smith's fracture of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.542A	Smith's fracture of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.542B	Smith's fracture of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.542C	Smith's fracture of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.549A	Smith's fracture of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.549B	Smith's fracture of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.549C	Smith's fracture of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.551A	Other extraarticular fracture of lower end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.551B	Other extraarticular fracture of lower end of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.551C	Other extraarticular fracture of lower end of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.552A	Other extraarticular fracture of lower end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.552B	Other extraarticular fracture of lower end of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.552C	Other extraarticular fracture of lower end of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.559A	Other extraarticular fracture of lower end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.559B	Other extraarticular fracture of lower end of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.559C	Other extraarticular fracture of lower end of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.561A	Barton's fracture of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.561B	Barton's fracture of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.561C	Barton's fracture of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.562A	Barton's fracture of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.562B	Barton's fracture of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.562C	Barton's fracture of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.569A	Barton's fracture of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.569B	Barton's fracture of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.569C	Barton's fracture of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.571A	Other intraarticular fracture of lower end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.571B	Other intraarticular fracture of lower end of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.571C	Other intraarticular fracture of lower end of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.572A	Other intraarticular fracture of lower end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.572B	Other intraarticular fracture of lower end of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.572C	Other intraarticular fracture of lower end of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.579A	Other intraarticular fracture of lower end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.579B	Other intraarticular fracture of lower end of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.579C	Other intraarticular fracture of lower end of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.591A	Other fractures of lower end of right radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.591B	Other fractures of lower end of right radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.591C	Other fractures of lower end of right radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.592A	Other fractures of lower end of left radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.592B	Other fractures of lower end of left radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.592C	Other fractures of lower end of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.599A	Other fractures of lower end of unspecified radius, initial encounter for closed fracture	DX	ICD-10-CM
S52.599B	Other fractures of lower end of unspecified radius, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.599C	Other fractures of lower end of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.601A	Unspecified fracture of lower end of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.601B	Unspecified fracture of lower end of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.601C	Unspecified fracture of lower end of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.602A	Unspecified fracture of lower end of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.602B	Unspecified fracture of lower end of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.602C	Unspecified fracture of lower end of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.609A	Unspecified fracture of lower end of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.609B	Unspecified fracture of lower end of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.609C	Unspecified fracture of lower end of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.611A	Displaced fracture of right ulna styloid process, initial encounter for closed fracture	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S52.611B	Displaced fracture of right ulna styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.611C	Displaced fracture of right ulna styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.612A	Displaced fracture of left ulna styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.612B	Displaced fracture of left ulna styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.612C	Displaced fracture of left ulna styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.613A	Displaced fracture of unspecified ulna styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.613B	Displaced fracture of unspecified ulna styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.613C	Displaced fracture of unspecified ulna styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.614A	Nondisplaced fracture of right ulna styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.614B	Nondisplaced fracture of right ulna styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.614C	Nondisplaced fracture of right ulna styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.615A	Nondisplaced fracture of left ulna styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.615B	Nondisplaced fracture of left ulna styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.615C	Nondisplaced fracture of left ulna styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.616A	Nondisplaced fracture of unspecified ulna styloid process, initial encounter for closed fracture	DX	ICD-10-CM
S52.616B	Nondisplaced fracture of unspecified ulna styloid process, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.616C	Nondisplaced fracture of unspecified ulna styloid process, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.621A	Torus fracture of lower end of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.622A	Torus fracture of lower end of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.629A	Torus fracture of lower end of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.691A	Other fracture of lower end of right ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.691B	Other fracture of lower end of right ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.691C	Other fracture of lower end of right ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.692A	Other fracture of lower end of left ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.692B	Other fracture of lower end of left ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.692C	Other fracture of lower end of left ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.699A	Other fracture of lower end of unspecified ulna, initial encounter for closed fracture	DX	ICD-10-CM
S52.699B	Other fracture of lower end of unspecified ulna, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.699C	Other fracture of lower end of unspecified ulna, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.90XA	Unspecified fracture of unspecified forearm, initial encounter for closed fracture	DX	ICD-10-CM
S52.90XB	Unspecified fracture of unspecified forearm, initial encounter for open fracture type I or II	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S52.90XC	Unspecified fracture of unspecified forearm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.91XA	Unspecified fracture of right forearm, initial encounter for closed fracture	DX	ICD-10-CM
S52.91XB	Unspecified fracture of right forearm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.91XC	Unspecified fracture of right forearm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S52.92XA	Unspecified fracture of left forearm, initial encounter for closed fracture	DX	ICD-10-CM
S52.92XB	Unspecified fracture of left forearm, initial encounter for open fracture type I or II	DX	ICD-10-CM
S52.92XC	Unspecified fracture of left forearm, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S59.001A	Unspecified physeal fracture of lower end of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.002A	Unspecified physeal fracture of lower end of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.009A	Unspecified physeal fracture of lower end of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.011A	Salter-Harris Type I physeal fracture of lower end of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.012A	Salter-Harris Type I physeal fracture of lower end of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.019A	Salter-Harris Type I physeal fracture of lower end of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.021A	Salter-Harris Type II physeal fracture of lower end of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.022A	Salter-Harris Type II physeal fracture of lower end of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.029A	Salter-Harris Type II physeal fracture of lower end of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.031A	Salter-Harris Type III physeal fracture of lower end of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.032A	Salter-Harris Type III physeal fracture of lower end of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.039A	Salter-Harris Type III physeal fracture of lower end of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.041A	Salter-Harris Type IV physeal fracture of lower end of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.042A	Salter-Harris Type IV physeal fracture of lower end of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.049A	Salter-Harris Type IV physeal fracture of lower end of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.091A	Other physeal fracture of lower end of ulna, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.092A	Other physeal fracture of lower end of ulna, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.099A	Other physeal fracture of lower end of ulna, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.101A	Unspecified physeal fracture of upper end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S59.102A	Unspecified physeal fracture of upper end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.109A	Unspecified physeal fracture of upper end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.111A	Salter-Harris Type I physeal fracture of upper end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.112A	Salter-Harris Type I physeal fracture of upper end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.119A	Salter-Harris Type I physeal fracture of upper end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.121A	Salter-Harris Type II physeal fracture of upper end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.122A	Salter-Harris Type II physeal fracture of upper end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.129A	Salter-Harris Type II physeal fracture of upper end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.131A	Salter-Harris Type III physeal fracture of upper end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.132A	Salter-Harris Type III physeal fracture of upper end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.139A	Salter-Harris Type III physeal fracture of upper end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.141A	Salter-Harris Type IV physeal fracture of upper end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.142A	Salter-Harris Type IV physeal fracture of upper end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.149A	Salter-Harris Type IV physeal fracture of upper end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.191A	Other physeal fracture of upper end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.192A	Other physeal fracture of upper end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.199A	Other physeal fracture of upper end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.201A	Unspecified physeal fracture of lower end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.202A	Unspecified physeal fracture of lower end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.209A	Unspecified physeal fracture of lower end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.211A	Salter-Harris Type I physeal fracture of lower end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.212A	Salter-Harris Type I physeal fracture of lower end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S59.219A	Salter-Harris Type I physeal fracture of lower end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.221A	Salter-Harris Type II physeal fracture of lower end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.222A	Salter-Harris Type II physeal fracture of lower end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.229A	Salter-Harris Type II physeal fracture of lower end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.231A	Salter-Harris Type III physeal fracture of lower end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.232A	Salter-Harris Type III physeal fracture of lower end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.239A	Salter-Harris Type III physeal fracture of lower end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.241A	Salter-Harris Type IV physeal fracture of lower end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.242A	Salter-Harris Type IV physeal fracture of lower end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.249A	Salter-Harris Type IV physeal fracture of lower end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.291A	Other physeal fracture of lower end of radius, right arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.292A	Other physeal fracture of lower end of radius, left arm, initial encounter for closed fracture	DX	ICD-10-CM
S59.299A	Other physeal fracture of lower end of radius, unspecified arm, initial encounter for closed fracture	DX	ICD-10-CM
S72.001A	Fracture of unspecified part of neck of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.001B	Fracture of unspecified part of neck of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.001C	Fracture of unspecified part of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.002A	Fracture of unspecified part of neck of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.002B	Fracture of unspecified part of neck of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.002C	Fracture of unspecified part of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.009A	Fracture of unspecified part of neck of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.009B	Fracture of unspecified part of neck of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.009C	Fracture of unspecified part of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.011A	Unspecified intracapsular fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.011B	Unspecified intracapsular fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.011C	Unspecified intracapsular fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.012A	Unspecified intracapsular fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S72.012B	Unspecified intracapsular fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.012C	Unspecified intracapsular fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.019A	Unspecified intracapsular fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.019B	Unspecified intracapsular fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.019C	Unspecified intracapsular fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.021A	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.021B	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.021C	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.022A	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.022B	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.022C	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.023A	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.023B	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.023C	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.024A	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.024B	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.024C	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.025A	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.025B	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.025C	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.026A	Nondisplaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.026B	Nondisplaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S72.026C	Nondisplaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.031A	Displaced midcervical fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.031B	Displaced midcervical fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.031C	Displaced midcervical fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.032A	Displaced midcervical fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.032B	Displaced midcervical fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.032C	Displaced midcervical fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.033A	Displaced midcervical fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.033B	Displaced midcervical fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S72.033C	Displaced midcervical fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.034A	Nondisplaced midcervical fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.034B	Nondisplaced midcervical fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.034C	Nondisplaced midcervical fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.035A	Nondisplaced midcervical fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.035B	Nondisplaced midcervical fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.035C	Nondisplaced midcervical fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.036A	Nondisplaced midcervical fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.036B	Nondisplaced midcervical fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.036C	Nondisplaced midcervical fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.041A	Displaced fracture of base of neck of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.041B	Displaced fracture of base of neck of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.041C	Displaced fracture of base of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.042A	Displaced fracture of base of neck of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.042B	Displaced fracture of base of neck of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.042C	Displaced fracture of base of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.043A	Displaced fracture of base of neck of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.043B	Displaced fracture of base of neck of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.043C	Displaced fracture of base of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.044A	Nondisplaced fracture of base of neck of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.044B	Nondisplaced fracture of base of neck of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.044C	Nondisplaced fracture of base of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.045A	Nondisplaced fracture of base of neck of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.045B	Nondisplaced fracture of base of neck of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.045C	Nondisplaced fracture of base of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.046A	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.046B	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S72.046C	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.051A	Unspecified fracture of head of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.051B	Unspecified fracture of head of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.051C	Unspecified fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.052A	Unspecified fracture of head of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.052B	Unspecified fracture of head of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.052C	Unspecified fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.059A	Unspecified fracture of head of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.059B	Unspecified fracture of head of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.059C	Unspecified fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.061A	Displaced articular fracture of head of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.061B	Displaced articular fracture of head of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.061C	Displaced articular fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.062A	Displaced articular fracture of head of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.062B	Displaced articular fracture of head of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.062C	Displaced articular fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.063A	Displaced articular fracture of head of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.063B	Displaced articular fracture of head of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.063C	Displaced articular fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.064A	Nondisplaced articular fracture of head of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.064B	Nondisplaced articular fracture of head of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.064C	Nondisplaced articular fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.065A	Nondisplaced articular fracture of head of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.065B	Nondisplaced articular fracture of head of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.065C	Nondisplaced articular fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.066A	Nondisplaced articular fracture of head of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.066B	Nondisplaced articular fracture of head of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S72.066C	Nondisplaced articular fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.091A	Other fracture of head and neck of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.091B	Other fracture of head and neck of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.091C	Other fracture of head and neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.092A	Other fracture of head and neck of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.092B	Other fracture of head and neck of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.092C	Other fracture of head and neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.099A	Other fracture of head and neck of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.099B	Other fracture of head and neck of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.099C	Other fracture of head and neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.101A	Unspecified trochanteric fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.101B	Unspecified trochanteric fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.101C	Unspecified trochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.102A	Unspecified trochanteric fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.102B	Unspecified trochanteric fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.102C	Unspecified trochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.109A	Unspecified trochanteric fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.109B	Unspecified trochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.109C	Unspecified trochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.111A	Displaced fracture of greater trochanter of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.111B	Displaced fracture of greater trochanter of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.111C	Displaced fracture of greater trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.112A	Displaced fracture of greater trochanter of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.112B	Displaced fracture of greater trochanter of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.112C	Displaced fracture of greater trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.113A	Displaced fracture of greater trochanter of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.113B	Displaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S72.113C	Displaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.114A	Nondisplaced fracture of greater trochanter of right femur, initial encounter for closed	DX	ICD-10-CM
S72.114B	Nondisplaced fracture of greater trochanter of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.114C	Nondisplaced fracture of greater trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.115A	Nondisplaced fracture of greater trochanter of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.115B	Nondisplaced fracture of greater trochanter of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.115C	Nondisplaced fracture of greater trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.116A	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.116B	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.116C	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.121A	Displaced fracture of lesser trochanter of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.121B	Displaced fracture of lesser trochanter of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.121C	Displaced fracture of lesser trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.122A	Displaced fracture of lesser trochanter of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.122B	Displaced fracture of lesser trochanter of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.122C	Displaced fracture of lesser trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.123A	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.123B	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.123C	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.124A	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.124B	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.124C	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.125A	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.125B	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S72.125C	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.126A	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.126B	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.126C	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.131A	Displaced apophyseal fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.131B	Displaced apophyseal fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.131C	Displaced apophyseal fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.132A	Displaced apophyseal fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.132B	Displaced apophyseal fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.132C	Displaced apophyseal fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.133A	Displaced apophyseal fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.133B	Displaced apophyseal fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.133C	Displaced apophyseal fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.134A	Nondisplaced apophyseal fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.134B	Nondisplaced apophyseal fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.134C	Nondisplaced apophyseal fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.135A	Nondisplaced apophyseal fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.135B	Nondisplaced apophyseal fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.135C	Nondisplaced apophyseal fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.136A	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.136B	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.136C	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.141A	Displaced intertrochanteric fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.141B	Displaced intertrochanteric fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.141C	Displaced intertrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.142A	Displaced intertrochanteric fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.142B	Displaced intertrochanteric fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.142C	Displaced intertrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM

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Code	Description	Code Type	Code Category
S72.143A	Displaced intertrochanteric fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.143B	Displaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.143C	Displaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.144A	Nondisplaced intertrochanteric fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.144B	Nondisplaced intertrochanteric fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.144C	Nondisplaced intertrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.145A	Nondisplaced intertrochanteric fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.145B	Nondisplaced intertrochanteric fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.145C	Nondisplaced intertrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.146A	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.146B	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.146C	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.21XA	Displaced subtrochanteric fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.21XB	Displaced subtrochanteric fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.21XC	Displaced subtrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.22XA	Displaced subtrochanteric fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.22XB	Displaced subtrochanteric fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.22XC	Displaced subtrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.23XA	Displaced subtrochanteric fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.23XB	Displaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.23XC	Displaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.24XA	Nondisplaced subtrochanteric fracture of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.24XB	Nondisplaced subtrochanteric fracture of right femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.24XC	Nondisplaced subtrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.25XA	Nondisplaced subtrochanteric fracture of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.25XB	Nondisplaced subtrochanteric fracture of left femur, initial encounter for open fracture type I or II	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S72.25XC	Nondisplaced subtrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S72.26XA	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S72.26XB	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	DX	ICD-10-CM
S72.26XC	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	DX	ICD-10-CM
S79.001A	Unspecified physeal fracture of upper end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.002A	Unspecified physeal fracture of upper end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.009A	Unspecified physeal fracture of upper end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.011A	Salter-Harris Type I physeal fracture of upper end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.012A	Salter-Harris Type I physeal fracture of upper end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.019A	Salter-Harris Type I physeal fracture of upper end of unspecified femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.091A	Other physeal fracture of upper end of right femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.092A	Other physeal fracture of upper end of left femur, initial encounter for closed fracture	DX	ICD-10-CM
S79.099A	Other physeal fracture of upper end of unspecified femur, initial encounter for closed	DX	ICD-10-CM
OPBH0ZZ	Excision of Right Radius, Open Approach	PX	ICD-10-CM
OPBJ0ZZ	Excision of Left Radius, Open Approach	PX	ICD-10-CM
OPBK0ZZ	Excision of Right Ulna, Open Approach	PX	ICD-10-CM
OPBL0ZZ	Excision of Left Ulna, Open Approach	PX	ICD-10-CM
OPH004Z	Insertion of Internal Fixation Device into Sternum, Open Approach	PX	ICD-10-CM
OPH034Z	Insertion of Internal Fixation Device into Sternum, Percutaneous Approach	PX	ICD-10-CM
OPH044Z	Insertion of Internal Fixation Device into Sternum, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPH104Z	Insertion of Internal Fixation Device into 1 to 2 Ribs, Open Approach	PX	ICD-10-CM
OPH134Z	Insertion of Internal Fixation Device into 1 to 2 Ribs, Percutaneous Approach	PX	ICD-10-CM
OPH144Z	Insertion of Internal Fixation Device into 1 to 2 Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPH204Z	Insertion of Internal Fixation Device into 3 or More Ribs, Open Approach	PX	ICD-10-CM
OPH234Z	Insertion of Internal Fixation Device into 3 or More Ribs, Percutaneous Approach	PX	ICD-10-CM
OPH244Z	Insertion of Internal Fixation Device into 3 or More Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPH504Z	Insertion of Internal Fixation Device into Right Scapula, Open Approach	PX	ICD-10-CM
OPH534Z	Insertion of Internal Fixation Device into Right Scapula, Percutaneous Approach	PX	ICD-10-CM
OPH544Z	Insertion of Internal Fixation Device into Right Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPH604Z	Insertion of Internal Fixation Device into Left Scapula, Open Approach	PX	ICD-10-CM
OPH634Z	Insertion of Internal Fixation Device into Left Scapula, Percutaneous Approach	PX	ICD-10-CM
OPH644Z	Insertion of Internal Fixation Device into Left Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPH704Z	Insertion of Internal Fixation Device into Right Glenoid Cavity, Open Approach	PX	ICD-10-CM
OPH734Z	Insertion of Internal Fixation Device into Right Glenoid Cavity, Percutaneous Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
OPH744Z	Insertion of Internal Fixation Device into Right Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPH804Z	Insertion of Internal Fixation Device into Left Glenoid Cavity, Open Approach	PX	ICD-10-CM
OPH834Z	Insertion of Internal Fixation Device into Left Glenoid Cavity, Percutaneous Approach	PX	ICD-10-CM
OPH844Z	Insertion of Internal Fixation Device into Left Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPH904Z	Insertion of Internal Fixation Device into Right Clavicle, Open Approach	PX	ICD-10-CM
OPH934Z	Insertion of Internal Fixation Device into Right Clavicle, Percutaneous Approach	PX	ICD-10-CM
OPH944Z	Insertion of Internal Fixation Device into Right Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHB04Z	Insertion of Internal Fixation Device into Left Clavicle, Open Approach	PX	ICD-10-CM
OPHB34Z	Insertion of Internal Fixation Device into Left Clavicle, Percutaneous Approach	PX	ICD-10-CM
OPHB44Z	Insertion of Internal Fixation Device into Left Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHH04Z	Insertion of Internal Fixation Device into Right Radius, Open Approach	PX	ICD-10-CM
OPHH05Z	Insertion of External Fixation Device into Right Radius, Open Approach	PX	ICD-10-CM
OPHH06Z	Insertion of Intramedullary Internal Fixation Device into Right Radius, Open Approach	PX	ICD-10-CM
OPHH0BZ	Insertion of Monoplanar External Fixation Device into Right Radius, Open Approach	PX	ICD-10-CM
OPHH0CZ	Insertion of Ring External Fixation Device into Right Radius, Open Approach	PX	ICD-10-CM
OPHH0DZ	Insertion of Hybrid External Fixation Device into Right Radius, Open Approach	PX	ICD-10-CM
OPHH34Z	Insertion of Internal Fixation Device into Right Radius, Percutaneous Approach	PX	ICD-10-CM
OPHH35Z	Insertion of External Fixation Device into Right Radius, Percutaneous Approach	PX	ICD-10-CM
OPHH36Z	Insertion of Intramedullary Internal Fixation Device into Right Radius, Percutaneous Approach	PX	ICD-10-CM
OPHH3BZ	Insertion of Monoplanar External Fixation Device into Right Radius, Percutaneous Approach	PX	ICD-10-CM
OPHH3CZ	Insertion of Ring External Fixation Device into Right Radius, Percutaneous Approach	PX	ICD-10-CM
OPHH3DZ	Insertion of Hybrid External Fixation Device into Right Radius, Percutaneous Approach	PX	ICD-10-CM
OPHH44Z	Insertion of Internal Fixation Device into Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHH45Z	Insertion of External Fixation Device into Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHH46Z	Insertion of Intramedullary Internal Fixation Device into Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHH4BZ	Insertion of Monoplanar External Fixation Device into Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHH4CZ	Insertion of Ring External Fixation Device into Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHH4DZ	Insertion of Hybrid External Fixation Device into Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHJ04Z	Insertion of Internal Fixation Device into Left Radius, Open Approach	PX	ICD-10-CM
OPHJ05Z	Insertion of External Fixation Device into Left Radius, Open Approach	PX	ICD-10-CM
OPHJ06Z	Insertion of Intramedullary Internal Fixation Device into Left Radius, Open Approach	PX	ICD-10-CM
OPHJOBZ	Insertion of Monoplanar External Fixation Device into Left Radius, Open Approach	PX	ICD-10-CM
OPHJOCZ	Insertion of Ring External Fixation Device into Left Radius, Open Approach	PX	ICD-10-CM
OPHJODZ	Insertion of Hybrid External Fixation Device into Left Radius, Open Approach	PX	ICD-10-CM
OPHJ34Z	Insertion of Internal Fixation Device into Left Radius, Percutaneous Approach	PX	ICD-10-CM
OPHJ35Z	Insertion of External Fixation Device into Left Radius, Percutaneous Approach	PX	ICD-10-CM
OPHJ36Z	Insertion of Intramedullary Internal Fixation Device into Left Radius, Percutaneous Approach	PX	ICD-10-CM
OPHJ3BZ	Insertion of Monoplanar External Fixation Device into Left Radius, Percutaneous Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
OPHJ3CZ	Insertion of Ring External Fixation Device into Left Radius, Percutaneous Approach	PX	ICD-10-CM
OPHJ3DZ	Insertion of Hybrid External Fixation Device into Left Radius, Percutaneous Approach	PX	ICD-10-CM
OPHJ44Z	Insertion of Internal Fixation Device into Left Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHJ45Z	Insertion of External Fixation Device into Left Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHJ46Z	Insertion of Intramedullary Internal Fixation Device into Left Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHJ4BZ	Insertion of Monoplanar External Fixation Device into Left Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHJ4CZ	Insertion of Ring External Fixation Device into Left Radius, Percutaneous Endoscopic	PX	ICD-10-CM
OPHJ4DZ	Insertion of Hybrid External Fixation Device into Left Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHK04Z	Insertion of Internal Fixation Device into Right Ulna, Open Approach	PX	ICD-10-CM
OPHK05Z	Insertion of External Fixation Device into Right Ulna, Open Approach	PX	ICD-10-CM
OPHK06Z	Insertion of Intramedullary Internal Fixation Device into Right Ulna, Open Approach	PX	ICD-10-CM
OPHK0BZ	Insertion of Monoplanar External Fixation Device into Right Ulna, Open Approach	PX	ICD-10-CM
OPHK0CZ	Insertion of Ring External Fixation Device into Right Ulna, Open Approach	PX	ICD-10-CM
OPHK0DZ	Insertion of Hybrid External Fixation Device into Right Ulna, Open Approach	PX	ICD-10-CM
OPHK34Z	Insertion of Internal Fixation Device into Right Ulna, Percutaneous Approach	PX	ICD-10-CM
OPHK35Z	Insertion of External Fixation Device into Right Ulna, Percutaneous Approach	PX	ICD-10-CM
OPHK36Z	Insertion of Intramedullary Internal Fixation Device into Right Ulna, Percutaneous Approach	PX	ICD-10-CM
OPHK3BZ	Insertion of Monoplanar External Fixation Device into Right Ulna, Percutaneous Approach	PX	ICD-10-CM
OPHK3CZ	Insertion of Ring External Fixation Device into Right Ulna, Percutaneous Approach	PX	ICD-10-CM
OPHK3DZ	Insertion of Hybrid External Fixation Device into Right Ulna, Percutaneous Approach	PX	ICD-10-CM
OPHK44Z	Insertion of Internal Fixation Device into Right Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHK45Z	Insertion of External Fixation Device into Right Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHK46Z	Insertion of Intramedullary Internal Fixation Device into Right Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHK4BZ	Insertion of Monoplanar External Fixation Device into Right Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHK4CZ	Insertion of Ring External Fixation Device into Right Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHK4DZ	Insertion of Hybrid External Fixation Device into Right Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHL04Z	Insertion of Internal Fixation Device into Left Ulna, Open Approach	PX	ICD-10-CM
OPHL05Z	Insertion of External Fixation Device into Left Ulna, Open Approach	PX	ICD-10-CM
OPHL06Z	Insertion of Intramedullary Internal Fixation Device into Left Ulna, Open Approach	PX	ICD-10-CM
OPHL0BZ	Insertion of Monoplanar External Fixation Device into Left Ulna, Open Approach	PX	ICD-10-CM
OPHL0CZ	Insertion of Ring External Fixation Device into Left Ulna, Open Approach	PX	ICD-10-CM
OPHL0DZ	Insertion of Hybrid External Fixation Device into Left Ulna, Open Approach	PX	ICD-10-CM
OPHL34Z	Insertion of Internal Fixation Device into Left Ulna, Percutaneous Approach	PX	ICD-10-CM
OPHL35Z	Insertion of External Fixation Device into Left Ulna, Percutaneous Approach	PX	ICD-10-CM
OPHL36Z	Insertion of Intramedullary Internal Fixation Device into Left Ulna, Percutaneous Approach	PX	ICD-10-CM
OPHL3BZ	Insertion of Monoplanar External Fixation Device into Left Ulna, Percutaneous Approach	PX	ICD-10-CM
OPHL3CZ	Insertion of Ring External Fixation Device into Left Ulna, Percutaneous Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
OPHL3DZ	Insertion of Hybrid External Fixation Device into Left Ulna, Percutaneous Approach	PX	ICD-10-CM
OPHL44Z	Insertion of Internal Fixation Device into Left Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHL45Z	Insertion of External Fixation Device into Left Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHL46Z	Insertion of Intramedullary Internal Fixation Device into Left Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHL4BZ	Insertion of Monoplanar External Fixation Device into Left Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHL4CZ	Insertion of Ring External Fixation Device into Left Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPHL4DZ	Insertion of Hybrid External Fixation Device into Left Ulna, Percutaneous Endoscopic	PX	ICD-10-CM
OPN00ZZ	Release Sternum, Open Approach	PX	ICD-10-CM
OPN03ZZ	Release Sternum, Percutaneous Approach	PX	ICD-10-CM
OPN04ZZ	Release Sternum, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPN10ZZ	Release 1 to 2 Ribs, Open Approach	PX	ICD-10-CM
OPN13ZZ	Release 1 to 2 Ribs, Percutaneous Approach	PX	ICD-10-CM
OPN14ZZ	Release 1 to 2 Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPN20ZZ	Release 3 or More Ribs, Open Approach	PX	ICD-10-CM
OPN23ZZ	Release 3 or More Ribs, Percutaneous Approach	PX	ICD-10-CM
OPN24ZZ	Release 3 or More Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPN50ZZ	Release Right Scapula, Open Approach	PX	ICD-10-CM
OPN53ZZ	Release Right Scapula, Percutaneous Approach	PX	ICD-10-CM
OPN54ZZ	Release Right Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPN60ZZ	Release Left Scapula, Open Approach	PX	ICD-10-CM
OPN63ZZ	Release Left Scapula, Percutaneous Approach	PX	ICD-10-CM
OPN64ZZ	Release Left Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPN70ZZ	Release Right Glenoid Cavity, Open Approach	PX	ICD-10-CM
OPN73ZZ	Release Right Glenoid Cavity, Percutaneous Approach	PX	ICD-10-CM
OPN74ZZ	Release Right Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPN80ZZ	Release Left Glenoid Cavity, Open Approach	PX	ICD-10-CM
OPN83ZZ	Release Left Glenoid Cavity, Percutaneous Approach	PX	ICD-10-CM
OPN84ZZ	Release Left Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPN90ZZ	Release Right Clavicle, Open Approach	PX	ICD-10-CM
OPN93ZZ	Release Right Clavicle, Percutaneous Approach	PX	ICD-10-CM
OPN94ZZ	Release Right Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPNB0ZZ	Release Left Clavicle, Open Approach	PX	ICD-10-CM
OPNB3ZZ	Release Left Clavicle, Percutaneous Approach	PX	ICD-10-CM
OPNB4ZZ	Release Left Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPNH0ZZ	Release Right Radius, Open Approach	PX	ICD-10-CM
OPNH3ZZ	Release Right Radius, Percutaneous Approach	PX	ICD-10-CM
OPNH4ZZ	Release Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPNJ0ZZ	Release Left Radius, Open Approach	PX	ICD-10-CM
OPNJ3ZZ	Release Left Radius, Percutaneous Approach	PX	ICD-10-CM
OPNJ4ZZ	Release Left Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPNK0ZZ	Release Right Ulna, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
OPNK3ZZ	Release Right Ulna, Percutaneous Approach	PX	ICD-10-CM
OPNK4ZZ	Release Right Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPNL0ZZ	Release Left Ulna, Open Approach	PX	ICD-10-CM
OPNL3ZZ	Release Left Ulna, Percutaneous Approach	PX	ICD-10-CM
OPNL4ZZ	Release Left Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP004Z	Removal of Internal Fixation Device from Sternum, Open Approach	PX	ICD-10-CM
OPP007Z	Removal of Autologous Tissue Substitute from Sternum, Open Approach	PX	ICD-10-CM
OPP00JZ	Removal of Synthetic Substitute from Sternum, Open Approach	PX	ICD-10-CM
OPP00KZ	Removal of Nonautologous Tissue Substitute from Sternum, Open Approach	PX	ICD-10-CM
OPP034Z	Removal of Internal Fixation Device from Sternum, Percutaneous Approach	PX	ICD-10-CM
OPP037Z	Removal of Autologous Tissue Substitute from Sternum, Percutaneous Approach	PX	ICD-10-CM
OPP03JZ	Removal of Synthetic Substitute from Sternum, Percutaneous Approach	PX	ICD-10-CM
OPP03KZ	Removal of Nonautologous Tissue Substitute from Sternum, Percutaneous Approach	PX	ICD-10-CM
OPP044Z	Removal of Internal Fixation Device from Sternum, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP047Z	Removal of Autologous Tissue Substitute from Sternum, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP04JZ	Removal of Synthetic Substitute from Sternum, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP04KZ	Removal of Nonautologous Tissue Substitute from Sternum, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP104Z	Removal of Internal Fixation Device from 1 to 2 Ribs, Open Approach	PX	ICD-10-CM
OPP107Z	Removal of Autologous Tissue Substitute from 1 to 2 Ribs, Open Approach	PX	ICD-10-CM
OPP10JZ	Removal of Synthetic Substitute from 1 to 2 Ribs, Open Approach	PX	ICD-10-CM
OPP10KZ	Removal of Nonautologous Tissue Substitute from 1 to 2 Ribs, Open Approach	PX	ICD-10-CM
OPP134Z	Removal of Internal Fixation Device from 1 to 2 Ribs, Percutaneous Approach	PX	ICD-10-CM
OPP137Z	Removal of Autologous Tissue Substitute from 1 to 2 Ribs, Percutaneous Approach	PX	ICD-10-CM
OPP13JZ	Removal of Synthetic Substitute from 1 to 2 Ribs, Percutaneous Approach	PX	ICD-10-CM
OPP13KZ	Removal of Nonautologous Tissue Substitute from 1 to 2 Ribs, Percutaneous Approach	PX	ICD-10-CM
OPP144Z	Removal of Internal Fixation Device from 1 to 2 Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP147Z	Removal of Autologous Tissue Substitute from 1 to 2 Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP14JZ	Removal of Synthetic Substitute from 1 to 2 Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP14KZ	Removal of Nonautologous Tissue Substitute from 1 to 2 Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP204Z	Removal of Internal Fixation Device from 3 or More Ribs, Open Approach	PX	ICD-10-CM
OPP207Z	Removal of Autologous Tissue Substitute from 3 or More Ribs, Open Approach	PX	ICD-10-CM
OPP20JZ	Removal of Synthetic Substitute from 3 or More Ribs, Open Approach	PX	ICD-10-CM
OPP20KZ	Removal of Nonautologous Tissue Substitute from 3 or More Ribs, Open Approach	PX	ICD-10-CM
OPP234Z	Removal of Internal Fixation Device from 3 or More Ribs, Percutaneous Approach	PX	ICD-10-CM
OPP237Z	Removal of Autologous Tissue Substitute from 3 or More Ribs, Percutaneous Approach	PX	ICD-10-CM
OPP23JZ	Removal of Synthetic Substitute from 3 or More Ribs, Percutaneous Approach	PX	ICD-10-CM
OPP23KZ	Removal of Nonautologous Tissue Substitute from 3 or More Ribs, Percutaneous Approach	PX	ICD-10-CM
OPP244Z	Removal of Internal Fixation Device from 3 or More Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP247Z	Removal of Autologous Tissue Substitute from 3 or More Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP24JZ	Removal of Synthetic Substitute from 3 or More Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
OPP24KZ	Removal of Nonautologous Tissue Substitute from 3 or More Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP504Z	Removal of Internal Fixation Device from Right Scapula, Open Approach	PX	ICD-10-CM
OPP507Z	Removal of Autologous Tissue Substitute from Right Scapula, Open Approach	PX	ICD-10-CM
OPP50JZ	Removal of Synthetic Substitute from Right Scapula, Open Approach	PX	ICD-10-CM
OPP50KZ	Removal of Nonautologous Tissue Substitute from Right Scapula, Open Approach	PX	ICD-10-CM
OPP534Z	Removal of Internal Fixation Device from Right Scapula, Percutaneous Approach	PX	ICD-10-CM
OPP537Z	Removal of Autologous Tissue Substitute from Right Scapula, Percutaneous Approach	PX	ICD-10-CM
OPP53JZ	Removal of Synthetic Substitute from Right Scapula, Percutaneous Approach	PX	ICD-10-CM
OPP53KZ	Removal of Nonautologous Tissue Substitute from Right Scapula, Percutaneous Approach	PX	ICD-10-CM
OPP544Z	Removal of Internal Fixation Device from Right Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP547Z	Removal of Autologous Tissue Substitute from Right Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP54JZ	Removal of Synthetic Substitute from Right Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP54KZ	Removal of Nonautologous Tissue Substitute from Right Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP604Z	Removal of Internal Fixation Device from Left Scapula, Open Approach	PX	ICD-10-CM
OPP607Z	Removal of Autologous Tissue Substitute from Left Scapula, Open Approach	PX	ICD-10-CM
OPP60JZ	Removal of Synthetic Substitute from Left Scapula, Open Approach	PX	ICD-10-CM
OPP60KZ	Removal of Nonautologous Tissue Substitute from Left Scapula, Open Approach	PX	ICD-10-CM
OPP634Z	Removal of Internal Fixation Device from Left Scapula, Percutaneous Approach	PX	ICD-10-CM
OPP637Z	Removal of Autologous Tissue Substitute from Left Scapula, Percutaneous Approach	PX	ICD-10-CM
OPP63JZ	Removal of Synthetic Substitute from Left Scapula, Percutaneous Approach	PX	ICD-10-CM
OPP63KZ	Removal of Nonautologous Tissue Substitute from Left Scapula, Percutaneous Approach	PX	ICD-10-CM
OPP644Z	Removal of Internal Fixation Device from Left Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP647Z	Removal of Autologous Tissue Substitute from Left Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP64JZ	Removal of Synthetic Substitute from Left Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP64KZ	Removal of Nonautologous Tissue Substitute from Left Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP704Z	Removal of Internal Fixation Device from Right Glenoid Cavity, Open Approach	PX	ICD-10-CM
OPP707Z	Removal of Autologous Tissue Substitute from Right Glenoid Cavity, Open Approach	PX	ICD-10-CM
OPP70JZ	Removal of Synthetic Substitute from Right Glenoid Cavity, Open Approach	PX	ICD-10-CM
OPP70KZ	Removal of Nonautologous Tissue Substitute from Right Glenoid Cavity, Open Approach	PX	ICD-10-CM
OPP734Z	Removal of Internal Fixation Device from Right Glenoid Cavity, Percutaneous Approach	PX	ICD-10-CM
OPP737Z	Removal of Autologous Tissue Substitute from Right Glenoid Cavity, Percutaneous Approach	PX	ICD-10-CM
OPP73JZ	Removal of Synthetic Substitute from Right Glenoid Cavity, Percutaneous Approach	PX	ICD-10-CM
OPP73KZ	Removal of Nonautologous Tissue Substitute from Right Glenoid Cavity, Percutaneous Approach	PX	ICD-10-CM
OPP744Z	Removal of Internal Fixation Device from Right Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP747Z	Removal of Autologous Tissue Substitute from Right Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
OPP74JZ	Removal of Synthetic Substitute from Right Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP74KZ	Removal of Nonautologous Tissue Substitute from Right Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP804Z	Removal of Internal Fixation Device from Left Glenoid Cavity, Open Approach	PX	ICD-10-CM
OPP807Z	Removal of Autologous Tissue Substitute from Left Glenoid Cavity, Open Approach	PX	ICD-10-CM
OPP80JZ	Removal of Synthetic Substitute from Left Glenoid Cavity, Open Approach	PX	ICD-10-CM
OPP80KZ	Removal of Nonautologous Tissue Substitute from Left Glenoid Cavity, Open Approach	PX	ICD-10-CM
OPP834Z	Removal of Internal Fixation Device from Left Glenoid Cavity, Percutaneous Approach	PX	ICD-10-CM
OPP837Z	Removal of Autologous Tissue Substitute from Left Glenoid Cavity, Percutaneous Approach	PX	ICD-10-CM
OPP83JZ	Removal of Synthetic Substitute from Left Glenoid Cavity, Percutaneous Approach	PX	ICD-10-CM
OPP83KZ	Removal of Nonautologous Tissue Substitute from Left Glenoid Cavity, Percutaneous	PX	ICD-10-CM
OPP844Z	Removal of Internal Fixation Device from Left Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP847Z	Removal of Autologous Tissue Substitute from Left Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP84JZ	Removal of Synthetic Substitute from Left Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP84KZ	Removal of Nonautologous Tissue Substitute from Left Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP904Z	Removal of Internal Fixation Device from Right Clavicle, Open Approach	PX	ICD-10-CM
OPP907Z	Removal of Autologous Tissue Substitute from Right Clavicle, Open Approach	PX	ICD-10-CM
OPP90JZ	Removal of Synthetic Substitute from Right Clavicle, Open Approach	PX	ICD-10-CM
OPP90KZ	Removal of Nonautologous Tissue Substitute from Right Clavicle, Open Approach	PX	ICD-10-CM
OPP934Z	Removal of Internal Fixation Device from Right Clavicle, Percutaneous Approach	PX	ICD-10-CM
OPP937Z	Removal of Autologous Tissue Substitute from Right Clavicle, Percutaneous Approach	PX	ICD-10-CM
OPP93JZ	Removal of Synthetic Substitute from Right Clavicle, Percutaneous Approach	PX	ICD-10-CM
OPP93KZ	Removal of Nonautologous Tissue Substitute from Right Clavicle, Percutaneous Approach	PX	ICD-10-CM
OPP944Z	Removal of Internal Fixation Device from Right Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP947Z	Removal of Autologous Tissue Substitute from Right Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP94JZ	Removal of Synthetic Substitute from Right Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPP94KZ	Removal of Nonautologous Tissue Substitute from Right Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPB04Z	Removal of Internal Fixation Device from Left Clavicle, Open Approach	PX	ICD-10-CM
OPPB07Z	Removal of Autologous Tissue Substitute from Left Clavicle, Open Approach	PX	ICD-10-CM
OPPB0JZ	Removal of Synthetic Substitute from Left Clavicle, Open Approach	PX	ICD-10-CM
OPPB0KZ	Removal of Nonautologous Tissue Substitute from Left Clavicle, Open Approach	PX	ICD-10-CM
OPPB34Z	Removal of Internal Fixation Device from Left Clavicle, Percutaneous Approach	PX	ICD-10-CM
OPPB37Z	Removal of Autologous Tissue Substitute from Left Clavicle, Percutaneous Approach	PX	ICD-10-CM
OPPB3JZ	Removal of Synthetic Substitute from Left Clavicle, Percutaneous Approach	PX	ICD-10-CM
OPPB3KZ	Removal of Nonautologous Tissue Substitute from Left Clavicle, Percutaneous Approach	PX	ICD-10-CM
OPPB44Z	Removal of Internal Fixation Device from Left Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
OPPB47Z	Removal of Autologous Tissue Substitute from Left Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPB4JZ	Removal of Synthetic Substitute from Left Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPB4KZ	Removal of Nonautologous Tissue Substitute from Left Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPH04Z	Removal of Internal Fixation Device from Right Radius, Open Approach	PX	ICD-10-CM
OPPH05Z	Removal of External Fixation Device from Right Radius, Open Approach	PX	ICD-10-CM
OPPH07Z	Removal of Autologous Tissue Substitute from Right Radius, Open Approach	PX	ICD-10-CM
OPPH0JZ	Removal of Synthetic Substitute from Right Radius, Open Approach	PX	ICD-10-CM
OPPH0KZ	Removal of Nonautologous Tissue Substitute from Right Radius, Open Approach	PX	ICD-10-CM
OPPH34Z	Removal of Internal Fixation Device from Right Radius, Percutaneous Approach	PX	ICD-10-CM
OPPH35Z	Removal of External Fixation Device from Right Radius, Percutaneous Approach	PX	ICD-10-CM
OPPH37Z	Removal of Autologous Tissue Substitute from Right Radius, Percutaneous Approach	PX	ICD-10-CM
OPPH3JZ	Removal of Synthetic Substitute from Right Radius, Percutaneous Approach	PX	ICD-10-CM
OPPH3KZ	Removal of Nonautologous Tissue Substitute from Right Radius, Percutaneous Approach	PX	ICD-10-CM
OPPH44Z	Removal of Internal Fixation Device from Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPH45Z	Removal of External Fixation Device from Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPH47Z	Removal of Autologous Tissue Substitute from Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPH4JZ	Removal of Synthetic Substitute from Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPH4KZ	Removal of Nonautologous Tissue Substitute from Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPJ04Z	Removal of Internal Fixation Device from Left Radius, Open Approach	PX	ICD-10-CM
OPPJ05Z	Removal of External Fixation Device from Left Radius, Open Approach	PX	ICD-10-CM
OPPJ07Z	Removal of Autologous Tissue Substitute from Left Radius, Open Approach	PX	ICD-10-CM
OPPJ0JZ	Removal of Synthetic Substitute from Left Radius, Open Approach	PX	ICD-10-CM
OPPJ0KZ	Removal of Nonautologous Tissue Substitute from Left Radius, Open Approach	PX	ICD-10-CM
OPPJ34Z	Removal of Internal Fixation Device from Left Radius, Percutaneous Approach	PX	ICD-10-CM
OPPJ35Z	Removal of External Fixation Device from Left Radius, Percutaneous Approach	PX	ICD-10-CM
OPPJ37Z	Removal of Autologous Tissue Substitute from Left Radius, Percutaneous Approach	PX	ICD-10-CM
OPPJ3JZ	Removal of Synthetic Substitute from Left Radius, Percutaneous Approach	PX	ICD-10-CM
OPPJ3KZ	Removal of Nonautologous Tissue Substitute from Left Radius, Percutaneous Approach	PX	ICD-10-CM
OPPJ44Z	Removal of Internal Fixation Device from Left Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPJ45Z	Removal of External Fixation Device from Left Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPJ47Z	Removal of Autologous Tissue Substitute from Left Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPJ4JZ	Removal of Synthetic Substitute from Left Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPJ4KZ	Removal of Nonautologous Tissue Substitute from Left Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPK04Z	Removal of Internal Fixation Device from Right Ulna, Open Approach	PX	ICD-10-CM
OPPK05Z	Removal of External Fixation Device from Right Ulna, Open Approach	PX	ICD-10-CM
OPPK07Z	Removal of Autologous Tissue Substitute from Right Ulna, Open Approach	PX	ICD-10-CM
OPPK0JZ	Removal of Synthetic Substitute from Right Ulna, Open Approach	PX	ICD-10-CM
OPPK0KZ	Removal of Nonautologous Tissue Substitute from Right Ulna, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
OPPK34Z	Removal of Internal Fixation Device from Right Ulna, Percutaneous Approach	PX	ICD-10-CM
OPPK35Z	Removal of External Fixation Device from Right Ulna, Percutaneous Approach	PX	ICD-10-CM
OPPK37Z	Removal of Autologous Tissue Substitute from Right Ulna, Percutaneous Approach	PX	ICD-10-CM
OPPK3JZ	Removal of Synthetic Substitute from Right Ulna, Percutaneous Approach	PX	ICD-10-CM
OPPK3KZ	Removal of Nonautologous Tissue Substitute from Right Ulna, Percutaneous Approach	PX	ICD-10-CM
OPPK44Z	Removal of Internal Fixation Device from Right Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPK45Z	Removal of External Fixation Device from Right Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPK47Z	Removal of Autologous Tissue Substitute from Right Ulna, Percutaneous Endoscopic	PX	ICD-10-CM
OPPK4JZ	Removal of Synthetic Substitute from Right Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPK4KZ	Removal of Nonautologous Tissue Substitute from Right Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPL04Z	Removal of Internal Fixation Device from Left Ulna, Open Approach	PX	ICD-10-CM
OPPL05Z	Removal of External Fixation Device from Left Ulna, Open Approach	PX	ICD-10-CM
OPPL07Z	Removal of Autologous Tissue Substitute from Left Ulna, Open Approach	PX	ICD-10-CM
OPPL0JZ	Removal of Synthetic Substitute from Left Ulna, Open Approach	PX	ICD-10-CM
OPPL0KZ	Removal of Nonautologous Tissue Substitute from Left Ulna, Open Approach	PX	ICD-10-CM
OPPL34Z	Removal of Internal Fixation Device from Left Ulna, Percutaneous Approach	PX	ICD-10-CM
OPPL35Z	Removal of External Fixation Device from Left Ulna, Percutaneous Approach	PX	ICD-10-CM
OPPL37Z	Removal of Autologous Tissue Substitute from Left Ulna, Percutaneous Approach	PX	ICD-10-CM
OPPL3JZ	Removal of Synthetic Substitute from Left Ulna, Percutaneous Approach	PX	ICD-10-CM
OPPL3KZ	Removal of Nonautologous Tissue Substitute from Left Ulna, Percutaneous Approach	PX	ICD-10-CM
OPPL44Z	Removal of Internal Fixation Device from Left Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPL45Z	Removal of External Fixation Device from Left Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPL47Z	Removal of Autologous Tissue Substitute from Left Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPL4JZ	Removal of Synthetic Substitute from Left Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPPL4KZ	Removal of Nonautologous Tissue Substitute from Left Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPQ00ZZ	Repair Sternum, Open Approach	PX	ICD-10-CM
OPQ03ZZ	Repair Sternum, Percutaneous Approach	PX	ICD-10-CM
OPQ04ZZ	Repair Sternum, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPQ0XZZ	Repair Sternum, External Approach	PX	ICD-10-CM
OPQ10ZZ	Repair 1 to 2 Ribs, Open Approach	PX	ICD-10-CM
OPQ13ZZ	Repair 1 to 2 Ribs, Percutaneous Approach	PX	ICD-10-CM
OPQ14ZZ	Repair 1 to 2 Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPQ1XZZ	Repair 1 to 2 Ribs, External Approach	PX	ICD-10-CM
OPQ20ZZ	Repair 3 or More Ribs, Open Approach	PX	ICD-10-CM
OPQ23ZZ	Repair 3 or More Ribs, Percutaneous Approach	PX	ICD-10-CM
OPQ24ZZ	Repair 3 or More Ribs, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPQ2XZZ	Repair 3 or More Ribs, External Approach	PX	ICD-10-CM
OPQ50ZZ	Repair Right Scapula, Open Approach	PX	ICD-10-CM
OPQ53ZZ	Repair Right Scapula, Percutaneous Approach	PX	ICD-10-CM
OPQ54ZZ	Repair Right Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPQ5XZZ	Repair Right Scapula, External Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0PQ60ZZ	Repair Left Scapula, Open Approach	PX	ICD-10-CM
0PQ63ZZ	Repair Left Scapula, Percutaneous Approach	PX	ICD-10-CM
0PQ64ZZ	Repair Left Scapula, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0PQ6XZZ	Repair Left Scapula, External Approach	PX	ICD-10-CM
0PQ70ZZ	Repair Right Glenoid Cavity, Open Approach	PX	ICD-10-CM
0PQ73ZZ	Repair Right Glenoid Cavity, Percutaneous Approach	PX	ICD-10-CM
0PQ74ZZ	Repair Right Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0PQ7XZZ	Repair Right Glenoid Cavity, External Approach	PX	ICD-10-CM
0PQ80ZZ	Repair Left Glenoid Cavity, Open Approach	PX	ICD-10-CM
0PQ83ZZ	Repair Left Glenoid Cavity, Percutaneous Approach	PX	ICD-10-CM
0PQ84ZZ	Repair Left Glenoid Cavity, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0PQ8XZZ	Repair Left Glenoid Cavity, External Approach	PX	ICD-10-CM
0PQ90ZZ	Repair Right Clavicle, Open Approach	PX	ICD-10-CM
0PQ93ZZ	Repair Right Clavicle, Percutaneous Approach	PX	ICD-10-CM
0PQ94ZZ	Repair Right Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0PQ9XZZ	Repair Right Clavicle, External Approach	PX	ICD-10-CM
0PQB0ZZ	Repair Left Clavicle, Open Approach	PX	ICD-10-CM
0PQB3ZZ	Repair Left Clavicle, Percutaneous Approach	PX	ICD-10-CM
0PQB4ZZ	Repair Left Clavicle, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0PQBXZZ	Repair Left Clavicle, External Approach	PX	ICD-10-CM
0PQH0ZZ	Repair Right Radius, Open Approach	PX	ICD-10-CM
0PQH3ZZ	Repair Right Radius, Percutaneous Approach	PX	ICD-10-CM
0PQH4ZZ	Repair Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0PQHXXZ	Repair Right Radius, External Approach	PX	ICD-10-CM
0PQJ0ZZ	Repair Left Radius, Open Approach	PX	ICD-10-CM
0PQJ3ZZ	Repair Left Radius, Percutaneous Approach	PX	ICD-10-CM
0PQJ4ZZ	Repair Left Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0PQJXZZ	Repair Left Radius, External Approach	PX	ICD-10-CM
0PQK0ZZ	Repair Right Ulna, Open Approach	PX	ICD-10-CM
0PQK3ZZ	Repair Right Ulna, Percutaneous Approach	PX	ICD-10-CM
0PQK4ZZ	Repair Right Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0PQKXZZ	Repair Right Ulna, External Approach	PX	ICD-10-CM
0PQL0ZZ	Repair Left Ulna, Open Approach	PX	ICD-10-CM
0PQL3ZZ	Repair Left Ulna, Percutaneous Approach	PX	ICD-10-CM
0PQL4ZZ	Repair Left Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0PQLXZZ	Repair Left Ulna, External Approach	PX	ICD-10-CM
0PR00JZ	Replacement of Sternum with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0PR03JZ	Replacement of Sternum with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0PR04JZ	Replacement of Sternum with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0PR10JZ	Replacement of 1 to 2 Ribs with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0PR13JZ	Replacement of 1 to 2 Ribs with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0PR14JZ	Replacement of 1 to 2 Ribs with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0PR20JZ	Replacement of 3 or More Ribs with Synthetic Substitute, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
OPR23JZ	Replacement of 3 or More Ribs with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPR24JZ	Replacement of 3 or More Ribs with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPR50JZ	Replacement of Right Scapula with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPR53JZ	Replacement of Right Scapula with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPR54JZ	Replacement of Right Scapula with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPR60JZ	Replacement of Left Scapula with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPR63JZ	Replacement of Left Scapula with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPR64JZ	Replacement of Left Scapula with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPR70JZ	Replacement of Right Glenoid Cavity with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPR73JZ	Replacement of Right Glenoid Cavity with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPR74JZ	Replacement of Right Glenoid Cavity with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPR80JZ	Replacement of Left Glenoid Cavity with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPR83JZ	Replacement of Left Glenoid Cavity with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPR84JZ	Replacement of Left Glenoid Cavity with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPR90JZ	Replacement of Right Clavicle with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPR93JZ	Replacement of Right Clavicle with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPR94JZ	Replacement of Right Clavicle with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPRB0JZ	Replacement of Left Clavicle with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPRB3JZ	Replacement of Left Clavicle with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPRB4JZ	Replacement of Left Clavicle with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPRH0JZ	Replacement of Right Radius with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPRH3JZ	Replacement of Right Radius with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPRH4JZ	Replacement of Right Radius with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPRJ0JZ	Replacement of Left Radius with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPRJ3JZ	Replacement of Left Radius with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPRJ4JZ	Replacement of Left Radius with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPRK0JZ	Replacement of Right Ulna with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPRK3JZ	Replacement of Right Ulna with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPRK4JZ	Replacement of Right Ulna with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPRLOJZ	Replacement of Left Ulna with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPRL3JZ	Replacement of Left Ulna with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPRL4JZ	Replacement of Left Ulna with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSH04Z	Reposition Right Radius with Internal Fixation Device, Open Approach	PX	ICD-10-CM
OPSH05Z	Reposition Right Radius with External Fixation Device, Open Approach	PX	ICD-10-CM
OPSH06Z	Reposition Right Radius with Intramedullary Internal Fixation Device, Open Approach	PX	ICD-10-CM
OPSH0BZ	Reposition Right Radius with Monoplanar External Fixation Device, Open Approach	PX	ICD-10-CM
OPSH0CZ	Reposition Right Radius with Ring External Fixation Device, Open Approach	PX	ICD-10-CM
OPSH0DZ	Reposition Right Radius with Hybrid External Fixation Device, Open Approach	PX	ICD-10-CM
OPSH0ZZ	Reposition Right Radius, Open Approach	PX	ICD-10-CM
OPSH34Z	Reposition Right Radius with Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSH35Z	Reposition Right Radius with External Fixation Device, Percutaneous Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
OPSH36Z	Reposition Right Radius with Intramedullary Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSH3BZ	Reposition Right Radius with Monoplanar External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSH3CZ	Reposition Right Radius with Ring External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSH3DZ	Reposition Right Radius with Hybrid External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSH3ZZ	Reposition Right Radius, Percutaneous Approach	PX	ICD-10-CM
OPSH44Z	Reposition Right Radius with Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSH45Z	Reposition Right Radius with External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSH46Z	Reposition Right Radius with Intramedullary Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSH4BZ	Reposition Right Radius with Monoplanar External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSH4CZ	Reposition Right Radius with Ring External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSH4DZ	Reposition Right Radius with Hybrid External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSH4ZZ	Reposition Right Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSHXZZ	Reposition Right Radius, External Approach	PX	ICD-10-CM
OPSI04Z	Reposition Left Radius with Internal Fixation Device, Open Approach	PX	ICD-10-CM
OPSI05Z	Reposition Left Radius with External Fixation Device, Open Approach	PX	ICD-10-CM
OPSI06Z	Reposition Left Radius with Intramedullary Internal Fixation Device, Open Approach	PX	ICD-10-CM
OPSI0BZ	Reposition Left Radius with Monoplanar External Fixation Device, Open Approach	PX	ICD-10-CM
OPSI0CZ	Reposition Left Radius with Ring External Fixation Device, Open Approach	PX	ICD-10-CM
OPSI0DZ	Reposition Left Radius with Hybrid External Fixation Device, Open Approach	PX	ICD-10-CM
OPSI0ZZ	Reposition Left Radius, Open Approach	PX	ICD-10-CM
OPSI34Z	Reposition Left Radius with Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSI35Z	Reposition Left Radius with External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSI36Z	Reposition Left Radius with Intramedullary Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSI3BZ	Reposition Left Radius with Monoplanar External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSI3CZ	Reposition Left Radius with Ring External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSI3DZ	Reposition Left Radius with Hybrid External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSI3ZZ	Reposition Left Radius, Percutaneous Approach	PX	ICD-10-CM
OPSI44Z	Reposition Left Radius with Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSI45Z	Reposition Left Radius with External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSI46Z	Reposition Left Radius with Intramedullary Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSI4BZ	Reposition Left Radius with Monoplanar External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSI4CZ	Reposition Left Radius with Ring External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSI4DZ	Reposition Left Radius with Hybrid External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSI4ZZ	Reposition Left Radius, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSIJZZ	Reposition Left Radius, External Approach	PX	ICD-10-CM
OPSK04Z	Reposition Right Ulna with Internal Fixation Device, Open Approach	PX	ICD-10-CM
OPSK05Z	Reposition Right Ulna with External Fixation Device, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
OPSK06Z	Reposition Right Ulna with Intramedullary Internal Fixation Device, Open Approach	PX	ICD-10-CM
OPSK0BZ	Reposition Right Ulna with Monoplanar External Fixation Device, Open Approach	PX	ICD-10-CM
OPSK0CZ	Reposition Right Ulna with Ring External Fixation Device, Open Approach	PX	ICD-10-CM
OPSK0DZ	Reposition Right Ulna with Hybrid External Fixation Device, Open Approach	PX	ICD-10-CM
OPSK0ZZ	Reposition Right Ulna, Open Approach	PX	ICD-10-CM
OPSK34Z	Reposition Right Ulna with Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSK35Z	Reposition Right Ulna with External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSK36Z	Reposition Right Ulna with Intramedullary Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSK3BZ	Reposition Right Ulna with Monoplanar External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSK3CZ	Reposition Right Ulna with Ring External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSK3DZ	Reposition Right Ulna with Hybrid External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSK3ZZ	Reposition Right Ulna, Percutaneous Approach	PX	ICD-10-CM
OPSK44Z	Reposition Right Ulna with Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSK45Z	Reposition Right Ulna with External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSK46Z	Reposition Right Ulna with Intramedullary Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSK4BZ	Reposition Right Ulna with Monoplanar External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSK4CZ	Reposition Right Ulna with Ring External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSK4DZ	Reposition Right Ulna with Hybrid External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSK4ZZ	Reposition Right Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSKXZZ	Reposition Right Ulna, External Approach	PX	ICD-10-CM
OPSL04Z	Reposition Left Ulna with Internal Fixation Device, Open Approach	PX	ICD-10-CM
OPSL05Z	Reposition Left Ulna with External Fixation Device, Open Approach	PX	ICD-10-CM
OPSL06Z	Reposition Left Ulna with Intramedullary Internal Fixation Device, Open Approach	PX	ICD-10-CM
OPSL0BZ	Reposition Left Ulna with Monoplanar External Fixation Device, Open Approach	PX	ICD-10-CM
OPSL0CZ	Reposition Left Ulna with Ring External Fixation Device, Open Approach	PX	ICD-10-CM
OPSL0DZ	Reposition Left Ulna with Hybrid External Fixation Device, Open Approach	PX	ICD-10-CM
OPSL0ZZ	Reposition Left Ulna, Open Approach	PX	ICD-10-CM
OPSL34Z	Reposition Left Ulna with Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSL35Z	Reposition Left Ulna with External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSL36Z	Reposition Left Ulna with Intramedullary Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSL3BZ	Reposition Left Ulna with Monoplanar External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSL3CZ	Reposition Left Ulna with Ring External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSL3DZ	Reposition Left Ulna with Hybrid External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
OPSL3ZZ	Reposition Left Ulna, Percutaneous Approach	PX	ICD-10-CM
OPSL44Z	Reposition Left Ulna with Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSL45Z	Reposition Left Ulna with External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSL46Z	Reposition Left Ulna with Intramedullary Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSL4BZ	Reposition Left Ulna with Monoplanar External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSL4CZ	Reposition Left Ulna with Ring External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
OPSL4DZ	Reposition Left Ulna with Hybrid External Fixation Device, Percutaneous Endoscopic	PX	ICD-10-CM
OPSL4ZZ	Reposition Left Ulna, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPSLXZZ	Reposition Left Ulna, External Approach	PX	ICD-10-CM
OPU00JZ	Supplement Sternum with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPU03JZ	Supplement Sternum with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPU04JZ	Supplement Sternum with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPU10JZ	Supplement 1 to 2 Ribs with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPU13JZ	Supplement 1 to 2 Ribs with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPU14JZ	Supplement 1 to 2 Ribs with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPU20JZ	Supplement 3 or More Ribs with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPU23JZ	Supplement 3 or More Ribs with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPU24JZ	Supplement 3 or More Ribs with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPU50JZ	Supplement Right Scapula with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPU53JZ	Supplement Right Scapula with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPU54JZ	Supplement Right Scapula with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPU60JZ	Supplement Left Scapula with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPU63JZ	Supplement Left Scapula with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPU64JZ	Supplement Left Scapula with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPU70JZ	Supplement Right Glenoid Cavity with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPU73JZ	Supplement Right Glenoid Cavity with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPU74JZ	Supplement Right Glenoid Cavity with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPU80JZ	Supplement Left Glenoid Cavity with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPU83JZ	Supplement Left Glenoid Cavity with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPU84JZ	Supplement Left Glenoid Cavity with Synthetic Substitute, Percutaneous Endoscopic	PX	ICD-10-CM
OPU90JZ	Supplement Right Clavicle with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPU93JZ	Supplement Right Clavicle with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPU94JZ	Supplement Right Clavicle with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPUB0JZ	Supplement Left Clavicle with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPUB3JZ	Supplement Left Clavicle with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPUB4JZ	Supplement Left Clavicle with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPUH0JZ	Supplement Right Radius with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPUH3JZ	Supplement Right Radius with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPUH4JZ	Supplement Right Radius with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPUJ0JZ	Supplement Left Radius with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPUJ3JZ	Supplement Left Radius with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPUJ4JZ	Supplement Left Radius with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPUK0JZ	Supplement Right Ulna with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPUK3JZ	Supplement Right Ulna with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPUK4JZ	Supplement Right Ulna with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
OPUL0JZ	Supplement Left Ulna with Synthetic Substitute, Open Approach	PX	ICD-10-CM
OPUL3JZ	Supplement Left Ulna with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
OPUL4JZ	Supplement Left Ulna with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0QB60ZZ	Excision of Right Upper Femur, Open Approach	PX	ICD-10-CM
0QB70ZZ	Excision of Left Upper Femur, Open Approach	PX	ICD-10-CM
0QB80ZZ	Excision of Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QB90ZZ	Excision of Left Femoral Shaft, Open Approach	PX	ICD-10-CM
0QBB0ZZ	Excision of Right Lower Femur, Open Approach	PX	ICD-10-CM
0QBC0ZZ	Excision of Left Lower Femur, Open Approach	PX	ICD-10-CM
0QH604Z	Insertion of Internal Fixation Device into Right Upper Femur, Open Approach	PX	ICD-10-CM
0QH605Z	Insertion of External Fixation Device into Right Upper Femur, Open Approach	PX	ICD-10-CM
0QH606Z	Insertion of Intramedullary Internal Fixation Device into Right Upper Femur, Open Approach	PX	ICD-10-CM
0QH60BZ	Insertion of Monoplanar External Fixation Device into Right Upper Femur, Open Approach	PX	ICD-10-CM
0QH60CZ	Insertion of Ring External Fixation Device into Right Upper Femur, Open Approach	PX	ICD-10-CM
0QH60DZ	Insertion of Hybrid External Fixation Device into Right Upper Femur, Open Approach	PX	ICD-10-CM
0QH634Z	Insertion of Internal Fixation Device into Right Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QH635Z	Insertion of External Fixation Device into Right Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QH636Z	Insertion of Intramedullary Internal Fixation Device into Right Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QH63BZ	Insertion of Monoplanar External Fixation Device into Right Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QH63CZ	Insertion of Ring External Fixation Device into Right Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QH63DZ	Insertion of Hybrid External Fixation Device into Right Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QH644Z	Insertion of Internal Fixation Device into Right Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH645Z	Insertion of External Fixation Device into Right Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH646Z	Insertion of Intramedullary Internal Fixation Device into Right Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH64BZ	Insertion of Monoplanar External Fixation Device into Right Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH64CZ	Insertion of Ring External Fixation Device into Right Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH64DZ	Insertion of Hybrid External Fixation Device into Right Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH704Z	Insertion of Internal Fixation Device into Left Upper Femur, Open Approach	PX	ICD-10-CM
0QH705Z	Insertion of External Fixation Device into Left Upper Femur, Open Approach	PX	ICD-10-CM
0QH706Z	Insertion of Intramedullary Internal Fixation Device into Left Upper Femur, Open Approach	PX	ICD-10-CM
0QH70BZ	Insertion of Monoplanar External Fixation Device into Left Upper Femur, Open Approach	PX	ICD-10-CM
0QH70CZ	Insertion of Ring External Fixation Device into Left Upper Femur, Open Approach	PX	ICD-10-CM
0QH70DZ	Insertion of Hybrid External Fixation Device into Left Upper Femur, Open Approach	PX	ICD-10-CM
0QH734Z	Insertion of Internal Fixation Device into Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QH735Z	Insertion of External Fixation Device into Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QH736Z	Insertion of Intramedullary Internal Fixation Device into Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0QH73BZ	Insertion of Monoplanar External Fixation Device into Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QH73CZ	Insertion of Ring External Fixation Device into Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QH73DZ	Insertion of Hybrid External Fixation Device into Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QH744Z	Insertion of Internal Fixation Device into Left Upper Femur, Percutaneous Endoscopic	PX	ICD-10-CM
0QH745Z	Insertion of External Fixation Device into Left Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH746Z	Insertion of Intramedullary Internal Fixation Device into Left Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH74BZ	Insertion of Monoplanar External Fixation Device into Left Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH74CZ	Insertion of Ring External Fixation Device into Left Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH74DZ	Insertion of Hybrid External Fixation Device into Left Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH804Z	Insertion of Internal Fixation Device into Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QH805Z	Insertion of External Fixation Device into Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QH806Z	Insertion of Intramedullary Internal Fixation Device into Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QH80BZ	Insertion of Monoplanar External Fixation Device into Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QH80CZ	Insertion of Ring External Fixation Device into Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QH80DZ	Insertion of Hybrid External Fixation Device into Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QH834Z	Insertion of Internal Fixation Device into Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QH835Z	Insertion of External Fixation Device into Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QH836Z	Insertion of Intramedullary Internal Fixation Device into Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QH83BZ	Insertion of Monoplanar External Fixation Device into Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QH83CZ	Insertion of Ring External Fixation Device into Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QH83DZ	Insertion of Hybrid External Fixation Device into Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QH844Z	Insertion of Internal Fixation Device into Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH845Z	Insertion of External Fixation Device into Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH846Z	Insertion of Intramedullary Internal Fixation Device into Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH84BZ	Insertion of Monoplanar External Fixation Device into Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH84CZ	Insertion of Ring External Fixation Device into Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH84DZ	Insertion of Hybrid External Fixation Device into Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH904Z	Insertion of Internal Fixation Device into Left Femoral Shaft, Open Approach	PX	ICD-10-CM
0QH905Z	Insertion of External Fixation Device into Left Femoral Shaft, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0QH906Z	Insertion of Intramedullary Internal Fixation Device into Left Femoral Shaft, Open Approach	PX	ICD-10-CM
0QH90BZ	Insertion of Monoplanar External Fixation Device into Left Femoral Shaft, Open Approach	PX	ICD-10-CM
0QH90CZ	Insertion of Ring External Fixation Device into Left Femoral Shaft, Open Approach	PX	ICD-10-CM
0QH90DZ	Insertion of Hybrid External Fixation Device into Left Femoral Shaft, Open Approach	PX	ICD-10-CM
0QH934Z	Insertion of Internal Fixation Device into Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QH935Z	Insertion of External Fixation Device into Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QH936Z	Insertion of Intramedullary Internal Fixation Device into Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QH93BZ	Insertion of Monoplanar External Fixation Device into Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QH93CZ	Insertion of Ring External Fixation Device into Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QH93DZ	Insertion of Hybrid External Fixation Device into Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QH944Z	Insertion of Internal Fixation Device into Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH945Z	Insertion of External Fixation Device into Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH946Z	Insertion of Intramedullary Internal Fixation Device into Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH94BZ	Insertion of Monoplanar External Fixation Device into Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH94CZ	Insertion of Ring External Fixation Device into Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QH94DZ	Insertion of Hybrid External Fixation Device into Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QHB04Z	Insertion of Internal Fixation Device into Right Lower Femur, Open Approach	PX	ICD-10-CM
0QHB05Z	Insertion of External Fixation Device into Right Lower Femur, Open Approach	PX	ICD-10-CM
0QHB06Z	Insertion of Intramedullary Internal Fixation Device into Right Lower Femur, Open Approach	PX	ICD-10-CM
0QHB0BZ	Insertion of Monoplanar External Fixation Device into Right Lower Femur, Open Approach	PX	ICD-10-CM
0QHB0CZ	Insertion of Ring External Fixation Device into Right Lower Femur, Open Approach	PX	ICD-10-CM
0QHB0DZ	Insertion of Hybrid External Fixation Device into Right Lower Femur, Open Approach	PX	ICD-10-CM
0QHB34Z	Insertion of Internal Fixation Device into Right Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QHB35Z	Insertion of External Fixation Device into Right Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QHB36Z	Insertion of Intramedullary Internal Fixation Device into Right Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QHB3BZ	Insertion of Monoplanar External Fixation Device into Right Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QHB3CZ	Insertion of Ring External Fixation Device into Right Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QHB3DZ	Insertion of Hybrid External Fixation Device into Right Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QHB44Z	Insertion of Internal Fixation Device into Right Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QHB45Z	Insertion of External Fixation Device into Right Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0QHB46Z	Insertion of Intramedullary Internal Fixation Device into Right Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QHB4BZ	Insertion of Monoplanar External Fixation Device into Right Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QHB4CZ	Insertion of Ring External Fixation Device into Right Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QHB4DZ	Insertion of Hybrid External Fixation Device into Right Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QHC04Z	Insertion of Internal Fixation Device into Left Lower Femur, Open Approach	PX	ICD-10-CM
0QHC05Z	Insertion of External Fixation Device into Left Lower Femur, Open Approach	PX	ICD-10-CM
0QHC06Z	Insertion of Intramedullary Internal Fixation Device into Left Lower Femur, Open Approach	PX	ICD-10-CM
0QHC0BZ	Insertion of Monoplanar External Fixation Device into Left Lower Femur, Open Approach	PX	ICD-10-CM
0QHC0CZ	Insertion of Ring External Fixation Device into Left Lower Femur, Open Approach	PX	ICD-10-CM
0QHC0DZ	Insertion of Hybrid External Fixation Device into Left Lower Femur, Open Approach	PX	ICD-10-CM
0QHC34Z	Insertion of Internal Fixation Device into Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QHC35Z	Insertion of External Fixation Device into Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QHC36Z	Insertion of Intramedullary Internal Fixation Device into Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QHC3BZ	Insertion of Monoplanar External Fixation Device into Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QHC3CZ	Insertion of Ring External Fixation Device into Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QHC3DZ	Insertion of Hybrid External Fixation Device into Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QHC44Z	Insertion of Internal Fixation Device into Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QHC45Z	Insertion of External Fixation Device into Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QHC46Z	Insertion of Intramedullary Internal Fixation Device into Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QHC4BZ	Insertion of Monoplanar External Fixation Device into Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QHC4CZ	Insertion of Ring External Fixation Device into Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QHC4DZ	Insertion of Hybrid External Fixation Device into Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QN60ZZ	Release Right Upper Femur, Open Approach	PX	ICD-10-CM
0QN63ZZ	Release Right Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QN64ZZ	Release Right Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QN70ZZ	Release Left Upper Femur, Open Approach	PX	ICD-10-CM
0QN73ZZ	Release Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QN74ZZ	Release Left Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QN80ZZ	Release Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QN83ZZ	Release Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QN84ZZ	Release Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QN90ZZ	Release Left Femoral Shaft, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0QN93ZZ	Release Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QN94ZZ	Release Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QNB0ZZ	Release Right Lower Femur, Open Approach	PX	ICD-10-CM
0QNB3ZZ	Release Right Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QNB4ZZ	Release Right Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QNC0ZZ	Release Left Lower Femur, Open Approach	PX	ICD-10-CM
0QNC3ZZ	Release Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QNC4ZZ	Release Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP604Z	Removal of Internal Fixation Device from Right Upper Femur, Open Approach	PX	ICD-10-CM
0QP605Z	Removal of External Fixation Device from Right Upper Femur, Open Approach	PX	ICD-10-CM
0QP607Z	Removal of Autologous Tissue Substitute from Right Upper Femur, Open Approach	PX	ICD-10-CM
0QP60JZ	Removal of Synthetic Substitute from Right Upper Femur, Open Approach	PX	ICD-10-CM
0QP60KZ	Removal of Nonautologous Tissue Substitute from Right Upper Femur, Open Approach	PX	ICD-10-CM
0QP634Z	Removal of Internal Fixation Device from Right Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QP635Z	Removal of External Fixation Device from Right Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QP637Z	Removal of Autologous Tissue Substitute from Right Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QP63JZ	Removal of Synthetic Substitute from Right Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QP63KZ	Removal of Nonautologous Tissue Substitute from Right Upper Femur, Percutaneous	PX	ICD-10-CM
0QP644Z	Removal of Internal Fixation Device from Right Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP645Z	Removal of External Fixation Device from Right Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP647Z	Removal of Autologous Tissue Substitute from Right Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP64JZ	Removal of Synthetic Substitute from Right Upper Femur, Percutaneous Endoscopic	PX	ICD-10-CM
0QP64KZ	Removal of Nonautologous Tissue Substitute from Right Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP704Z	Removal of Internal Fixation Device from Left Upper Femur, Open Approach	PX	ICD-10-CM
0QP705Z	Removal of External Fixation Device from Left Upper Femur, Open Approach	PX	ICD-10-CM
0QP707Z	Removal of Autologous Tissue Substitute from Left Upper Femur, Open Approach	PX	ICD-10-CM
0QP70JZ	Removal of Synthetic Substitute from Left Upper Femur, Open Approach	PX	ICD-10-CM
0QP70KZ	Removal of Nonautologous Tissue Substitute from Left Upper Femur, Open Approach	PX	ICD-10-CM
0QP734Z	Removal of Internal Fixation Device from Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QP735Z	Removal of External Fixation Device from Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QP737Z	Removal of Autologous Tissue Substitute from Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QP73JZ	Removal of Synthetic Substitute from Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QP73KZ	Removal of Nonautologous Tissue Substitute from Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QP744Z	Removal of Internal Fixation Device from Left Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP745Z	Removal of External Fixation Device from Left Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP747Z	Removal of Autologous Tissue Substitute from Left Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0QP74JZ	Removal of Synthetic Substitute from Left Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP74KZ	Removal of Nonautologous Tissue Substitute from Left Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP804Z	Removal of Internal Fixation Device from Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QP805Z	Removal of External Fixation Device from Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QP807Z	Removal of Autologous Tissue Substitute from Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QP80JZ	Removal of Synthetic Substitute from Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QP80KZ	Removal of Nonautologous Tissue Substitute from Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QP834Z	Removal of Internal Fixation Device from Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QP835Z	Removal of External Fixation Device from Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QP837Z	Removal of Autologous Tissue Substitute from Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QP83JZ	Removal of Synthetic Substitute from Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QP83KZ	Removal of Nonautologous Tissue Substitute from Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QP844Z	Removal of Internal Fixation Device from Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP845Z	Removal of External Fixation Device from Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP847Z	Removal of Autologous Tissue Substitute from Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP84JZ	Removal of Synthetic Substitute from Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP84KZ	Removal of Nonautologous Tissue Substitute from Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP904Z	Removal of Internal Fixation Device from Left Femoral Shaft, Open Approach	PX	ICD-10-CM
0QP905Z	Removal of External Fixation Device from Left Femoral Shaft, Open Approach	PX	ICD-10-CM
0QP907Z	Removal of Autologous Tissue Substitute from Left Femoral Shaft, Open Approach	PX	ICD-10-CM
0QP90JZ	Removal of Synthetic Substitute from Left Femoral Shaft, Open Approach	PX	ICD-10-CM
0QP90KZ	Removal of Nonautologous Tissue Substitute from Left Femoral Shaft, Open Approach	PX	ICD-10-CM
0QP934Z	Removal of Internal Fixation Device from Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QP935Z	Removal of External Fixation Device from Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QP937Z	Removal of Autologous Tissue Substitute from Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QP93JZ	Removal of Synthetic Substitute from Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QP93KZ	Removal of Nonautologous Tissue Substitute from Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QP944Z	Removal of Internal Fixation Device from Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP945Z	Removal of External Fixation Device from Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP947Z	Removal of Autologous Tissue Substitute from Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP94JZ	Removal of Synthetic Substitute from Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QP94KZ	Removal of Nonautologous Tissue Substitute from Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QPB04Z	Removal of Internal Fixation Device from Right Lower Femur, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0QPB05Z	Removal of External Fixation Device from Right Lower Femur, Open Approach	PX	ICD-10-CM
0QPB07Z	Removal of Autologous Tissue Substitute from Right Lower Femur, Open Approach	PX	ICD-10-CM
0QPB0JZ	Removal of Synthetic Substitute from Right Lower Femur, Open Approach	PX	ICD-10-CM
0QPB0KZ	Removal of Nonautologous Tissue Substitute from Right Lower Femur, Open Approach	PX	ICD-10-CM
0QPB34Z	Removal of Internal Fixation Device from Right Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QPB35Z	Removal of External Fixation Device from Right Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QPB37Z	Removal of Autologous Tissue Substitute from Right Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QPB3JZ	Removal of Synthetic Substitute from Right Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QPB3KZ	Removal of Nonautologous Tissue Substitute from Right Lower Femur, Percutaneous	PX	ICD-10-CM
0QPB44Z	Removal of Internal Fixation Device from Right Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QPB45Z	Removal of External Fixation Device from Right Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QPB47Z	Removal of Autologous Tissue Substitute from Right Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QPB4JZ	Removal of Synthetic Substitute from Right Lower Femur, Percutaneous Endoscopic	PX	ICD-10-CM
0QPB4KZ	Removal of Nonautologous Tissue Substitute from Right Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QPC04Z	Removal of Internal Fixation Device from Left Lower Femur, Open Approach	PX	ICD-10-CM
0QPC05Z	Removal of External Fixation Device from Left Lower Femur, Open Approach	PX	ICD-10-CM
0QPC07Z	Removal of Autologous Tissue Substitute from Left Lower Femur, Open Approach	PX	ICD-10-CM
0QPC0JZ	Removal of Synthetic Substitute from Left Lower Femur, Open Approach	PX	ICD-10-CM
0QPC0KZ	Removal of Nonautologous Tissue Substitute from Left Lower Femur, Open Approach	PX	ICD-10-CM
0QPC34Z	Removal of Internal Fixation Device from Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QPC35Z	Removal of External Fixation Device from Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QPC37Z	Removal of Autologous Tissue Substitute from Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QPC3JZ	Removal of Synthetic Substitute from Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QPC3KZ	Removal of Nonautologous Tissue Substitute from Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QPC44Z	Removal of Internal Fixation Device from Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QPC45Z	Removal of External Fixation Device from Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QPC47Z	Removal of Autologous Tissue Substitute from Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QPC4JZ	Removal of Synthetic Substitute from Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QPC4KZ	Removal of Nonautologous Tissue Substitute from Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QQ60ZZ	Repair Right Upper Femur, Open Approach	PX	ICD-10-CM
0QQ63ZZ	Repair Right Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QQ64ZZ	Repair Right Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QQ6XZZ	Repair Right Upper Femur, External Approach	PX	ICD-10-CM
0QQ70ZZ	Repair Left Upper Femur, Open Approach	PX	ICD-10-CM
0QQ73ZZ	Repair Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0QQ74ZZ	Repair Left Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QQ7XZZ	Repair Left Upper Femur, External Approach	PX	ICD-10-CM
0QQ80ZZ	Repair Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QQ83ZZ	Repair Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QQ84ZZ	Repair Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QQ8XZZ	Repair Right Femoral Shaft, External Approach	PX	ICD-10-CM
0QQ90ZZ	Repair Left Femoral Shaft, Open Approach	PX	ICD-10-CM
0QQ93ZZ	Repair Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QQ94ZZ	Repair Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QQ9XZZ	Repair Left Femoral Shaft, External Approach	PX	ICD-10-CM
0QQB0ZZ	Repair Right Lower Femur, Open Approach	PX	ICD-10-CM
0QQB3ZZ	Repair Right Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QQB4ZZ	Repair Right Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QQBXZZ	Repair Right Lower Femur, External Approach	PX	ICD-10-CM
0QQC0ZZ	Repair Left Lower Femur, Open Approach	PX	ICD-10-CM
0QQC3ZZ	Repair Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QQC4ZZ	Repair Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QQCXZZ	Repair Left Lower Femur, External Approach	PX	ICD-10-CM
0QR60JZ	Replacement of Right Upper Femur with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0QR63JZ	Replacement of Right Upper Femur with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0QR64JZ	Replacement of Right Upper Femur with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QR70JZ	Replacement of Left Upper Femur with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0QR73JZ	Replacement of Left Upper Femur with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0QR74JZ	Replacement of Left Upper Femur with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QR80JZ	Replacement of Right Femoral Shaft with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0QR83JZ	Replacement of Right Femoral Shaft with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0QR84JZ	Replacement of Right Femoral Shaft with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QR90JZ	Replacement of Left Femoral Shaft with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0QR93JZ	Replacement of Left Femoral Shaft with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0QR94JZ	Replacement of Left Femoral Shaft with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QRB0JZ	Replacement of Right Lower Femur with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0QRB3JZ	Replacement of Right Lower Femur with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0QRB4JZ	Replacement of Right Lower Femur with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QRC0JZ	Replacement of Left Lower Femur with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0QRC3JZ	Replacement of Left Lower Femur with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0QRC4JZ	Replacement of Left Lower Femur with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS604Z	Reposition Right Upper Femur with Internal Fixation Device, Open Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0QS605Z	Reposition Right Upper Femur with External Fixation Device, Open Approach	PX	ICD-10-CM
0QS606Z	Reposition Right Upper Femur with Intramedullary Internal Fixation Device, Open Approach	PX	ICD-10-CM
0QS60BZ	Reposition Right Upper Femur with Monoplanar External Fixation Device, Open Approach	PX	ICD-10-CM
0QS60CZ	Reposition Right Upper Femur with Ring External Fixation Device, Open Approach	PX	ICD-10-CM
0QS60DZ	Reposition Right Upper Femur with Hybrid External Fixation Device, Open Approach	PX	ICD-10-CM
0QS60ZZ	Reposition Right Upper Femur, Open Approach	PX	ICD-10-CM
0QS634Z	Reposition Right Upper Femur with Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS635Z	Reposition Right Upper Femur with External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS636Z	Reposition Right Upper Femur with Intramedullary Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS63BZ	Reposition Right Upper Femur with Monoplanar External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS63CZ	Reposition Right Upper Femur with Ring External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS63DZ	Reposition Right Upper Femur with Hybrid External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS63ZZ	Reposition Right Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QS644Z	Reposition Right Upper Femur with Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS645Z	Reposition Right Upper Femur with External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS646Z	Reposition Right Upper Femur with Intramedullary Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS64BZ	Reposition Right Upper Femur with Monoplanar External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS64CZ	Reposition Right Upper Femur with Ring External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS64DZ	Reposition Right Upper Femur with Hybrid External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS64ZZ	Reposition Right Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS6XZZ	Reposition Right Upper Femur, External Approach	PX	ICD-10-CM
0QS704Z	Reposition Left Upper Femur with Internal Fixation Device, Open Approach	PX	ICD-10-CM
0QS705Z	Reposition Left Upper Femur with External Fixation Device, Open Approach	PX	ICD-10-CM
0QS706Z	Reposition Left Upper Femur with Intramedullary Internal Fixation Device, Open Approach	PX	ICD-10-CM
0QS70BZ	Reposition Left Upper Femur with Monoplanar External Fixation Device, Open Approach	PX	ICD-10-CM
0QS70CZ	Reposition Left Upper Femur with Ring External Fixation Device, Open Approach	PX	ICD-10-CM
0QS70DZ	Reposition Left Upper Femur with Hybrid External Fixation Device, Open Approach	PX	ICD-10-CM
0QS70ZZ	Reposition Left Upper Femur, Open Approach	PX	ICD-10-CM
0QS734Z	Reposition Left Upper Femur with Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS735Z	Reposition Left Upper Femur with External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS736Z	Reposition Left Upper Femur with Intramedullary Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS73BZ	Reposition Left Upper Femur with Monoplanar External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS73CZ	Reposition Left Upper Femur with Ring External Fixation Device, Percutaneous Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0QS73DZ	Reposition Left Upper Femur with Hybrid External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS73ZZ	Reposition Left Upper Femur, Percutaneous Approach	PX	ICD-10-CM
0QS744Z	Reposition Left Upper Femur with Internal Fixation Device, Percutaneous Endoscopic	PX	ICD-10-CM
0QS745Z	Reposition Left Upper Femur with External Fixation Device, Percutaneous Endoscopic	PX	ICD-10-CM
0QS746Z	Reposition Left Upper Femur with Intramedullary Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS74BZ	Reposition Left Upper Femur with Monoplanar External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS74CZ	Reposition Left Upper Femur with Ring External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS74DZ	Reposition Left Upper Femur with Hybrid External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS74ZZ	Reposition Left Upper Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS7XZZ	Reposition Left Upper Femur, External Approach	PX	ICD-10-CM
0QS804Z	Reposition Right Femoral Shaft with Internal Fixation Device, Open Approach	PX	ICD-10-CM
0QS805Z	Reposition Right Femoral Shaft with External Fixation Device, Open Approach	PX	ICD-10-CM
0QS806Z	Reposition Right Femoral Shaft with Intramedullary Internal Fixation Device, Open Approach	PX	ICD-10-CM
0QS80BZ	Reposition Right Femoral Shaft with Monoplanar External Fixation Device, Open Approach	PX	ICD-10-CM
0QS80CZ	Reposition Right Femoral Shaft with Ring External Fixation Device, Open Approach	PX	ICD-10-CM
0QS80DZ	Reposition Right Femoral Shaft with Hybrid External Fixation Device, Open Approach	PX	ICD-10-CM
0QS80ZZ	Reposition Right Femoral Shaft, Open Approach	PX	ICD-10-CM
0QS834Z	Reposition Right Femoral Shaft with Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS835Z	Reposition Right Femoral Shaft with External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS836Z	Reposition Right Femoral Shaft with Intramedullary Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS83BZ	Reposition Right Femoral Shaft with Monoplanar External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS83CZ	Reposition Right Femoral Shaft with Ring External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS83DZ	Reposition Right Femoral Shaft with Hybrid External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS83ZZ	Reposition Right Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QS844Z	Reposition Right Femoral Shaft with Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS845Z	Reposition Right Femoral Shaft with External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS846Z	Reposition Right Femoral Shaft with Intramedullary Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS84BZ	Reposition Right Femoral Shaft with Monoplanar External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS84CZ	Reposition Right Femoral Shaft with Ring External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS84DZ	Reposition Right Femoral Shaft with Hybrid External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS84ZZ	Reposition Right Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0QS8XZZ	Reposition Right Femoral Shaft, External Approach	PX	ICD-10-CM
0QS904Z	Reposition Left Femoral Shaft with Internal Fixation Device, Open Approach	PX	ICD-10-CM
0QS905Z	Reposition Left Femoral Shaft with External Fixation Device, Open Approach	PX	ICD-10-CM
0QS906Z	Reposition Left Femoral Shaft with Intramedullary Internal Fixation Device, Open Approach	PX	ICD-10-CM
0QS90BZ	Reposition Left Femoral Shaft with Monoplanar External Fixation Device, Open Approach	PX	ICD-10-CM
0QS90CZ	Reposition Left Femoral Shaft with Ring External Fixation Device, Open Approach	PX	ICD-10-CM
0QS90DZ	Reposition Left Femoral Shaft with Hybrid External Fixation Device, Open Approach	PX	ICD-10-CM
0QS90ZZ	Reposition Left Femoral Shaft, Open Approach	PX	ICD-10-CM
0QS934Z	Reposition Left Femoral Shaft with Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS935Z	Reposition Left Femoral Shaft with External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS936Z	Reposition Left Femoral Shaft with Intramedullary Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS93BZ	Reposition Left Femoral Shaft with Monoplanar External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS93CZ	Reposition Left Femoral Shaft with Ring External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS93DZ	Reposition Left Femoral Shaft with Hybrid External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QS93ZZ	Reposition Left Femoral Shaft, Percutaneous Approach	PX	ICD-10-CM
0QS944Z	Reposition Left Femoral Shaft with Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS945Z	Reposition Left Femoral Shaft with External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS946Z	Reposition Left Femoral Shaft with Intramedullary Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS94BZ	Reposition Left Femoral Shaft with Monoplanar External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS94CZ	Reposition Left Femoral Shaft with Ring External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS94DZ	Reposition Left Femoral Shaft with Hybrid External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS94ZZ	Reposition Left Femoral Shaft, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QS9XZZ	Reposition Left Femoral Shaft, External Approach	PX	ICD-10-CM
0QSB04Z	Reposition Right Lower Femur with Internal Fixation Device, Open Approach	PX	ICD-10-CM
0QSB05Z	Reposition Right Lower Femur with External Fixation Device, Open Approach	PX	ICD-10-CM
0QSB06Z	Reposition Right Lower Femur with Intramedullary Internal Fixation Device, Open Approach	PX	ICD-10-CM
0QSB0BZ	Reposition Right Lower Femur with Monoplanar External Fixation Device, Open Approach	PX	ICD-10-CM
0QSB0CZ	Reposition Right Lower Femur with Ring External Fixation Device, Open Approach	PX	ICD-10-CM
0QSB0DZ	Reposition Right Lower Femur with Hybrid External Fixation Device, Open Approach	PX	ICD-10-CM
0QSB0ZZ	Reposition Right Lower Femur, Open Approach	PX	ICD-10-CM
0QSB34Z	Reposition Right Lower Femur with Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QSB35Z	Reposition Right Lower Femur with External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QSB36Z	Reposition Right Lower Femur with Intramedullary Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
0QSB3BZ	Reposition Right Lower Femur with Monoplanar External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QSB3CZ	Reposition Right Lower Femur with Ring External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QSB3DZ	Reposition Right Lower Femur with Hybrid External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QSB3ZZ	Reposition Right Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QSB44Z	Reposition Right Lower Femur with Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QSB45Z	Reposition Right Lower Femur with External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QSB46Z	Reposition Right Lower Femur with Intramedullary Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QSB4BZ	Reposition Right Lower Femur with Monoplanar External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QSB4CZ	Reposition Right Lower Femur with Ring External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QSB4DZ	Reposition Right Lower Femur with Hybrid External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QSB4ZZ	Reposition Right Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QSBXZZ	Reposition Right Lower Femur, External Approach	PX	ICD-10-CM
0QSC04Z	Reposition Left Lower Femur with Internal Fixation Device, Open Approach	PX	ICD-10-CM
0QSC05Z	Reposition Left Lower Femur with External Fixation Device, Open Approach	PX	ICD-10-CM
0QSC06Z	Reposition Left Lower Femur with Intramedullary Internal Fixation Device, Open Approach	PX	ICD-10-CM
0QSC0BZ	Reposition Left Lower Femur with Monoplanar External Fixation Device, Open Approach	PX	ICD-10-CM
0QSC0CZ	Reposition Left Lower Femur with Ring External Fixation Device, Open Approach	PX	ICD-10-CM
0QSC0DZ	Reposition Left Lower Femur with Hybrid External Fixation Device, Open Approach	PX	ICD-10-CM
0QSC0ZZ	Reposition Left Lower Femur, Open Approach	PX	ICD-10-CM
0QSC34Z	Reposition Left Lower Femur with Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QSC35Z	Reposition Left Lower Femur with External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QSC36Z	Reposition Left Lower Femur with Intramedullary Internal Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QSC3BZ	Reposition Left Lower Femur with Monoplanar External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QSC3CZ	Reposition Left Lower Femur with Ring External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QSC3DZ	Reposition Left Lower Femur with Hybrid External Fixation Device, Percutaneous Approach	PX	ICD-10-CM
0QSC3ZZ	Reposition Left Lower Femur, Percutaneous Approach	PX	ICD-10-CM
0QSC44Z	Reposition Left Lower Femur with Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QSC45Z	Reposition Left Lower Femur with External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QSC46Z	Reposition Left Lower Femur with Intramedullary Internal Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QSC4BZ	Reposition Left Lower Femur with Monoplanar External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QSC4CZ	Reposition Left Lower Femur with Ring External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM

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Code	Description	Code Type	Code Category
0QSC4DZ	Reposition Left Lower Femur with Hybrid External Fixation Device, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QSC4ZZ	Reposition Left Lower Femur, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QSCXZZ	Reposition Left Lower Femur, External Approach	PX	ICD-10-CM
0QU60JZ	Supplement Right Upper Femur with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0QU63JZ	Supplement Right Upper Femur with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0QU64JZ	Supplement Right Upper Femur with Synthetic Substitute, Percutaneous Endoscopic	PX	ICD-10-CM
0QU70JZ	Supplement Left Upper Femur with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0QU73JZ	Supplement Left Upper Femur with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0QU74JZ	Supplement Left Upper Femur with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QU80JZ	Supplement Right Femoral Shaft with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0QU83JZ	Supplement Right Femoral Shaft with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0QU84JZ	Supplement Right Femoral Shaft with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QU90JZ	Supplement Left Femoral Shaft with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0QU93JZ	Supplement Left Femoral Shaft with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0QU94JZ	Supplement Left Femoral Shaft with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0QUB0JZ	Supplement Right Lower Femur with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0QUB3JZ	Supplement Right Lower Femur with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0QUB4JZ	Supplement Right Lower Femur with Synthetic Substitute, Percutaneous Endoscopic	PX	ICD-10-CM
0QUC0JZ	Supplement Left Lower Femur with Synthetic Substitute, Open Approach	PX	ICD-10-CM
0QUC3JZ	Supplement Left Lower Femur with Synthetic Substitute, Percutaneous Approach	PX	ICD-10-CM
0QUC4JZ	Supplement Left Lower Femur with Synthetic Substitute, Percutaneous Endoscopic Approach	PX	ICD-10-CM
0XH23YZ	Insertion of Other Device into Right Shoulder Region, Percutaneous Approach	PX	ICD-10-CM
0XH33YZ	Insertion of Other Device into Left Shoulder Region, Percutaneous Approach	PX	ICD-10-CM
R55	Syncope and collapse	DX	ICD-10-CM
Cardioversion			
99.61	Atrial cardioversion	PX	ICD-09-CM
99.62	Other electric countershock of heart	PX	ICD-09-CM
92960	External shock to heart to regulate heart beat	PX	CPT-4
92961	Internal shock to heart to regulate heart beat	PX	CPT-4
5A2204Z	Restoration of Cardiac Rhythm, Single	PX	ICD-10-CM
Cardioablation			
37.33	Excision or destruction of other lesion or tissue of heart, open approach	PX	ICD-09-CM
37.34	Excision or destruction of other lesion or tissue of heart, other approach	PX	ICD-09-CM
33250	Operative ablation of supraventricular arrhythmogenic focus or pathway (eg, Wolff-Parkinson-White, atrioventricular node re-entry), tract(s) and/or focus (foci); without cardiopulmonary bypass	PX	CPT-4
33251	Operative ablation of supraventricular arrhythmogenic focus or pathway (eg, Wolff-Parkinson-White, atrioventricular node re-entry), tract(s) and/or focus (foci); with cardiopulmonary bypass	PX	CPT-4
33254	Operative tissue ablation and reconstruction of atria, limited (eg, modified maze procedure)	PX	CPT-4

