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The following report(s) provides findings from an FDA-initiated query using Sentinel. While Sentinel queries may be undertaken to assess potential medical product safety risks, they may also be initiated for various other reasons. Some examples include determining a rate or count of an identified health outcome of interest, examining medical product use, exploring the feasibility of future, more detailed analyses within Sentinel, and seeking to better understand Sentinel capabilities.

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_wp012: Report 2 of 4

Request ID: cder_mpl2p_wp012_nsdp_v01

Request Description: In this report we estimated the risk of intentional self-harm comparing brand name sertraline to its authorized generic in the Sentinel Distributed Database (SDD). This is report 2 of 4. Report 1 does not include covariates for socioeconomic status in the propensity score models. Report 3 assesses the risk of hospitalized depression. Report 4 assesses the risk of hospitalized depression and includes covariates for socioeconomic status in the propensity score models.

Sentinel Modular Program Tool Used: Cohort Identification and Descriptive Analysis (CIDA) and Propensity Score Analysis (PSA) tools, version 7.3.3, with additional programming

Data Source: The study period spanned from June 30, 2006 to September 30, 2015. We distributed the analytic package to 17 Data Partners (DP) on July 30, 2019. Only the results from four DPs whose propensity score models converged are included in this report. See Appendix A for a list of the latest dates of available data for each DP included in this report.

Study Design: This study used a retrospective new-user cohort design.

Exposures: We defined the exposures of interest, new use of brand name sertraline compared to authorized generic sertraline, using outpatient dispensing data and National Drug Codes (NDCs). Please refer to Appendix B for a list of generic and brand name medical products used to define exposures.

Outcomes of Interest: We used a validated algorithm to define intentional self-harm². The algorithm defines intentional self-harm as evidence of an inpatient mental health diagnosis as well as an inpatient or emergency department self-harm diagnosis on the same day. Both components of the algorithm used International Classification of Disease, Ninth Revision, Clinical Modification (ICD-9-CM) diagnosis codes. Please see Appendix C for specific diagnosis codes used to define intentional self-harm in this report.

Cohort Eligibility Criteria: We included members' first valid exposure that occurred between June 30, 2006 and September 30, 2015. We required members to be continuously enrolled in health plans with medical and drug coverage for at least 180 days prior to their first qualifying sertraline dispensing date (i.e., index date). The following age groups were included in the cohort: 12-17, 18-24, 25-54, 55+ years. New use was defined as no evidence of any sertraline dispensing in the 180 days prior to index. We required members to have no evidence of a traumatic brain injury diagnosis in the 180 days preceding and including the index date. We required members to have evidence of a mood or depressive disorder diagnosis in the 90 days preceding and including the index date in order to be included in the cohorts. Please see Appendix D for specific ICD-9-CM diagnosis codes used to define traumatic brain injury and mood or depressive disorder. We examined three separate cohorts:

- 1) Risk window 1-14 days: We excluded members if they had evidence of the outcome of interest on the first day of their sertraline treatment episode.
- 2) Risk window 1-365 days: We excluded members if they had evidence of the outcome of interest on the first day of their sertraline treatment episode.
- 3) Risk window 15-365 days: We excluded members if they had evidence of the outcome of interest in the first 14 days of their sertraline treatment episode.

Follow-up Time: Follow-up time began on the day of first dispensing and continued for the duration of the exposure episode. Exposure episode lengths were defined using outpatient pharmacy dispensing days supplied to create a sequence of continuous exposure. Exposure episodes were considered continuous if gaps in days supplied were 15 days or less. An episode extension of 15 days was added to the end of each exposure episode. Follow-up continued until the first occurrence of any of the following: 1) outcome occurrence; 2) evidence of a dispensing for another antidepressant; 3) evidence of a dispensing for the opposite study drug; 4) disenrollment; 5) recorded death; 6) end of exposure episode; 7) end of query period; 8) end of risk window (defined above). Please see Appendix E for a list of generic and brand names of medical products used to define incidence.

Propensity Score Estimation: The PSA tool calculated propensity scores and identified matched cohorts based on propensity scores within each Data Partner. The following covariates were assessed in the 180 days prior to index date and included in the propensity score estimation: age, year, sex, Charlson/Elixhauser combined comorbidity score¹, health service and drug utilization, recorded history of attention-deficit/ hyperactivity disorder, akathisia, antipsychotic medication use, anxiety, anxiolytic medication use, atherosclerotic disease, bipolar disorder, breast cancer, cardiomyopathy, cerebral degenerations, chronic lung disease, colorectal cancer, conduct disorder, congenital heart diseases, delirium, dementia and other cerebral degenerations, diabetes, dyslipidemia, electroconvulsive therapy, endocarditis, pericarditis, and myocarditis, essential hypertension, gastrointestinal hemorrhage, glaucoma, gout, hallucination, heart failure, hypertensive heart and kidney diseases, hypnotic use, hypothyroidism, injury other than poisoning, lithium and other mood stabilizer use, lung cancer, myocardial infarction, nonrheumatic valve, non-sertraline antidepressant use, non-sertraline selective serotonin reuptake inhibitor use, obsessive-compulsive disorder, use of opioids used for medication assisted treatment, osteoarthritis, other arrhythmia, other chronic kidney diseases, other congenital anomalies, other heart diseases, other malignant neoplasm, other mental disorders, pain requiring opiates, Parkinson's disease, peptic ulcer disease and related conditions without hemorrhage, persistent mental disorders due to conditions classified elsewhere, personality disorders, pervasive developmental disorders, pneumonia, post-traumatic stress disorder, premenstrual dysphoric disorder, prostate cancer, psychotic conditions, rheumatic fever, rheumatic heart diseases, rheumatoid arthritis, schizophrenia, secondary hypertension, seizure disorder, sepsis, sleep disorder, social anxiety disorder, stroke or transient ischemic attack, substance abuse disorder, suicidal behavior², transcranial magnetic stimulation, urinary incontinence, vagus nerve stimulation, ventricular arrhythmia. Please see Appendix F for ICD-9-CM, Healthcare Common Procedure Coding System (HCPCS) codes, and Current Procedural Terminology, Fourth Edition (CPT-4) codes used to define covariates in this request and Appendix G for a list of generic and brand name medical products.

In addition to the covariates described above, we used the publicly available data from the United States Census Bureau's annual American Community Survey to estimate median income, median home value, and percent of residents who are unemployed for each member by their recorded ZIP code.

Analysis: The matching ratio for the propensity score was 1:n (n≥10). Patients in the exposed and comparator cohorts were nearest neighbor matched, without replacement, to up to 10 exposed patients. The matching caliper was 0.05. For each comparison, we used case-centered logistic regression to calculate relative risks and 95% confidence intervals. We performed a subgroup analysis by stratifying members from the unmatched cohorts based on their age at index: 12-17, 18-24, 25-54, or 55+ years. We rematched patients within each age group and estimated relative risks and 95% confidence intervals for each subgroup.

Please see Appendix H for the specifications of parameters used in this request.

Limitations: Algorithms 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>).

¹ Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. *J Clin Epidemiol.* 2011;64(7):749-759

² Patrick AR, Miller M, Barber CW, Wang PS, Canning CF, Schneeweiss S. Identification of Hospitalizations for Intentional Self-Harm when E-Codes are Incompletely Recorded. *Pharmacoepidemiol Drug Saf.* 2010; 19(12): 1263-1275

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

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).

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.

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) Tool***

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 metrics to the propensity score estimation model:

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 included in the "Continuous enrollment before exposure" field.

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 ratio.

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. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 1-14 Days (Primary Outcome) (Unmatched, Aggregated)

Characteristic ¹	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	7,228	100.0%	363,168	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	44.9	16.8	53	16.3	-8.119	-0.49
Age (years)	Number	Percent	Number	Percent		
12-17	532	7.4%	17,510	4.8%	2.539	0.106
18-24	671	9.3%	24,191	6.7%	2.622	0.097
25-54	3,945	54.6%	150,942	41.6%	13.017	0.263
55+	2,080	28.8%	170,525	47.0%	-18.178	-0.382
Gender						
Female	5,305	73.4%	249,827	68.8%	4.604	0.102
Male	1,923	26.6%	113,326	31.2%	-4.6	-0.102
Year						
2006	3,928	54.3%	5,337	1.5%	52.875	1.459
2007	486	6.7%	13,099	3.6%	3.117	0.141
2008	448	6.2%	18,012	5.0%	1.238	0.054
2009	486	6.7%	30,937	8.5%	-1.795	-0.068
2010	412	5.7%	55,750	15.4%	-9.651	-0.318
2011	406	5.6%	61,181	16.8%	-11.229	-0.361
2012	338	4.7%	48,535	13.4%	-8.688	-0.307
2013	319	4.4%	49,372	13.6%	-9.181	-0.325
2014	254	3.5%	50,326	13.9%	-10.343	-0.374
2015	151	2.1%	30,619	8.4%	-6.342	-0.287
Median household income	72,022.4	28,625.2	61,382.3	23,868.0	10,640.113	0.404
Median value of home	320,479.8	222,809.4	232,790.0	165,021.3	87,689.850	0.447
Percent unemployed	7.7	3.3	8.4	4	-0.697	-0.191
Recorded history of:	Mean	Standard Deviation	Mean	Standard Deviation		
Prior combined comorbidity raw score	0.7	1.4	1.3	2.2	-0.615	-0.332
	Number	Percent	Number	Percent		
ADHD	277	3.8%	11,455	3.2%	0.678	0.037
Akathisia	22	0.3%	1,028	0.3%	0.021	0.004
Anxiety	1,806	25.0%	98,935	27.2%	-2.256	-0.051
Atherosclerotic disease	143	2.0%	18,727	5.2%	-3.178	-0.172
Bipolar disorder	303	4.2%	21,697	6.0%	-1.782	-0.081
Breast cancer	96	1.3%	5,903	1.6%	-0.297	-0.025
Cardiomyopathy	60	0.8%	8,432	2.3%	-1.492	-0.12
Cerebral degenerations usually manifest in childhood	-	0.0%	39	0.0%	-0.011	-
Chronic lung disease	680	9.4%	63,387	17.5%	-8.046	-0.238
Colorectal cancer	21	0.3%	2,238	0.6%	-0.326	-0.048