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
33255	Operative tissue ablation and reconstruction of atria, extensive (eg, maze procedure); without cardiopulmonary bypass	PX	CPT-4
33256	Operative tissue ablation and reconstruction of atria, extensive (eg, maze procedure); with cardiopulmonary bypass	PX	CPT-4
33257	Operative tissue ablation and reconstruction of atria, performed at the time of other cardiac procedure(s), limited (eg, modified maze procedure) (List separately in addition to code for primary procedure)	PX	CPT-4
33258	Operative tissue ablation and reconstruction of atria, performed at the time of other cardiac procedure(s), extensive (eg, maze procedure), without cardiopulmonary bypass (List separately in addition to code for primary procedure)	PX	CPT-4
33259	Operative tissue ablation and reconstruction of atria, performed at the time of other cardiac procedure(s), extensive (eg, maze procedure), with cardiopulmonary bypass (List separately in addition to code for primary procedure)	PX	CPT-4
33261	Operative ablation of ventricular arrhythmogenic focus with cardiopulmonary bypass	PX	CPT-4
33265	Endoscopy, surgical; operative tissue ablation and reconstruction of atria, limited (eg, modified maze procedure), without cardiopulmonary bypass	PX	CPT-4
33266	Endoscopy, surgical; operative tissue ablation and reconstruction of atria, extensive (eg, maze procedure), without cardiopulmonary bypass	PX	CPT-4
93650	Intracardiac catheter ablation of atrioventricular node function, atrioventricular conduction for creation of complete heart block, with or without temporary pacemaker placement	PX	CPT-4
93651	Intracardiac catheter ablation of arrhythmogenic focus; for treatment of supraventricular tachycardia by ablation of fast or slow atrioventricular pathways, accessory atrioventricular connections or other atrial foci, singly or in combination	PX	CPT-4
93652	Intracardiac catheter ablation of arrhythmogenic focus; for treatment of ventricular tachycardia	PX	CPT-4
C1732	Catheter, electrophysiology, diagnostic/ablation, 3D or vector mapping	PX	HCPCS
C1733	Catheter, electrophysiology, diagnostic/ablation, other than 3D or vector mapping, other than cool-tip	PX	HCPCS
C2630	Catheter, electrophysiology, diagnostic/ablation, other than 3D or vector mapping, cool-tip	PX	HCPCS
02550ZZ	Destruction of Atrial Septum, Open Approach	PX	ICD-10-CM
02553ZZ	Destruction of Atrial Septum, Percutaneous Approach	PX	ICD-10-CM
02560ZZ	Destruction of Right Atrium, Open Approach	PX	ICD-10-CM
02563ZZ	Destruction of Right Atrium, Percutaneous Approach	PX	ICD-10-CM
02570ZZ	Destruction of Left Atrium, Open Approach	PX	ICD-10-CM
02573ZZ	Destruction of Left Atrium, Percutaneous Approach	PX	ICD-10-CM
02580ZZ	Destruction of Conduction Mechanism, Open Approach	PX	ICD-10-CM
02583ZZ	Destruction of Conduction Mechanism, Percutaneous Approach	PX	ICD-10-CM
02590ZZ	Destruction of Chordae Tendineae, Open Approach	PX	ICD-10-CM
02593ZZ	Destruction of Chordae Tendineae, Percutaneous Approach	PX	ICD-10-CM
025F0ZZ	Destruction of Aortic Valve, Open Approach	PX	ICD-10-CM
025F3ZZ	Destruction of Aortic Valve, Percutaneous Approach	PX	ICD-10-CM
025G0ZZ	Destruction of Mitral Valve, Open Approach	PX	ICD-10-CM
025G3ZZ	Destruction of Mitral Valve, Percutaneous Approach	PX	ICD-10-CM