Table 1a. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 1-14 Days (Primary Outcome) (Unmatched, Aggregated)

Recorded history of:	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Conduct disorder	44	0.6%	3,974	1.1%	-0.486	-0.053
Congenital heart diseases	33	0.5%	2,524	0.7%	-0.238	-0.032
Delirium	126	1.7%	15,418	4.2%	-2.502	-0.147
Dementias and other cerebral degenerations	129	1.8%	21,783	6.0%	-4.213	-0.219
Diabetes	630	8.7%	70,555	19.4%	-10.712	-0.312
Dyslipidemia	1,709	23.6%	126,676	34.9%	-11.237	-0.249
Electroconvulsive therapy	11	0.2%	550	0.2%	0.001	0
Endocarditis, pericarditis, and myocarditis	*****	*****	782	0.2%	*****	*****
Essential hypertension	1,708	23.6%	153,034	42.1%	-18.508	-0.402
Gastrointestinal hemorrhage	106	1.5%	9,450	2.6%	-1.136	-0.081
Glaucoma	244	3.4%	19,713	5.4%	-2.052	-0.1
Gout	55	0.8%	7,490	2.1%	-1.301	-0.11
Hallucination	16	0.2%	2,681	0.7%	-0.517	-0.075
Heart failure	173	2.4%	29,798	8.2%	-5.812	-0.262
Hypertensive heart and kidney diseases	156	2.2%	24,590	6.8%	-4.613	-0.225
Hypnotics	944	13.1%	48,736	13.4%	-0.359	-0.011
Hypothyroidism	825	11.4%	50,382	13.9%	-2.459	-0.074
Injury other than poisoning	1,256	17.4%	75,926	20.9%	-3.53	-0.09
Lung cancer	22	0.3%	2,745	0.8%	-0.451	-0.062
Myocardial infarction	87	1.2%	13,276	3.7%	-2.452	-0.16
Nonrheumatic valve	232	3.2%	23,201	6.4%	-3.179	-0.149
Obsessive-compulsive disorder	143	2.0%	3,798	1.0%	0.933	0.076
Osteoarthritis	591	8.2%	58,478	16.1%	-7.926	-0.244
Other arrhythmia	440	6.1%	48,750	13.4%	-7.336	-0.249
Other chronic kidney diseases	92	1.3%	25,363	7.0%	-5.711	-0.29
Other congenital anomalies	16	0.2%	1,117	0.3%	-0.086	-0.017
Other heart diseases	427	5.9%	50,325	13.9%	-7.95	-0.269
Other malignant neoplasm	238	3.3%	18,316	5.0%	-1.751	-0.088
Other mental disorders	1,175	16.3%	52,676	14.5%	1.752	0.049
Parkinson disease	37	0.5%	4,797	1.3%	-0.809	-0.085
Peptic ulcer disease and related conditions (without hemorrhage)	-	0.0%	*****	*****	*****	-
Persistent mental disorders due to conditions classified elsewhere	88	1.2%	20,210	5.6%	-4.347	-0.242
Personality disorders	108	1.5%	5,384	1.5%	0.012	0.001
Pervasive developmental disorders	19	0.3%	823	0.2%	0.036	0.007
Pneumonia	157	2.2%	18,634	5.1%	-2.959	-0.158
Post-traumatic stress disorder	144	2.0%	8,650	2.4%	-0.39	-0.027
Premenstrual dysphoric disorder	47	0.7%	1,044	0.3%	0.363	0.053
Prostate cancer	36	0.5%	3,718	1.0%	-0.526	-0.061
Psychotic conditions	115	1.6%	16,691	4.6%	-3.005	-0.174
Rheumatic fever	*****	*****	88	0.0%	*****	*****

Table 1a. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 1-14 Days (Primary Outcome) (Unmatched, Aggregated)

	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Recorded history of:						
Rheumatic heart diseases	72	1.0%	7,203	2.0%	-0.987	-0.082
Rheumatoid arthritis	97	1.3%	8,901	2.5%	-1.109	-0.081
Schizophrenia	39	0.5%	7,854	2.2%	-1.623	-0.141
Secondary hypertension	*****	*****	608	0.2%	*****	*****
Seizure disorder	137	1.9%	13,714	3.8%	-1.881	-0.113
Self Harm (Patrick algorithm and E codes)	63	0.9%	3,856	1.1%	-0.19	-0.019
Self Harm (Patrick algorithm)	52	0.7%	2,743	0.8%	-0.036	-0.004
Self harm (E codes)	38	0.5%	2,271	0.6%	-0.1	-0.013
Sepsis	43	0.6%	7,820	2.2%	-1.558	-0.134
Sleep disorder	712	9.9%	46,457	12.8%	-2.942	-0.093
Social anxiety disorder	36	0.5%	1,427	0.4%	0.105	0.016
Stroke or transient ischemic attack	223	3.1%	26,174	7.2%	-4.122	-0.187
Substance abuse disorders	259	3.6%	9,619	2.6%	0.935	0.054
Transcranial magnetic stimulation	-	0.0%	30	0.0%	-0.008	-
Urinary incontinence	131	1.8%	11,872	3.3%	-1.457	-0.093
Vagus nerve stimulation	*****	*****	434	0.1%	*****	*****
Ventricular arrhythmia	59	0.8%	7,209	2.0%	-1.169	-0.1
Health Service Utilization Intensity:	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters (AV)	10.5	10.4	10.2	9.4	0.231	0.023
Mean number of emergency room encounters (ED)	0.3	0.8	0.5	1.4	-0.259	-0.234
Mean number of inpatient hospital encounters (IP)	0.2	0.6	0.4	0.9	-0.172	-0.227
Mean number of non-acute institutional encounters (IS)	0	0.2	0.1	0.4	-0.061	-0.196
Mean number of other ambulatory encounters (OA)	1.6	3.5	4.1	9.2	-2.46	-0.352
Mean number of unique drug classes	4.9	4.2	6.5	4.6	-1.537	-0.349
Mean number of generics	5.3	4.8	7	5.2	-1.706	-0.341
Mean number of filled prescriptions	12.3	14	18	17.3	-5.747	-0.366
History of use:	Number	Percent	Number	Percent		
Antipsychotics	463	6.4%	35,999	9.9%	-3.507	-0.128
Anxiolytic medication	1,549	21.4%	65,653	18.1%	3.353	0.084
Lithium and other mood stabilizers	777	10.7%	36,767	10.1%	0.626	0.02
Non-sertraline SSRI	1,559	21.6%	81,875	22.5%	-0.976	-0.024
Non-sertraline antidepressants	2,763	38.2%	144,903	39.9%	-1.673	-0.034
Opioids used for medication assisted treatment	38	0.5%	4,340	1.2%	-0.669	-0.073
Pain requiring opiates	1,805	25.0%	136,383	37.6%	-12.581	-0.274

¹Characteristics in blue show a standardized difference greater than 0.1.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 1b. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 1-14 Days (Primary Outcome) (Matched, Aggregated), Ratio: 1:many, Caliper:0.05

Characteristic ¹	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	7,224	99.9%	39,800	11.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	44.9	16.8	44.7	17.1	0.205	0.012
Age (years)	Number	Percent	Number	Percent		
12-17	532	7.4%	515	7.1%	0.24	0.009
18-24	671	9.3%	658	9.1%	0.184	0.006
25-54	3,943	54.6%	4,021	55.7%	-1.085	-0.022
55+	2,078	28.8%	2,030	28.1%	0.662	0.016
Gender						
Female	5,301	73.4%	5,257	72.8%	0.615	0.014
Male	1,923	26.6%	1,967	27.2%	-0.615	-0.014
Year						
2006	3,924	54.3%	3,702	51.2%	3.077	0.078
2007	486	6.7%	623	8.6%	-1.903	-0.073
2008	448	6.2%	493	6.8%	-0.62	-0.026
2009	486	6.7%	489	6.8%	-0.044	-0.002
2010	412	5.7%	379	5.3%	0.451	0.02
2011	406	5.6%	421	5.8%	-0.213	-0.009
2012	338	4.7%	358	5.0%	-0.272	-0.013
2013	319	4.4%	358	5.0%	-0.537	-0.026
2014	254	3.5%	256	3.5%	-0.033	-0.002
2015	151	2.1%	144	2.0%	0.094	0.007
Median household income	71,994.0	28,593.4	71,611.1	28,036.5	382.86	0.014
Median value of home	320,306.6	222,677.3	320,192.1	223,027.5	114.487	0.001
Percent unemployed	7.7	3.3	7.8	3.4	-0.032	-0.009
Recorded history of:	Mean	Standard Deviation	Mean	Standard Deviation		
Prior combined comorbidity raw score	0.7	1.4	0.7	1.4	0.019	0.014
	Number	Percent	Number	Percent		
ADHD	276	3.8%	289	4.0%	-0.18	-0.009
Akathisia	22	0.3%	25	0.3%	-0.043	-0.008
Anxiety	1,805	25.0%	1,770	24.5%	0.485	0.011
Atherosclerotic disease	142	2.0%	146	2.0%	-0.057	-0.004
Bipolar disorder	303	4.2%	305	4.2%	-0.025	-0.001
Breast cancer	96	1.3%	89	1.2%	0.094	0.008
Cardiomyopathy	60	0.8%	56	0.8%	0.05	0.006
Cerebral degenerations usually manifest in childhood	-	0.0%	-	0.0%	0	-
Chronic lung disease	680	9.4%	685	9.5%	-0.076	-0.003
Colorectal cancer	21	0.3%	23	0.3%	-0.03	-0.006

Table 1b. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 1-14 Days (Primary Outcome) (Matched, Aggregated), Ratio: 1:many, Caliper:0.05