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Code	Description	Code Type	Code Category
025H0ZZ	Destruction of Pulmonary Valve, Open Approach	PX	ICD-10-CM
025H3ZZ	Destruction of Pulmonary Valve, Percutaneous Approach	PX	ICD-10-CM
025J0ZZ	Destruction of Tricuspid Valve, Open Approach	PX	ICD-10-CM
025J3ZZ	Destruction of Tricuspid Valve, Percutaneous Approach	PX	ICD-10-CM
025K0ZZ	Destruction of Right Ventricle, Open Approach	PX	ICD-10-CM
025K3ZZ	Destruction of Right Ventricle, Percutaneous Approach	PX	ICD-10-CM
025L0ZZ	Destruction of Left Ventricle, Open Approach	PX	ICD-10-CM
025L3ZZ	Destruction of Left Ventricle, Percutaneous Approach	PX	ICD-10-CM
025M0ZZ	Destruction of Ventricular Septum, Open Approach	PX	ICD-10-CM
025M3ZZ	Destruction of Ventricular Septum, Percutaneous Approach	PX	ICD-10-CM
02B50ZZ	Excision of Atrial Septum, Open Approach	PX	ICD-10-CM
02B53ZZ	Excision of Atrial Septum, Percutaneous Approach	PX	ICD-10-CM
02B60ZZ	Excision of Right Atrium, Open Approach	PX	ICD-10-CM
02B63ZZ	Excision of Right Atrium, Percutaneous Approach	PX	ICD-10-CM
02B70ZZ	Excision of Left Atrium, Open Approach	PX	ICD-10-CM
02B73ZZ	Excision of Left Atrium, Percutaneous Approach	PX	ICD-10-CM
02B80ZZ	Excision of Conduction Mechanism, Open Approach	PX	ICD-10-CM
02B83ZZ	Excision of Conduction Mechanism, Percutaneous Approach	PX	ICD-10-CM
02B90ZZ	Excision of Chordae Tendineae, Open Approach	PX	ICD-10-CM
02B93ZZ	Excision of Chordae Tendineae, Percutaneous Approach	PX	ICD-10-CM
02BF0ZZ	Excision of Aortic Valve, Open Approach	PX	ICD-10-CM
02BF3ZZ	Excision of Aortic Valve, Percutaneous Approach	PX	ICD-10-CM
02BG0ZZ	Excision of Mitral Valve, Open Approach	PX	ICD-10-CM
02BG3ZZ	Excision of Mitral Valve, Percutaneous Approach	PX	ICD-10-CM
02BH0ZZ	Excision of Pulmonary Valve, Open Approach	PX	ICD-10-CM
02BH3ZZ	Excision of Pulmonary Valve, Percutaneous Approach	PX	ICD-10-CM
02BJ0ZZ	Excision of Tricuspid Valve, Open Approach	PX	ICD-10-CM
02BJ3ZZ	Excision of Tricuspid Valve, Percutaneous Approach	PX	ICD-10-CM
02BK0ZZ	Excision of Right Ventricle, Open Approach	PX	ICD-10-CM
02BK3ZZ	Excision of Right Ventricle, Percutaneous Approach	PX	ICD-10-CM
02BL0ZZ	Excision of Left Ventricle, Open Approach	PX	ICD-10-CM
02BL3ZZ	Excision of Left Ventricle, Percutaneous Approach	PX	ICD-10-CM
02BM0ZZ	Excision of Ventricular Septum, Open Approach	PX	ICD-10-CM
02BM3ZZ	Excision of Ventricular Septum, Percutaneous Approach	PX	ICD-10-CM
02T80ZZ	Resection of Conduction Mechanism, Open Approach	PX	ICD-10-CM
02T83ZZ	Resection of Conduction Mechanism, Percutaneous Approach	PX	ICD-10-CM
C2618	Probe/needle, cryoablation	PX	HCPCS
Hospitalized for bleeding			
280.0	Iron deficiency anemia secondary to blood loss (chronic)	DX	ICD-09-CM
285.1	Acute posthemorrhagic anemia	DX	ICD-09-CM
285.9	Unspecified anemia	DX	ICD-09-CM
423.0	Hemopericardium	DX	ICD-09-CM
430	Subarachnoid hemorrhage	DX	ICD-09-CM