Recorded history of:	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Conduct disorder	44	0.6%	44	0.6%	0.005	0.001
Congenital heart diseases	33	0.5%	32	0.4%	0.011	0.002
Delirium	126	1.7%	124	1.7%	0.03	0.002
Dementias and other cerebral degenerations	128	1.8%	125	1.7%	0.048	0.004
Diabetes	630	8.7%	634	8.8%	-0.05	-0.002
Dyslipidemia	1,709	23.7%	1,711	23.7%	-0.021	-0.001
Electroconvulsive therapy	11	0.2%	*****	*****	*****	*****
Endocarditis, pericarditis, and myocarditis	*****	*****	*****	*****	-0.003	-0.001
Essential hypertension	1,706	23.6%	1,656	22.9%	0.69	0.017
Gastrointestinal hemorrhage	106	1.5%	107	1.5%	-0.012	-0.001
Glaucoma	244	3.4%	237	3.3%	0.099	0.006
Gout	55	0.8%	54	0.8%	0.008	0.001
Hallucination	16	0.2%	13	0.2%	0.044	0.01
Heart failure	173	2.4%	165	2.3%	0.114	0.008
Hypertensive heart and kidney diseases	156	2.2%	153	2.1%	0.039	0.003
Hypnotics	942	13.0%	922	12.8%	0.273	0.008
Hypothyroidism	821	11.4%	817	11.3%	0.056	0.002
Injury other than poisoning	1,255	17.4%	1,259	17.4%	-0.058	-0.002
Lung cancer	22	0.3%	26	0.4%	-0.058	-0.01
Myocardial infarction	87	1.2%	81	1.1%	0.082	0.008
Nonrheumatic valve	232	3.2%	226	3.1%	0.083	0.005
Obsessive-compulsive disorder	142	2.0%	130	1.8%	0.173	0.013
Osteoarthritis	589	8.2%	577	8.0%	0.168	0.006
Other arrhythmia	440	6.1%	425	5.9%	0.21	0.009
Other chronic kidney diseases	92	1.3%	94	1.3%	-0.032	-0.003
Other congenital anomalies	16	0.2%	15	0.2%	0.009	0.002
Other heart diseases	427	5.9%	425	5.9%	0.028	0.001
Other malignant neoplasm	238	3.3%	228	3.2%	0.138	0.008
Other mental disorders	1,173	16.2%	1,168	16.2%	0.074	0.002
Parkinson disease	37	0.5%	34	0.5%	0.046	0.007
Peptic ulcer disease and related conditions (without hemorrhage)	-	0.0%	-	0.0%	0	-
Persistent mental disorders due to conditions classified elsewhere	88	1.2%	91	1.3%	-0.045	-0.004
Personality disorders	106	1.5%	104	1.4%	0.034	0.003
Pervasive developmental disorders	19	0.3%	19	0.3%	0.006	0.001
Pneumonia	156	2.2%	155	2.1%	0.012	0.001
Post-traumatic stress disorder	144	2.0%	148	2.1%	-0.058	-0.004
Premenstrual dysphoric disorder	47	0.7%	51	0.7%	-0.05	-0.006
Prostate cancer	36	0.5%	35	0.5%	0.009	0.001
Psychotic conditions	115	1.6%	115	1.6%	-0.006	-0.001
Rheumatic fever	*****	*****	*****	*****	0.001	0.001

Table 1b. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 1-14 Days (Primary Outcome) (Matched, Aggregated), Ratio: 1:many, Caliper:0.05

	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Recorded history of:						
Rheumatic heart diseases	72	1.0%	65	0.9%	0.099	0.01
Rheumatoid arthritis	97	1.3%	103	1.4%	-0.078	-0.007
Schizophrenia	39	0.5%	40	0.5%	-0.01	-0.001
Secondary hypertension	*****	*****	*****	*****	-0.022	-0.009
Seizure disorder	137	1.9%	135	1.9%	0.031	0.002
Self Harm (Patrick algorithm and E codes)	63	0.9%	68	0.9%	-0.07	-0.007
Self Harm (Patrick algorithm)	52	0.7%	50	0.7%	0.029	0.003
Self harm (E codes)	38	0.5%	40	0.5%	-0.023	-0.003
Sepsis	43	0.6%	40	0.6%	0.044	0.006
Sleep disorder	711	9.8%	718	9.9%	-0.09	-0.003
Social anxiety disorder	36	0.5%	38	0.5%	-0.034	-0.005
Stroke or transient ischemic attack	223	3.1%	218	3.0%	0.071	0.004
Substance abuse disorders	259	3.6%	259	3.6%	-0.005	0
Transcranial magnetic stimulation	-	0.0%	0	0.0%	-0.004	-
Urinary incontinence	131	1.8%	128	1.8%	0.044	0.003
Vagus nerve stimulation	*****	*****	*****	*****	-0.006	-0.002
Ventricular arrhythmia	59	0.8%	61	0.8%	-0.022	-0.002
Health Service Utilization Intensity:	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters (AV)	10.5	10.3	10.3	10.7	0.159	0.015
Mean number of emergency room encounters (ED)	0.3	0.8	0.3	0.7	0.01	0.014
Mean number of inpatient hospital encounters (IP)	0.2	0.6	0.2	0.6	-0.007	-0.011
Mean number of non-acute institutional encounters (IS)	0	0.2	0	0.2	0.002	0.012
Mean number of other ambulatory encounters (OA)	1.6	3.5	1.6	3.7	0.034	0.009
Mean number of unique drug classes	4.9	4.2	4.9	4.1	0.023	0.006
Mean number of generics	5.3	4.8	5.3	4.6	0.028	0.006
Mean number of filled prescriptions	12.3	14	12.2	13.2	0.022	0.002
History of use:	Number	Percent	Number	Percent		
Antipsychotics	462	6.4%	459	6.4%	0.035	0.001
Anxiolytic medication	1,548	21.4%	1,582	21.9%	-0.467	-0.011
Lithium and other mood stabilizers	777	10.8%	770	10.7%	0.101	0.003
Non-sertraline SSRI	1,559	21.6%	1,574	21.8%	-0.213	-0.005
Non-sertraline antidepressants	2,760	38.2%	2,791	38.6%	-0.432	-0.009
Opioids used for medication assisted treatment	38	0.5%	42	0.6%	-0.061	-0.008
Pain requiring opiates	1,803	25.0%	1,843	25.5%	-0.557	-0.013