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Code	Description	Code Type	Code Category
431	Intracerebral hemorrhage	DX	ICD-09-CM
432.0	Nontraumatic extradural hemorrhage	DX	ICD-09-CM
432.1	Subdural hemorrhage	DX	ICD-09-CM
432.9	Unspecified intracranial hemorrhage	DX	ICD-09-CM
455	Hemorrhoids	DX	ICD-09-CM
455.0	Internal hemorrhoids without mention of complication	DX	ICD-09-CM
455.1	Internal thrombosed hemorrhoids	DX	ICD-09-CM
455.2	Internal hemorrhoids with other complication	DX	ICD-09-CM
455.3	External hemorrhoids without mention of complication	DX	ICD-09-CM
455.4	External thrombosed hemorrhoids	DX	ICD-09-CM
455.5	External hemorrhoids with other complication	DX	ICD-09-CM
455.6	Unspecified hemorrhoids without mention of complication	DX	ICD-09-CM
455.7	Unspecified thrombosed hemorrhoids	DX	ICD-09-CM
455.8	Unspecified hemorrhoids with other complication	DX	ICD-09-CM
455.9	Residual hemorrhoidal skin tags	DX	ICD-09-CM
456.0	Esophageal varices with bleeding	DX	ICD-09-CM
456.20	Esophageal varices with bleeding in diseases classified elsewhere	DX	ICD-09-CM
459.0	Unspecified hemorrhage	DX	ICD-09-CM
530.1	Esophagitis	DX	ICD-09-CM
530.10	Unspecified esophagitis	DX	ICD-09-CM
530.11	Reflux esophagitis	DX	ICD-09-CM
530.12	Acute esophagitis	DX	ICD-09-CM
530.13	Eosinophilic esophagitis	DX	ICD-09-CM
530.19	Other esophagitis	DX	ICD-09-CM
530.7	Gastroesophageal laceration-hemorrhage syndrome	DX	ICD-09-CM
530.82	Esophageal hemorrhage	DX	ICD-09-CM
531.0	Acute gastric ulcer with hemorrhage	DX	ICD-09-CM
531.00	Acute gastric ulcer with hemorrhage, without mention of obstruction	DX	ICD-09-CM
531.01	Acute gastric ulcer with hemorrhage and obstruction	DX	ICD-09-CM
531.1	Acute gastric ulcer with perforation	DX	ICD-09-CM
531.10	Acute gastric ulcer with perforation, without mention of obstruction	DX	ICD-09-CM
531.11	Acute gastric ulcer with perforation and obstruction	DX	ICD-09-CM
531.2	Acute gastric ulcer with hemorrhage and perforation	DX	ICD-09-CM
531.20	Acute gastric ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-09-CM
531.21	Acute gastric ulcer with hemorrhage, perforation, and obstruction	DX	ICD-09-CM
531.3	Acute gastric ulcer without mention of hemorrhage or perforation	DX	ICD-09-CM
531.30	Acute gastric ulcer without mention of hemorrhage, perforation, or obstruction	DX	ICD-09-CM
531.31	Acute gastric ulcer without mention of hemorrhage or perforation, with obstruction	DX	ICD-09-CM
531.4	Chronic or unspecified gastric ulcer with hemorrhage	DX	ICD-09-CM
531.40	Chronic or unspecified gastric ulcer with hemorrhage, without mention of obstruction	DX	ICD-09-CM
531.41	Chronic or unspecified gastric ulcer with hemorrhage and obstruction	DX	ICD-09-CM
531.5	Chronic or unspecified gastric ulcer with perforation	DX	ICD-09-CM
531.50	Chronic or unspecified gastric ulcer with perforation, without mention of obstruction	DX	ICD-09-CM

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Code	Description	Code Type	Code Category
531.51	Chronic or unspecified gastric ulcer with perforation and obstruction	DX	ICD-09-CM
531.6	Chronic or unspecified gastric ulcer with hemorrhage and perforation	DX	ICD-09-CM
531.60	Chronic or unspecified gastric ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-09-CM
531.61	Chronic or unspecified gastric ulcer with hemorrhage, perforation, and obstruction	DX	ICD-09-CM
531.7	Chronic gastric ulcer without mention of hemorrhage or perforation	DX	ICD-09-CM
531.70	Chronic gastric ulcer without mention of hemorrhage, perforation, without mention of obstruction	DX	ICD-09-CM
531.71	Chronic gastric ulcer without mention of hemorrhage or perforation, with obstruction	DX	ICD-09-CM
531.9	Gastric ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation	DX	ICD-09-CM
531.90	Gastric ulcer, unspecified as acute or chronic, without mention of hemorrhage, perforation, or obstruction	DX	ICD-09-CM
531.91	Gastric ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation, with obstruction	DX	ICD-09-CM
532.0	Acute duodenal ulcer with hemorrhage	DX	ICD-09-CM
532.00	Acute duodenal ulcer with hemorrhage, without mention of obstruction	DX	ICD-09-CM
532.01	Acute duodenal ulcer with hemorrhage and obstruction	DX	ICD-09-CM
532.1	Acute duodenal ulcer with perforation	DX	ICD-09-CM
532.10	Acute duodenal ulcer with perforation, without mention of obstruction	DX	ICD-09-CM
532.11	Acute duodenal ulcer with perforation and obstruction	DX	ICD-09-CM
532.2	Acute duodenal ulcer with hemorrhage and perforation	DX	ICD-09-CM
532.20	Acute duodenal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-09-CM
532.21	Acute duodenal ulcer with hemorrhage, perforation, and obstruction	DX	ICD-09-CM
532.3	Acute duodenal ulcer without mention of hemorrhage or perforation	DX	ICD-09-CM
532.30	Acute duodenal ulcer without mention of hemorrhage, perforation, or obstruction	DX	ICD-09-CM
532.31	Acute duodenal ulcer without mention of hemorrhage or perforation, with obstruction	DX	ICD-09-CM
532.4	Chronic or unspecified duodenal ulcer with hemorrhage	DX	ICD-09-CM
532.40	Duodenal ulcer, chronic or unspecified, with hemorrhage, without mention of obstruction	DX	ICD-09-CM
532.41	Chronic or unspecified duodenal ulcer with hemorrhage and obstruction	DX	ICD-09-CM
532.5	Chronic or unspecified duodenal ulcer with perforation	DX	ICD-09-CM
532.50	Chronic or unspecified duodenal ulcer with perforation, without mention of obstruction	DX	ICD-09-CM
532.51	Chronic or unspecified duodenal ulcer with perforation and obstruction	DX	ICD-09-CM
532.6	Chronic or unspecified duodenal ulcer with hemorrhage and perforation	DX	ICD-09-CM
532.60	Chronic or unspecified duodenal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-09-CM
532.61	Chronic or unspecified duodenal ulcer with hemorrhage, perforation, and obstruction	DX	ICD-09-CM
532.7	Chronic duodenal ulcer without mention of hemorrhage or perforation	DX	ICD-09-CM
532.70	Chronic duodenal ulcer without mention of hemorrhage, perforation, or obstruction	DX	ICD-09-CM
532.71	Chronic duodenal ulcer without mention of hemorrhage or perforation, with obstruction	DX	ICD-09-CM
532.9	Duodenal ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation	DX	ICD-09-CM
532.90	Duodenal ulcer, unspecified as acute or chronic, without hemorrhage, perforation, or obstruction	DX	ICD-09-CM

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Code	Description	Code Type	Code Category
532.91	Duodenal ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation, with obstruction	DX	ICD-09-CM
533.0	Acute peptic ulcer, unspecified site, with hemorrhage	DX	ICD-09-CM
533.00	Acute peptic ulcer, unspecified site, with hemorrhage, without mention of obstruction	DX	ICD-09-CM
533.01	Acute peptic ulcer, unspecified site, with hemorrhage and obstruction	DX	ICD-09-CM
533.1	Acute peptic ulcer, unspecified site, with perforation	DX	ICD-09-CM
533.10	Acute peptic ulcer, unspecified site, with perforation, without mention of obstruction	DX	ICD-09-CM
533.11	Acute peptic ulcer, unspecified site, with perforation and obstruction	DX	ICD-09-CM
533.2	Acute peptic ulcer, unspecified site, with hemorrhage and perforation	DX	ICD-09-CM
533.20	Acute peptic ulcer, unspecified site, with hemorrhage and perforation, without mention of obstruction	DX	ICD-09-CM
533.21	Acute peptic ulcer, unspecified site, with hemorrhage, perforation, and obstruction	DX	ICD-09-CM
533.3	Acute peptic ulcer, unspecified site, without mention of hemorrhage and perforation	DX	ICD-09-CM
533.30	Acute peptic ulcer, unspecified site, without mention of hemorrhage, perforation, or obstruction	DX	ICD-09-CM
533.31	Acute peptic ulcer, unspecified site, without mention of hemorrhage and perforation, with obstruction	DX	ICD-09-CM
533.4	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage	DX	ICD-09-CM
533.40	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage, without mention of obstruction	DX	ICD-09-CM
533.41	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage and obstruction	DX	ICD-09-CM
533.5	Chronic or unspecified peptic ulcer, unspecified site, with perforation	DX	ICD-09-CM
533.50	Chronic or unspecified peptic ulcer, unspecified site, with perforation, without mention of obstruction	DX	ICD-09-CM
533.51	Chronic or unspecified peptic ulcer, unspecified site, with perforation and obstruction	DX	ICD-09-CM
533.6	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage and perforation	DX	ICD-09-CM
533.60	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage and perforation, without mention of obstruction	DX	ICD-09-CM
533.61	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage, perforation, and obstruction	DX	ICD-09-CM
533.7	Chronic peptic ulcer, unspecified site, without mention of hemorrhage or perforation	DX	ICD-09-CM
533.70	Chronic peptic ulcer, unspecified site, without mention of hemorrhage, perforation, or obstruction	DX	ICD-09-CM
533.71	Chronic peptic ulcer of unspecified site without mention of hemorrhage or perforation, with obstruction	DX	ICD-09-CM
533.9	Peptic ulcer, unspecified site, unspecified as acute or chronic, without mention of hemorrhage or perforation	DX	ICD-09-CM
533.90	Peptic ulcer, unspecified site, unspecified as acute or chronic, without mention of hemorrhage, perforation, or obstruction	DX	ICD-09-CM
533.91	Peptic ulcer, unspecified site, unspecified as acute or chronic, without mention of hemorrhage or perforation, with obstruction	DX	ICD-09-CM
534.0	Acute gastrojejunal ulcer with hemorrhage	DX	ICD-09-CM
534.00	Acute gastrojejunal ulcer with hemorrhage, without mention of obstruction	DX	ICD-09-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
534.01	Acute gastrojejunal ulcer, with hemorrhage and obstruction	DX	ICD-09-CM
534.1	Acute gastrojejunal ulcer with perforation	DX	ICD-09-CM
534.10	Acute gastrojejunal ulcer with perforation, without mention of obstruction	DX	ICD-09-CM
534.11	Acute gastrojejunal ulcer with perforation and obstruction	DX	ICD-09-CM
534.2	Acute gastrojejunal ulcer with hemorrhage and perforation	DX	ICD-09-CM
534.20	Acute gastrojejunal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-09-CM
534.21	Acute gastrojejunal ulcer with hemorrhage, perforation, and obstruction	DX	ICD-09-CM
534.3	Acute gastrojejunal ulcer without mention of hemorrhage or perforation	DX	ICD-09-CM
534.30	Acute gastrojejunal ulcer without mention of hemorrhage, perforation, or obstruction	DX	ICD-09-CM
534.31	Acute gastrojejunal ulcer without mention of hemorrhage or perforation, with obstruction	DX	ICD-09-CM
534.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage	DX	ICD-09-CM
534.40	Chronic or unspecified gastrojejunal ulcer with hemorrhage, without mention of obstruction	DX	ICD-09-CM
534.41	Chronic or unspecified gastrojejunal ulcer, with hemorrhage and obstruction	DX	ICD-09-CM
534.5	Chronic or unspecified gastrojejunal ulcer with perforation	DX	ICD-09-CM
534.50	Chronic or unspecified gastrojejunal ulcer with perforation, without mention of obstruction	DX	ICD-09-CM
534.51	Chronic or unspecified gastrojejunal ulcer with perforation and obstruction	DX	ICD-09-CM
534.6	Chronic or unspecified gastrojejunal ulcer with hemorrhage and perforation	DX	ICD-09-CM
534.60	Chronic or unspecified gastrojejunal ulcer with hemorrhage and perforation, without mention of obstruction	DX	ICD-09-CM
534.61	Chronic or unspecified gastrojejunal ulcer with hemorrhage, perforation, and obstruction	DX	ICD-09-CM
534.7	Chronic gastrojejunal ulcer without mention of hemorrhage or perforation	DX	ICD-09-CM
534.70	Chronic gastrojejunal ulcer without mention of hemorrhage, perforation, or obstruction	DX	ICD-09-CM
534.71	Chronic gastrojejunal ulcer without mention of hemorrhage or perforation, with obstruction	DX	ICD-09-CM
534.9	Gastrojejunal ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation	DX	ICD-09-CM
534.90	Gastrojejunal ulcer, unspecified as acute or chronic, without mention of hemorrhage, perforation, or obstruction	DX	ICD-09-CM
534.91	Gastrojejunal ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation, with obstruction	DX	ICD-09-CM
535.00	Acute gastritis without mention of hemorrhage	DX	ICD-09-CM
535.01	Acute gastritis with hemorrhage	DX	ICD-09-CM
535.10	Atrophic gastritis without mention of hemorrhage	DX	ICD-09-CM
535.11	Atrophic gastritis with hemorrhage	DX	ICD-09-CM
535.20	Gastric mucosal hypertrophy without mention of hemorrhage	DX	ICD-09-CM
535.21	Gastric mucosal hypertrophy with hemorrhage	DX	ICD-09-CM
535.30	Alcoholic gastritis without mention of hemorrhage	DX	ICD-09-CM
535.31	Alcoholic gastritis with hemorrhage	DX	ICD-09-CM
535.40	Other specified gastritis without mention of hemorrhage	DX	ICD-09-CM
535.41	Other specified gastritis with hemorrhage	DX	ICD-09-CM
535.50	Unspecified gastritis and gastroduodenitis without mention of hemorrhage	DX	ICD-09-CM
535.51	Unspecified gastritis and gastroduodenitis with hemorrhage	DX	ICD-09-CM
535.60	Duodenitis without mention of hemorrhage	DX	ICD-09-CM
535.61	Duodenitis with hemorrhage	DX	ICD-09-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
537.83	Angiodysplasia of stomach and duodenum with hemorrhage	DX	ICD-09-CM
562.00	Diverticulosis of small intestine (without mention of hemorrhage)	DX	ICD-09-CM
562.01	Diverticulitis of small intestine (without mention of hemorrhage)	DX	ICD-09-CM
562.02	Diverticulosis of small intestine with hemorrhage	DX	ICD-09-CM
562.03	Diverticulitis of small intestine with hemorrhage	DX	ICD-09-CM
562.10	Diverticulosis of colon (without mention of hemorrhage)	DX	ICD-09-CM
562.11	Diverticulitis of colon (without mention of hemorrhage)	DX	ICD-09-CM
562.12	Diverticulosis of colon with hemorrhage	DX	ICD-09-CM
562.13	Diverticulitis of colon with hemorrhage	DX	ICD-09-CM
568.81	Hemoperitoneum (nontraumatic)	DX	ICD-09-CM
569.3	Hemorrhage of rectum and anus	DX	ICD-09-CM
569.85	Angiodysplasia of intestine with hemorrhage	DX	ICD-09-CM
578.0	Hematemesis	DX	ICD-09-CM
578.1	Blood in stool	DX	ICD-09-CM
578.9	Hemorrhage of gastrointestinal tract, unspecified	DX	ICD-09-CM
593.81	Vascular disorders of kidney	DX	ICD-09-CM
599.7	Hematuria	DX	ICD-09-CM
599.70	Hematuria, unspecified	DX	ICD-09-CM
599.71	Gross hematuria	DX	ICD-09-CM
599.72	Microscopic hematuria	DX	ICD-09-CM
623.8	Other specified noninflammatory disorder of vagina	DX	ICD-09-CM
626.2	Excessive or frequent menstruation	DX	ICD-09-CM
626.6	Metrorrhagia	DX	ICD-09-CM
719.1	Hemarthrosis	DX	ICD-09-CM
719.10	Hemarthrosis, site unspecified	DX	ICD-09-CM
719.11	Hemarthrosis, shoulder region	DX	ICD-09-CM
719.12	Hemarthrosis, upper arm	DX	ICD-09-CM
719.13	Hemarthrosis, forearm	DX	ICD-09-CM
719.14	Hemarthrosis, hand	DX	ICD-09-CM
719.15	Hemarthrosis, pelvic region and thigh	DX	ICD-09-CM
719.16	Hemarthrosis, lower leg	DX	ICD-09-CM
719.17	Hemarthrosis, ankle and foot	DX	ICD-09-CM
719.18	Hemarthrosis, other specified site	DX	ICD-09-CM
719.19	Hemarthrosis, multiple sites	DX	ICD-09-CM
784.7	Epistaxis	DX	ICD-09-CM
784.8	Hemorrhage from throat	DX	ICD-09-CM
786.3	Hemoptysis	DX	ICD-09-CM
790.92	Abnormal coagulation profile	DX	ICD-09-CM
852.0	Subarachnoid hemorrhage following injury without mention of open intracranial wound	DX	ICD-09-CM
852.00	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	DX	ICD-09-CM
852.01	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	DX	ICD-09-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
852.02	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	DX	ICD-09-CM
852.03	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	DX	ICD-09-CM
852.04	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-09-CM
852.05	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-09-CM
852.06	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	DX	ICD-09-CM
852.09	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	DX	ICD-09-CM
852.2	Subdural hemorrhage following injury without mention of open intracranial wound	DX	ICD-09-CM
852.20	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	DX	ICD-09-CM
852.21	Subdural hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	DX	ICD-09-CM
852.22	Subdural hemorrhage following injury, without mention of open intracranial wound, brief (less than one hour) loss of consciousness	DX	ICD-09-CM
852.23	Subdural hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	DX	ICD-09-CM
852.24	Subdural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-09-CM
852.25	Subdural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-09-CM
852.26	Subdural hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	DX	ICD-09-CM
852.29	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	DX	ICD-09-CM
852.4	Extradural hemorrhage following injury without mention of open intracranial wound	DX	ICD-09-CM
852.40	Extradural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	DX	ICD-09-CM
852.41	Extradural hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	DX	ICD-09-CM
852.42	Extradural hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	DX	ICD-09-CM
852.43	Extradural hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	DX	ICD-09-CM
852.44	Extradural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	DX	ICD-09-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
852.45	Extradural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	DX	ICD-09-CM
852.46	Extradural hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	DX	ICD-09-CM
852.49	Extradural hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	DX	ICD-09-CM
853.0	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound	DX	ICD-09-CM
D50.0	Iron deficiency anemia secondary to blood loss (chronic)	DX	ICD-10-CM
D62	Acute posthemorrhagic anemia	DX	ICD-10-CM
D64.9	Anemia, unspecified	DX	ICD-10-CM
I31.2	Hemopericardium, not elsewhere classified	DX	ICD-10-CM
I60.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation	DX	ICD-10-CM
I60.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation	DX	ICD-10-CM
I60.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation	DX	ICD-10-CM
I60.10	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery	DX	ICD-10-CM
I60.11	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery	DX	ICD-10-CM
I60.12	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery	DX	ICD-10-CM
I60.2	Nontraumatic subarachnoid hemorrhage from anterior communicating artery	DX	ICD-10-CM
I60.30	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery	DX	ICD-10-CM
I60.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery	DX	ICD-10-CM
I60.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery	DX	ICD-10-CM
I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery	DX	ICD-10-CM
I60.50	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery	DX	ICD-10-CM
I60.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery	DX	ICD-10-CM
I60.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery	DX	ICD-10-CM
I60.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries	DX	ICD-10-CM
I60.7	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery	DX	ICD-10-CM
I60.8	Other nontraumatic subarachnoid hemorrhage	DX	ICD-10-CM
I60.9	Nontraumatic subarachnoid hemorrhage, unspecified	DX	ICD-10-CM
I61.0	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical	DX	ICD-10-CM
I61.1	Nontraumatic intracerebral hemorrhage in hemisphere, cortical	DX	ICD-10-CM
I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified	DX	ICD-10-CM
I61.3	Nontraumatic intracerebral hemorrhage in brain stem	DX	ICD-10-CM
I61.4	Nontraumatic intracerebral hemorrhage in cerebellum	DX	ICD-10-CM
I61.5	Nontraumatic intracerebral hemorrhage, intraventricular	DX	ICD-10-CM
I61.6	Nontraumatic intracerebral hemorrhage, multiple localized	DX	ICD-10-CM
I61.8	Other nontraumatic intracerebral hemorrhage	DX	ICD-10-CM
I61.9	Nontraumatic intracerebral hemorrhage, unspecified	DX	ICD-10-CM
I62.00	Nontraumatic subdural hemorrhage, unspecified	DX	ICD-10-CM
I62.01	Nontraumatic acute subdural hemorrhage	DX	ICD-10-CM
I62.02	Nontraumatic subacute subdural hemorrhage	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
I62.03	Nontraumatic chronic subdural hemorrhage	DX	ICD-10-CM
I62.1	Nontraumatic extradural hemorrhage	DX	ICD-10-CM
I62.9	Nontraumatic intracranial hemorrhage, unspecified	DX	ICD-10-CM
I85.01	Esophageal varices with bleeding	DX	ICD-10-CM
I85.11	Secondary esophageal varices with bleeding	DX	ICD-10-CM
K20.0	Eosinophilic esophagitis	DX	ICD-10-CM
K20.8	Other esophagitis	DX	ICD-10-CM
K20.9	Esophagitis, unspecified	DX	ICD-10-CM
K21.0	Gastro-esophageal reflux disease with esophagitis	DX	ICD-10-CM
K22.6	Gastro-esophageal laceration-hemorrhage syndrome	DX	ICD-10-CM
K22.8	Other specified diseases of esophagus	DX	ICD-10-CM
K25.0	Acute gastric ulcer with hemorrhage	DX	ICD-10-CM
K25.1	Acute gastric ulcer with perforation	DX	ICD-10-CM
K25.2	Acute gastric ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K25.3	Acute gastric ulcer without hemorrhage or perforation	DX	ICD-10-CM
K25.4	Chronic or unspecified gastric ulcer with hemorrhage	DX	ICD-10-CM
K25.5	Chronic or unspecified gastric ulcer with perforation	DX	ICD-10-CM
K25.6	Chronic or unspecified gastric ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K25.7	Chronic gastric ulcer without hemorrhage or perforation	DX	ICD-10-CM
K25.9	Gastric ulcer, unspecified as acute or chronic, without hemorrhage or perforation	DX	ICD-10-CM
K26.0	Acute duodenal ulcer with hemorrhage	DX	ICD-10-CM
K26.1	Acute duodenal ulcer with perforation	DX	ICD-10-CM
K26.2	Acute duodenal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K26.3	Acute duodenal ulcer without hemorrhage or perforation	DX	ICD-10-CM
K26.4	Chronic or unspecified duodenal ulcer with hemorrhage	DX	ICD-10-CM
K26.5	Chronic or unspecified duodenal ulcer with perforation	DX	ICD-10-CM
K26.6	Chronic or unspecified duodenal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K26.7	Chronic duodenal ulcer without hemorrhage or perforation	DX	ICD-10-CM
K26.9	Duodenal ulcer, unspecified as acute or chronic, without hemorrhage or perforation	DX	ICD-10-CM
K27.0	Acute peptic ulcer, site unspecified, with hemorrhage	DX	ICD-10-CM
K27.1	Acute peptic ulcer, site unspecified, with perforation	DX	ICD-10-CM
K27.2	Acute peptic ulcer, site unspecified, with both hemorrhage and perforation	DX	ICD-10-CM
K27.3	Acute peptic ulcer, site unspecified, without hemorrhage or perforation	DX	ICD-10-CM
K27.4	Chronic or unspecified peptic ulcer, site unspecified, with hemorrhage	DX	ICD-10-CM
K27.5	Chronic or unspecified peptic ulcer, site unspecified, with perforation	DX	ICD-10-CM
K27.6	Chronic or unspecified peptic ulcer, site unspecified, with both hemorrhage and perforation	DX	ICD-10-CM
K27.7	Chronic peptic ulcer, site unspecified, without hemorrhage or perforation	DX	ICD-10-CM
K27.9	Peptic ulcer, site unspecified, unspecified as acute or chronic, without hemorrhage or perforation	DX	ICD-10-CM
K28.0	Acute gastrojejunal ulcer with hemorrhage	DX	ICD-10-CM
K28.1	Acute gastrojejunal ulcer with perforation	DX	ICD-10-CM
K28.2	Acute gastrojejunal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K28.3	Acute gastrojejunal ulcer without hemorrhage or perforation	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
K28.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage	DX	ICD-10-CM
K28.5	Chronic or unspecified gastrojejunal ulcer with perforation	DX	ICD-10-CM
K28.6	Chronic or unspecified gastrojejunal ulcer with both hemorrhage and perforation	DX	ICD-10-CM
K28.7	Chronic gastrojejunal ulcer without hemorrhage or perforation	DX	ICD-10-CM
K28.9	Gastrojejunal ulcer, unspecified as acute or chronic, without hemorrhage or perforation	DX	ICD-10-CM
K29.00	Acute gastritis without bleeding	DX	ICD-10-CM
K29.01	Acute gastritis with bleeding	DX	ICD-10-CM
K29.20	Alcoholic gastritis without bleeding	DX	ICD-10-CM
K29.21	Alcoholic gastritis with bleeding	DX	ICD-10-CM
K29.30	Chronic superficial gastritis without bleeding	DX	ICD-10-CM
K29.31	Chronic superficial gastritis with bleeding	DX	ICD-10-CM
K29.40	Chronic atrophic gastritis without bleeding	DX	ICD-10-CM
K29.41	Chronic atrophic gastritis with bleeding	DX	ICD-10-CM
K29.50	Unspecified chronic gastritis without bleeding	DX	ICD-10-CM
K29.51	Unspecified chronic gastritis with bleeding	DX	ICD-10-CM
K29.60	Other gastritis without bleeding	DX	ICD-10-CM
K29.61	Other gastritis with bleeding	DX	ICD-10-CM
K29.70	Gastritis, unspecified, without bleeding	DX	ICD-10-CM
K29.71	Gastritis, unspecified, with bleeding	DX	ICD-10-CM
K29.80	Duodenitis without bleeding	DX	ICD-10-CM
K29.81	Duodenitis with bleeding	DX	ICD-10-CM
K29.90	Gastroduodenitis, unspecified, without bleeding	DX	ICD-10-CM
K29.91	Gastroduodenitis, unspecified, with bleeding	DX	ICD-10-CM
K31.811	Angiodysplasia of stomach and duodenum with bleeding	DX	ICD-10-CM
K55.21	Angiodysplasia of colon with hemorrhage	DX	ICD-10-CM
K56.699	Other intestinal obstruction unspecified as to partial versus complete obstruction	DX	ICD-10-CM
K57.00	Diverticulitis of small intestine with perforation and abscess without bleeding	DX	ICD-10-CM
K57.01	Diverticulitis of small intestine with perforation and abscess with bleeding	DX	ICD-10-CM
K57.10	Diverticulosis of small intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.11	Diverticulosis of small intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.12	Diverticulitis of small intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.13	Diverticulitis of small intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.20	Diverticulitis of large intestine with perforation and abscess without bleeding	DX	ICD-10-CM
K57.21	Diverticulitis of large intestine with perforation and abscess with bleeding	DX	ICD-10-CM
K57.30	Diverticulosis of large intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.31	Diverticulosis of large intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.32	Diverticulitis of large intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.33	Diverticulitis of large intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.40	Diverticulitis of both small and large intestine with perforation and abscess without bleeding	DX	ICD-10-CM
K57.41	Diverticulitis of both small and large intestine with perforation and abscess with bleeding	DX	ICD-10-CM
K57.50	Diverticulosis of both small and large intestine without perforation or abscess without bleeding	DX	ICD-10-CM
K57.51	Diverticulosis of both small and large intestine without perforation or abscess with bleeding	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
K57.52	Diverticulitis of both small and large intestine without perforation or abscess without	DX	ICD-10-CM
K57.53	Diverticulitis of both small and large intestine without perforation or abscess with bleeding	DX	ICD-10-CM
K57.80	Diverticulitis of intestine, part unspecified, with perforation and abscess without bleeding	DX	ICD-10-CM
K57.81	Diverticulitis of intestine, part unspecified, with perforation and abscess with bleeding	DX	ICD-10-CM
K57.90	Diverticulosis of intestine, part unspecified, without perforation or abscess without bleeding	DX	ICD-10-CM
K57.91	Diverticulosis of intestine, part unspecified, without perforation or abscess with bleeding	DX	ICD-10-CM
K57.92	Diverticulitis of intestine, part unspecified, without perforation or abscess without bleeding	DX	ICD-10-CM
K57.93	Diverticulitis of intestine, part unspecified, without perforation or abscess with bleeding	DX	ICD-10-CM
K62.5	Hemorrhage of anus and rectum	DX	ICD-10-CM
K64.0	First degree hemorrhoids	DX	ICD-10-CM
K64.1	Second degree hemorrhoids	DX	ICD-10-CM
K64.2	Third degree hemorrhoids	DX	ICD-10-CM
K64.3	Fourth degree hemorrhoids	DX	ICD-10-CM
K64.4	Residual hemorrhoidal skin tags	DX	ICD-10-CM
K64.5	Perianal venous thrombosis	DX	ICD-10-CM
K64.8	Other hemorrhoids	DX	ICD-10-CM
K64.9	Unspecified hemorrhoids	DX	ICD-10-CM
K66.1	Hemoperitoneum	DX	ICD-10-CM
K92.0	Hematemesis	DX	ICD-10-CM
K92.1	Melena	DX	ICD-10-CM
K92.2	Gastrointestinal hemorrhage, unspecified	DX	ICD-10-CM
M25.00	Hemarthrosis, unspecified joint	DX	ICD-10-CM
M25.011	Hemarthrosis, right shoulder	DX	ICD-10-CM
M25.012	Hemarthrosis, left shoulder	DX	ICD-10-CM
M25.019	Hemarthrosis, unspecified shoulder	DX	ICD-10-CM
M25.021	Hemarthrosis, right elbow	DX	ICD-10-CM
M25.022	Hemarthrosis, left elbow	DX	ICD-10-CM
M25.029	Hemarthrosis, unspecified elbow	DX	ICD-10-CM
M25.031	Hemarthrosis, right wrist	DX	ICD-10-CM
M25.032	Hemarthrosis, left wrist	DX	ICD-10-CM
M25.039	Hemarthrosis, unspecified wrist	DX	ICD-10-CM
M25.041	Hemarthrosis, right hand	DX	ICD-10-CM
M25.042	Hemarthrosis, left hand	DX	ICD-10-CM
M25.049	Hemarthrosis, unspecified hand	DX	ICD-10-CM
M25.051	Hemarthrosis, right hip	DX	ICD-10-CM
M25.052	Hemarthrosis, left hip	DX	ICD-10-CM
M25.059	Hemarthrosis, unspecified hip	DX	ICD-10-CM
M25.061	Hemarthrosis, right knee	DX	ICD-10-CM
M25.062	Hemarthrosis, left knee	DX	ICD-10-CM
M25.069	Hemarthrosis, unspecified knee	DX	ICD-10-CM
M25.071	Hemarthrosis, right ankle	DX	ICD-10-CM
M25.072	Hemarthrosis, left ankle	DX	ICD-10-CM
M25.073	Hemarthrosis, unspecified ankle	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
M25.074	Hemarthrosis, right foot	DX	ICD-10-CM
M25.075	Hemarthrosis, left foot	DX	ICD-10-CM
M25.076	Hemarthrosis, unspecified foot	DX	ICD-10-CM
M25.08	Hemarthrosis, other specified site	DX	ICD-10-CM
N28.0	Ischemia and infarction of kidney	DX	ICD-10-CM
N89.8	Other specified noninflammatory disorders of vagina	DX	ICD-10-CM
N92.0	Excessive and frequent menstruation with regular cycle	DX	ICD-10-CM
N92.1	Excessive and frequent menstruation with irregular cycle	DX	ICD-10-CM
R04.0	Epistaxis	DX	ICD-10-CM
R04.1	Hemorrhage from throat	DX	ICD-10-CM
R31.0	Gross hematuria	DX	ICD-10-CM
R31.1	Benign essential microscopic hematuria	DX	ICD-10-CM
R31.21	Asymptomatic microscopic hematuria	DX	ICD-10-CM
R31.29	Other microscopic hematuria	DX	ICD-10-CM
R31.9	Hematuria, unspecified	DX	ICD-10-CM
R58	Hemorrhage, not elsewhere classified	DX	ICD-10-CM
R79.1	Abnormal coagulation profile	DX	ICD-10-CM
S06.4X0A	Epidural hemorrhage without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.4X1A	Epidural hemorrhage with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.4X2A	Epidural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial	DX	ICD-10-CM
S06.4X3A	Epidural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.4X4A	Epidural hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.4X5A	Epidural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.4X6A	Epidural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.4X7A	Epidural hemorrhage with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.4X8A	Epidural hemorrhage with loss of consciousness of any duration with death due to other causes prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.4X9A	Epidural hemorrhage with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S06.5X0A	Traumatic subdural hemorrhage without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.5X1A	Traumatic subdural hemorrhage with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.5X2A	Traumatic subdural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.5X3A	Traumatic subdural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.5X4A	Traumatic subdural hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.5X5A	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM

Appendix H. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Fourth Edition (CPT-4), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Type	Code Category
S06.5X6A	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.5X7A	Traumatic subdural hemorrhage with loss of consciousness of any duration with death due to brain injury before regaining consciousness, initial encounter	DX	ICD-10-CM
S06.5X8A	Traumatic subdural hemorrhage with loss of consciousness of any duration with death due to other cause before regaining consciousness, initial encounter	DX	ICD-10-CM
S06.5X9A	Traumatic subdural hemorrhage with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM
S06.6X0A	Traumatic subarachnoid hemorrhage without loss of consciousness, initial encounter	DX	ICD-10-CM
S06.6X1A	Traumatic subarachnoid hemorrhage with loss of consciousness of 30 minutes or less, initial encounter	DX	ICD-10-CM
S06.6X2A	Traumatic subarachnoid hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter	DX	ICD-10-CM
S06.6X3A	Traumatic subarachnoid hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter	DX	ICD-10-CM
S06.6X4A	Traumatic subarachnoid hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter	DX	ICD-10-CM
S06.6X5A	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter	DX	ICD-10-CM
S06.6X6A	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter	DX	ICD-10-CM
S06.6X7A	Traumatic subarachnoid hemorrhage with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.6X8A	Traumatic subarachnoid hemorrhage with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter	DX	ICD-10-CM
S06.6X9A	Traumatic subarachnoid hemorrhage with loss of consciousness of unspecified duration, initial encounter	DX	ICD-10-CM

Appendix I. Evaluation Windows Used to Define Baseline Characteristics in this Request

Characteristic	Evaluation Window	Care Settings ¹
KEY: Highlighted = Table 1, not in Propensity Score (PS)		
Age (continuous)	Index date	
Age-group		
21-49	Index date	
50-64	Index date	
Sex		
Female	Index date	
Male	Index date	
Other	Index date	
Race/ethnicity		
American Indian or Alaska Native	Index date	
Asian	Index date	
Black or African American	Index date	
Native Hawaiian or Other Pacific Islander	Index date	
White	Index date	
Unknown	Index date	
Year		
2010	Index date	
2011	Index date	
2012	Index date	
2013	Index date	
2014	Index date	
2015	Index date	
2016	Index date	
2017	Index date	
2018	Index date	
2019	Index date	
2020	Index date	
2021	Index date	
Medical comorbidities		
Diabetes	-183 to 0	Any
Hypercholesterolemia	-183 to 0	Any
Hypertension	-183 to 0	Any
Kidney failure - Chronic	-183 to 0	Any
Kidney failure - Acute	-183 to 0	Any
Obesity	-183 to 0	Any
Peptic ulcer disease	-183 to 0	Any
Nicotine dependency	-183 to 0	Any
Hospitalized AMI (past 0-30 days)	-30 to 0	IPP or IPS
Hospitalized AMI (past 31-183 days)	-183 to -31	IPP or IPS
Coronary revascularization	-183 to 0	Any
Hospitalized heart failure	-183 to 0	IP* or ED*
Outpatient heart failure	-183 to 0	AV* or OA*
Other ischemic heart disease	-183 to 0	Any
Hospitalized stroke (past 0-30 days)	-30 to 0	IPP
Hospitalized stroke (past 31-183 days)	-183 to -31	IPP
Transient ischemic attack	-183 to 0	Any
Other medical conditions (falls, fractures, syncope, walker use)	-183 to 0	Any

Appendix I. Evaluation Windows Used to Define Baseline Characteristics in this Request

Characteristic	Evaluation Window	Care Settings¹
Cardioversion	-183 to 0	Any
Cardioablation	-183 to 0	Any
Hospitalized for bleeding	-183 to 0	IPP
Medication use		
Estrogen replacement	-183 to 0	-
H2-antagonist	-183 to 0	-
NSAIDs	-183 to 0	-
Proton pump inhibitors	-183 to 0	-
SSRI antidepressants	-183 to 0	-
Insulin	-183 to 0	-
Metformin (Biguanide)	-183 to 0	-
Sulfonylureas	-183 to 0	-
Other Diabetes Medications	-183 to 0	-
ACEI/ARB	-183 to 0	-
Antiarrhythmics	-183 to 0	-
Anti-coagulant (injectable)	-183 to 0	-
Anti-platelets	-183 to 0	-
Beta-blockers	-183 to 0	-
Calcium channel blockers	-183 to 0	-
Digoxin	-183 to 0	-
Diuretics - Loop	-183 to 0	-
Diuretics - Potassium sparing	-183 to 0	-
Diuretics - Thiazide	-183 to 0	-
Nitrates	-183 to 0	-
Statins	-183 to 0	-
Fibrates	-183 to 0	-
Amiodarone	-183 to 0	-
Dronedarone	-183 to 0	-
CHA₂DS₂-VASc score (continuous)	-183 to 0	
CHA₂DS₂-VASc score (categorical)		
0	-183 to 0	-
1	-183 to 0	-
2	-183 to 0	-
3	-183 to 0	-
4	-183 to 0	-
5+	-183 to 0	-
HAS-BLED score (continuous)	-183 to 0	
HAS-BLED score (categorical)		
0	-183 to 0	-
1	-183 to 0	-
2	-183 to 0	-
3+	-183 to 0	-
Health care utilization		
Number of inpatient hospital stays	-183 to 0	IP*
Number of ambulatory visits	-183 to 0	AV*
Number of emergency room encounters		
0 visit	-30 to 0	ED*
At least 1 visit	-30 to 0	ED*

Appendix I. Evaluation Windows Used to Define Baseline Characteristics in this Request

Characteristic	Evaluation Window	Care Settings¹
2+ visits	-30 to 0	ED*
Number of emergency room encounters		
0 visit	-183 to -31	ED*
At least 1 visit	-183 to -31	ED*
2+ visits	-183 to -31	ED*
Number of unique generics dispensed	-183 to 0	-

Appendix J. Specifications Defining Parameters in this Request

The Center for Drug Evaluation and Research has requested execution of the Cohort Identification and Descriptive AN/Allysis (CIDA) tool v11.3.0 with additional programming to compare risk of stroke and bleeding associated with use of apixaban and dabigatran in those aged 64 years or younger in the Sentinel Distributed Database (SDD).

Query period: 10/19/2010 - 02/28/2022
Coverage requirement: Medical and drug coverage
Pre-index enrollment requirement: 183 days
Post-Index Enrollment Requirement: None
Enrollment gap: 45 days
Age groups: 21-49, 50-64 years
Stratifications: None
Censor Output Categorization: None
Envelope macro: No reclassification
Freeze data: Yes
Additional programming needed: Risk scores, daily dose requirement, custom forest plots, custom weight distribution output
Output Denominator: No

	Comparison 1 Overall		Comparison 2 Overall		Comparison 3 Overall		Comparison 4 Overall	
Drug/Exposure								
Exposure/Comparator	Dabigatran, 150 mg	Apixaban, 5 mg	Dabigatran, 150 mg	Apixaban, 5 mg	Dabigatran, 150 mg	Apixaban, 5 mg	Dabigatran, 150 mg	Apixaban, 5 mg
Daily Dose Requirement	Twice daily	Twice daily	Twice daily	Twice daily	Twice daily	Twice daily	Twice daily	Twice daily
Incident w/ Respect to:	Dabigatran, 150 mg	Apixaban, 5 mg	Dabigatran, 150 mg	Apixaban, 5 mg	Dabigatran, 150 mg	Apixaban, 5 mg	Dabigatran, 150 mg	Apixaban, 5 mg
Incidence Assessment	Dispensing date or days supply		Dispensing date or days supply		Dispensing date or days supply		Dispensing date or days supply	
Washout (days)	183		183		183		183	
Cohort Definition	First valid incident exposure episode		First valid incident exposure episode		First valid incident exposure episode		First valid incident exposure episode	
Stockpiling overlapping	33%		33%		33%		33%	
Episode Gap	3		3		3		3	
Episode Extension Period	3		3		3		3	
Minimum Episode Duration	1		1		1		1	
Maximum Episode Duration	None		None		None		None	
Minimum Days Supplied	1		1		1		1	
Minimum cumulative dose of index medication	N/A		N/A		N/A		N/A	

Appendix J. Specifications Defining Parameters in this Request

	Comparison 1	Comparison 2	Comparison 3	Comparison 4
	Overall	Overall	Overall	Overall
Maximum cumulative dose of index medication	N/A	N/A	N/A	N/A
Evaluation period for cumulative dose determination	N/A	N/A	N/A	N/A
Minimum Current Filled Daily Dose of index	N/A	N/A	N/A	N/A
Maximum Current Filled Daily Dose of index	N/A	N/A	N/A	N/A
Forced supply to attach to dispensings	N/A	N/A	N/A	N/A
Censor Criteria	Death, DP end date, Disenrollment, Event, End of exposure episode, Comparator drug dispensing, Low-dose of current exposure, Warfarin dispensing, Edoxaban dispensing, Rivaroxaban dispensing, Kidney transplant, Dialysis, IS encounter, Major extracranial bleeding, Gastrointestinal hemorrhage, Intracranial hemorrhage	Death, DP end date, Disenrollment, Event, End of exposure episode, Comparator drug dispensing, Low-dose of current exposure, Warfarin dispensing, Edoxaban dispensing, Rivaroxaban dispensing, Kidney transplant, Dialysis, IS encounter, Thromboembolic stroke, Gastrointestinal hemorrhage, Intracranial hemorrhage	Death, DP end date, Disenrollment, Event, End of exposure episode, Comparator drug dispensing, Low-dose of current exposure, Warfarin dispensing, Edoxaban dispensing, Rivaroxaban dispensing, Kidney transplant, Dialysis, IS encounter, Thromboembolic stroke, Major extracranial bleeding, Intracranial hemorrhage	Death, DP end date, Disenrollment, Event, End of exposure episode, Comparator drug dispensing, Low-dose of current exposure, Warfarin dispensing, Edoxaban dispensing, Rivaroxaban dispensing, Kidney transplant, Dialysis, IS encounter, Thromboembolic stroke, Major extracranial bleeding, Gastrointestinal hemorrhage
Create Baseline Table?	Yes	Yes	Yes	Yes
Inclusion/Exclusion Pre-Existing Condition	Atrial fibrillation or flutter	Atrial fibrillation or flutter	Atrial fibrillation or flutter	Atrial fibrillation or flutter

Appendix J. Specifications Defining Parameters in this Request								
Include/Exclude Care Setting/PDX Lookback Period Number of instances the criteria should be found in evaluation period	Include Any -183, 0		Include Any -183, 0		Include Any -183, 0		Include Any -183, 0	
	≥ 1		≥ 1		≥ 1		≥ 1	
Pre-Existing Condition	Comparison 1		Comparison 2		Comparison 3		Comparison 4	
	Overall		Overall		Overall		Overall	
	Low-dose dabigatran, rivaroxaban, apixaban, edoxaban, warfarin	Low-dose apixaban, rivaroxaban, dabigatran, edoxaban, warfarin	Low-dose dabigatran, rivaroxaban, apixaban, edoxaban, warfarin	Low-dose apixaban, rivaroxaban, dabigatran, edoxaban, warfarin	Low-dose dabigatran, rivaroxaban, apixaban, edoxaban, warfarin	Low-dose apixaban, rivaroxaban, dabigatran, edoxaban, warfarin	Low-dose dabigatran, rivaroxaban, apixaban, edoxaban, warfarin	Low-dose apixaban, rivaroxaban, dabigatran, edoxaban, warfarin
Include/Exclude Lookback Period Lookback period to define condition looks for evidence of a date or evidence of an interval Number of instances the criteria should be found in evaluation period Minimum Days Supplied Minimum cumulative dose Minimum average filled daily dose Maximum average filled daily dose Minimum current filled daily dose Maximum current filled daily dose	Exclude -183, 0 Dispensing date or days supply ≥ 1 1 N/A N/A N/A N/A N/A N/A		Exclude -183, 0 Dispensing date or days supply ≥ 1 1 N/A N/A N/A N/A N/A		Exclude -183, 0 Dispensing date or days supply ≥ 1 1 N/A N/A N/A N/A N/A		Exclude -183, 0 Dispensing date or days supply ≥ 1 1 N/A N/A N/A N/A N/A	

Appendix J. Specifications Defining Parameters in this Request				
Forced supply to attach to dispensings	N/A	N/A	N/A	N/A
Pre-Existing Condition	Institutional stay encounter	Institutional stay encounter	Institutional stay encounter	Institutional stay encounter
Include/Exclude	Exclude	Exclude	Exclude	Exclude
Lookback Period	0, 0	0, 0	0, 0	0, 0
Number of instances the criteria should be found in evaluation period	≥ 1	≥ 1	≥ 1	≥ 1
	Comparison 1	Comparison 2	Comparison 3	Comparison 4
	Overall	Overall	Overall	Overall
Pre-Existing Condition	Dialysis, Kidney replacement, Deep vein thrombosis, Pulmonary embolism, Joint replacement, Mitral valve disease, Valve replacement, Valve repair	Dialysis, Kidney replacement, Deep vein thrombosis, Pulmonary embolism, Joint replacement, Mitral valve disease, Valve replacement, Valve repair	Dialysis, Kidney replacement, Deep vein thrombosis, Pulmonary embolism, Joint replacement, Mitral valve disease, Valve replacement, Valve repair	Dialysis, Kidney replacement, Deep vein thrombosis, Pulmonary embolism, Joint replacement, Mitral valve disease, Valve replacement, Valve repair
Include/Exclude	Exclude	Exclude	Exclude	Exclude
Care Setting/PDX	Any, except AV/OA for dialysis	Any, except AV/OA for dialysis	Any, except AV/OA for dialysis	Any, except AV/OA for dialysis
Lookback Period	-183, 0	-183, 0	-183, 0	-183, 0
Number of instances the criteria should be found in evaluation period	≥ 1	≥ 1	≥ 1	≥ 1
Event/Outcome	Thromboembolic stroke	Major Extracranial Bleeding ¹	Gastrointestinal hemorrhage ²	Intracranial Hemorrhage
Care Setting/PDX	IPP	IPP	IPP	IPP
Washout (days)	0	0	0	0
Event de-duplication	De-duplicates occurrences of the same event group on the same day	De-duplicates occurrences of the same event group on the same day	De-duplicates occurrences of the same event group on the same day	De-duplicates occurrences of the same event group on the same day

Appendix J. Specifications Defining Parameters in this Request				
	Comparison 1	Comparison 2	Comparison 3	Comparison 4
	Overall	Overall	Overall	Overall
Forced supply to attach to dispensings	N/A	N/A	N/A	N/A
Risk Window Interval Start	N/A			
Blackout Period	1	1	1	1

¹The major extracranial bleed outcome is defined as **a)** one code from "MEB_1" tab in the primary inpatient position AND no code from "MEB_trauma_exclusion" on the same day OR **b)** one code from "MEB_2" in the primary inpatient position AND one code from "MEB_1" in secondary or unspecified inpatient position on the same day AND no code from "MEB_trauma_exclusion" on the same day

²The gastrointestinal hemorrhage outcome is defined as **a)** one code from "GI_1" tab in the primary inpatient position OR **b)** one code from "GI_2" in the primary inpatient position AND one code from "GI_1" in secondary or unspecified inpatient position on the same day

ICD-9, ICD-10, HCPCS, and CPT codes are provided by Optum360. NDC codes are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."

Appendix K. Specifications for Propensity Score (PS) Models

The Center for Drug Evaluation and Research has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) tool with additional programming to compare risk of stroke and bleeding associated with use of apixaban and dabigatran in those aged 64 years or younger in the Sentinel Distributed Database (SDD).

PS Models		Comparison				Analyses			
Model	Comparison	EOI	REF	PS Model Label	PS Model Label (plus programming)	Analysis name 1	Analysis name 2	Analysis name 3	
1 Overall	Dabigatran vs. Apixaban, Stroke	dab_stroke	api_stroke	dab_api_stroke	dab_api	dab_api_stroke_0	dab_api_stroke_1	dab_api_stroke_2.5	
2 Overall	Dabigatran vs. Apixaban, Major Extracranial Bleeding	dab_meb	api_meb	dab_api_meb	dab_api	dab_api_meb_0	dab_api_meb_1	dab_api_meb_2.5	
3 Overall	Dabigatran vs. Apixaban, Gastrointestinal Hemorrhage	dab_gi	api_gi	dab_api_gi	dab_api	dab_api_gi_0	dab_api_gi_1	dab_api_gi_2.5	
4 Overall	Dabigatran vs. Apixaban, Intracranial Hemorrhage	dab_ich	api_ich	dab_api_ich	dab_api	dab_api_ich_0	dab_api_ich_1	dab_api_ich_2.5	

Appendix K. Specifications for Propensity Score (PS) Models

The Center for Drug Evaluation and Research has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) tool with additional programming to compare risk of stroke and bleeding associated with use of apixaban and dabigatran in those aged 64 years or younger in the Sentinel Distributed Database (SDD).

Propensity Score Estimation Parameters	Covariates	See Appendix J
	Firth Logistic Intercept Corrected Method	No
	High-dimensional Propensity Score	No

Propensity Score Analysis		Analysis Group
	Analysis name	All listed
	IP weight calculation	ATE Stabilized
	Weight truncation?	- No truncation - 1st percentile truncation

		Analysis Group			
Subgroups	Analysis name	All listed above			
	Subgroups	Sex	Age Group (years)	CHA2DS2-VASc	HAS-BLED
	Sugroup Categories	Females, Males	21-49, 50-64	0, 1, 2, 3, 4, 5+	0, 1, 2, 3+
	Firth Logistic Intercept Corrected Method	No	No	No	No
	Re-estimate Propensity Score	Yes: the propensity score will be re-estimated			