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 1c. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 1-365 Days (Primary Outcome) (Unmatched, Aggregated)

Characteristic ¹	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	7,228	100.0%	363,168	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	44.9	16.8	53	16.3	-8.119	-0.49
Age (years)	Number	Percent	Number	Percent		
12-17	532	7.4%	17,510	4.8%	2.539	0.106
18-24	671	9.3%	24,191	6.7%	2.622	0.097
25-54	3,945	54.6%	150,942	41.6%	13.017	0.263
55+	2,080	28.8%	170,525	47.0%	-18.178	-0.382
Gender						
Female	5,305	73.4%	249,827	68.8%	4.604	0.102
Male	1,923	26.6%	113,326	31.2%	-4.6	-0.102
Year						
2006	3,928	54.3%	5,337	1.5%	52.875	1.459
2007	486	6.7%	13,099	3.6%	3.117	0.141
2008	448	6.2%	18,012	5.0%	1.238	0.054
2009	486	6.7%	30,937	8.5%	-1.795	-0.068
2010	412	5.7%	55,750	15.4%	-9.651	-0.318
2011	406	5.6%	61,181	16.8%	-11.229	-0.361
2012	338	4.7%	48,535	13.4%	-8.688	-0.307
2013	319	4.4%	49,372	13.6%	-9.181	-0.325
2014	254	3.5%	50,326	13.9%	-10.343	-0.374
2015	151	2.1%	30,619	8.4%	-6.342	-0.287
Median household income	72,022.4	28,625.2	61,382.3	23,868.0	10,640.113	0.404
Median value of home	320,479.8	222,809.4	232,790.0	165,021.3	87,689.850	0.447
Percent unemployed	7.7	3.3	8.4	4	-0.697	-0.191
Recorded history of:	Mean	Standard Deviation	Mean	Standard Deviation		
Prior combined comorbidity raw score	0.7	1.4	1.3	2.2	-0.615	-0.332
	Number	Percent	Number	Percent		
ADHD	277	3.8%	11,455	3.2%	0.678	0.037
Akathisia	22	0.3%	1,028	0.3%	0.021	0.004
Anxiety	1,806	25.0%	98,935	27.2%	-2.256	-0.051
Atherosclerotic disease	143	2.0%	18,727	5.2%	-3.178	-0.172
Bipolar disorder	303	4.2%	21,697	6.0%	-1.782	-0.081
Breast cancer	96	1.3%	5,903	1.6%	-0.297	-0.025
Cardiomyopathy	60	0.8%	8,432	2.3%	-1.492	-0.12
Cerebral degenerations usually manifest in childhood	-	0.0%	39	0.0%	-0.011	-
Chronic lung disease	680	9.4%	63,387	17.5%	-8.046	-0.238
Colorectal cancer	21	0.3%	2,238	0.6%	-0.326	-0.048

Table 1c. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 1-365 Days (Primary Outcome) (Unmatched, Aggregated)

Recorded history of:	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Conduct disorder	44	0.6%	3,974	1.1%	-0.486	-0.053
Congenital heart diseases	33	0.5%	2,524	0.7%	-0.238	-0.032
Delirium	126	1.7%	15,418	4.2%	-2.502	-0.147
Dementias and other cerebral degenerations	129	1.8%	21,783	6.0%	-4.213	-0.219
Diabetes	630	8.7%	70,555	19.4%	-10.712	-0.312
Dyslipidemia	1,709	23.6%	126,676	34.9%	-11.237	-0.249
Electroconvulsive therapy	11	0.2%	550	0.2%	0.001	0
Endocarditis, pericarditis, and myocarditis	*****	*****	782	0.2%	*****	*****
Essential hypertension	1,708	23.6%	153,034	42.1%	-18.508	-0.402
Gastrointestinal hemorrhage	106	1.5%	9,450	2.6%	-1.136	-0.081
Glaucoma	244	3.4%	19,713	5.4%	-2.052	-0.1
Gout	55	0.8%	7,490	2.1%	-1.301	-0.11
Hallucination	16	0.2%	2,681	0.7%	-0.517	-0.075
Heart failure	173	2.4%	29,798	8.2%	-5.812	-0.262
Hypertensive heart and kidney diseases	156	2.2%	24,590	6.8%	-4.613	-0.225
Hypnotics	944	13.1%	48,736	13.4%	-0.359	-0.011
Hypothyroidism	825	11.4%	50,382	13.9%	-2.459	-0.074
Injury other than poisoning	1,256	17.4%	75,926	20.9%	-3.53	-0.09
Lung cancer	22	0.3%	2,745	0.8%	-0.451	-0.062
Myocardial infarction	87	1.2%	13,276	3.7%	-2.452	-0.16
Nonrheumatic valve	232	3.2%	23,201	6.4%	-3.179	-0.149
Obsessive-compulsive disorder	143	2.0%	3,798	1.0%	0.933	0.076
Osteoarthritis	591	8.2%	58,478	16.1%	-7.926	-0.244
Other arrhythmia	440	6.1%	48,750	13.4%	-7.336	-0.249
Other chronic kidney diseases	92	1.3%	25,363	7.0%	-5.711	-0.29
Other congenital anomalies	16	0.2%	1,117	0.3%	-0.086	-0.017
Other heart diseases	427	5.9%	50,325	13.9%	-7.95	-0.269
Other malignant neoplasm	238	3.3%	18,316	5.0%	-1.751	-0.088
Other mental disorders	1,175	16.3%	52,676	14.5%	1.752	0.049
Parkinson disease	37	0.5%	4,797	1.3%	-0.809	-0.085
Peptic ulcer disease and related conditions (without hemorrhage)	-	0.0%	*****	*****	*****	-
Persistent mental disorders due to conditions classified elsewhere	88	1.2%	20,210	5.6%	-4.347	-0.242
Personality disorders	108	1.5%	5,384	1.5%	0.012	0.001
Pervasive developmental disorders	19	0.3%	823	0.2%	0.036	0.007
Pneumonia	157	2.2%	18,634	5.1%	-2.959	-0.158
Post-traumatic stress disorder	144	2.0%	8,650	2.4%	-0.39	-0.027
Premenstrual dysphoric disorder	47	0.7%	1,044	0.3%	0.363	0.053
Prostate cancer	36	0.5%	3,718	1.0%	-0.526	-0.061
Psychotic conditions	115	1.6%	16,691	4.6%	-3.005	-0.174
Rheumatic fever	*****	*****	88	0.0%	*****	*****

Table 1c. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 1-365 Days (Primary Outcome) (Unmatched, Aggregated)

	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Recorded history of:						
Rheumatic heart diseases	72	1.0%	7,203	2.0%	-0.987	-0.082
Rheumatoid arthritis	97	1.3%	8,901	2.5%	-1.109	-0.081
Schizophrenia	39	0.5%	7,854	2.2%	-1.623	-0.141
Secondary hypertension	*****	*****	608	0.2%	*****	*****
Seizure disorder	137	1.9%	13,714	3.8%	-1.881	-0.113
Self Harm (Patrick algorithm and E codes)	63	0.9%	3,856	1.1%	-0.19	-0.019
Self Harm (Patrick algorithm)	52	0.7%	2,743	0.8%	-0.036	-0.004
Self harm (E codes)	38	0.5%	2,271	0.6%	-0.1	-0.013
Sepsis	43	0.6%	7,820	2.2%	-1.558	-0.134
Sleep disorder	712	9.9%	46,457	12.8%	-2.942	-0.093
Social anxiety disorder	36	0.5%	1,427	0.4%	0.105	0.016
Stroke or transient ischemic attack	223	3.1%	26,174	7.2%	-4.122	-0.187
Substance abuse disorders	259	3.6%	9,619	2.6%	0.935	0.054
Transcranial magnetic stimulation	-	0.0%	30	0.0%	-0.008	-
Urinary incontinence	131	1.8%	11,872	3.3%	-1.457	-0.093
Vagus nerve stimulation	*****	*****	434	0.1%	*****	*****
Ventricular arrhythmia	59	0.8%	7,209	2.0%	-1.169	-0.1
Health Service Utilization Intensity:	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters (AV)	10.5	10.4	10.2	9.4	0.231	0.023
Mean number of emergency room encounters (ED)	0.3	0.8	0.5	1.4	-0.259	-0.234
Mean number of inpatient hospital encounters (IP)	0.2	0.6	0.4	0.9	-0.172	-0.227
Mean number of non-acute institutional encounters (IS)	0	0.2	0.1	0.4	-0.061	-0.196
Mean number of other ambulatory encounters (OA)	1.6	3.5	4.1	9.2	-2.46	-0.352
Mean number of unique drug classes	4.9	4.2	6.5	4.6	-1.537	-0.349
Mean number of generics	5.3	4.8	7	5.2	-1.706	-0.341
Mean number of filled prescriptions	12.3	14	18	17.3	-5.747	-0.366
History of use:	Number	Percent	Number	Percent		
Antipsychotics	463	6.4%	35,999	9.9%	-3.507	-0.128
Anxiolytic medication	1,549	21.4%	65,653	18.1%	3.353	0.084
Lithium and other mood stabilizers	777	10.7%	36,767	10.1%	0.626	0.02
Non-sertraline SSRI	1,559	21.6%	81,875	22.5%	-0.976	-0.024
Non-sertraline antidepressants	2,763	38.2%	144,903	39.9%	-1.673	-0.034
Opioids used for medication assisted treatment	38	0.5%	4,340	1.2%	-0.669	-0.073
Pain requiring opiates	1,805	25.0%	136,383	37.6%	-12.581	-0.274

¹Characteristics in blue show a standardized difference greater than 0.1.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 1d. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 1-365 Days (Primary Outcome) (Matched, Aggregated), Ratio: 1:many, Caliper:0.05

Characteristic ¹	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	7,224	99.9%	39,800	11.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	44.9	16.8	44.7	17.1	0.205	0.012
Age (years)	Number	Percent	Number	Percent		
12-17	532	7.4%	515	7.1%	0.24	0.009
18-24	671	9.3%	658	9.1%	0.184	0.006
25-54	3,943	54.6%	4,021	55.7%	-1.085	-0.022
55+	2,078	28.8%	2,030	28.1%	0.662	0.016
Gender						
Female	5,301	73.4%	5,257	72.8%	0.615	0.014
Male	1,923	26.6%	1,967	27.2%	-0.615	-0.014
Year						
2006	3,924	54.3%	3,702	51.2%	3.077	0.078
2007	486	6.7%	623	8.6%	-1.903	-0.073
2008	448	6.2%	493	6.8%	-0.62	-0.026
2009	486	6.7%	489	6.8%	-0.044	-0.002
2010	412	5.7%	379	5.3%	0.451	0.02
2011	406	5.6%	421	5.8%	-0.213	-0.009
2012	338	4.7%	358	5.0%	-0.272	-0.013
2013	319	4.4%	358	5.0%	-0.537	-0.026
2014	254	3.5%	256	3.5%	-0.033	-0.002
2015	151	2.1%	144	2.0%	0.094	0.007
Median household income	71,994.0	28,593.4	71,611.1	28,036.5	382.86	0.014
Median value of home	320,306.6	222,677.3	320,192.1	223,027.5	114.487	0.001
Percent unemployed	7.7	3.3	7.8	3.4	-0.032	-0.009
Recorded history of:	Mean	Standard Deviation	Mean	Standard Deviation		
Prior combined comorbidity raw score	0.7	1.4	0.7	1.4	0.019	0.014
	Number	Percent	Number	Percent		
ADHD	276	3.8%	289	4.0%	-0.18	-0.009
Akathisia	22	0.3%	25	0.3%	-0.043	-0.008
Anxiety	1,805	25.0%	1,770	24.5%	0.485	0.011
Atherosclerotic disease	142	2.0%	146	2.0%	-0.057	-0.004
Bipolar disorder	303	4.2%	305	4.2%	-0.025	-0.001
Breast cancer	96	1.3%	89	1.2%	0.094	0.008
Cardiomyopathy	60	0.8%	56	0.8%	0.05	0.006
Cerebral degenerations usually manifest in childhood	-	0.0%	-	0.0%	0	-
Chronic lung disease	680	9.4%	685	9.5%	-0.076	-0.003
Colorectal cancer	21	0.3%	23	0.3%	-0.03	-0.006

Table 1d. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 1-365 Days (Primary Outcome) (Matched, Aggregated), Ratio: 1:many, Caliper:0.05

Recorded history of:	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Conduct disorder	44	0.6%	44	0.6%	0.005	0.001
Congenital heart diseases	33	0.5%	32	0.4%	0.011	0.002
Delirium	126	1.7%	124	1.7%	0.03	0.002
Dementias and other cerebral degenerations	128	1.8%	125	1.7%	0.048	0.004
Diabetes	630	8.7%	634	8.8%	-0.05	-0.002
Dyslipidemia	1,709	23.7%	1,711	23.7%	-0.021	-0.001
Electroconvulsive therapy	11	0.2%	*****	*****	*****	*****
Endocarditis, pericarditis, and myocarditis	*****	*****	*****	*****	-0.003	-0.001
Essential hypertension	1,706	23.6%	1,656	22.9%	0.69	0.017
Gastrointestinal hemorrhage	106	1.5%	107	1.5%	-0.012	-0.001
Glaucoma	244	3.4%	237	3.3%	0.099	0.006
Gout	55	0.8%	54	0.8%	0.008	0.001
Hallucination	16	0.2%	13	0.2%	0.044	0.01
Heart failure	173	2.4%	165	2.3%	0.114	0.008
Hypertensive heart and kidney diseases	156	2.2%	153	2.1%	0.039	0.003
Hypnotics	942	13.0%	922	12.8%	0.273	0.008
Hypothyroidism	821	11.4%	817	11.3%	0.056	0.002
Injury other than poisoning	1,255	17.4%	1,259	17.4%	-0.058	-0.002
Lung cancer	22	0.3%	26	0.4%	-0.058	-0.01
Myocardial infarction	87	1.2%	81	1.1%	0.082	0.008
Nonrheumatic valve	232	3.2%	226	3.1%	0.083	0.005
Obsessive-compulsive disorder	142	2.0%	130	1.8%	0.173	0.013
Osteoarthritis	589	8.2%	577	8.0%	0.168	0.006
Other arrhythmia	440	6.1%	425	5.9%	0.21	0.009
Other chronic kidney diseases	92	1.3%	94	1.3%	-0.032	-0.003
Other congenital anomalies	16	0.2%	15	0.2%	0.009	0.002
Other heart diseases	427	5.9%	425	5.9%	0.028	0.001
Other malignant neoplasm	238	3.3%	228	3.2%	0.138	0.008
Other mental disorders	1,173	16.2%	1,168	16.2%	0.074	0.002
Parkinson disease	37	0.5%	34	0.5%	0.046	0.007
Peptic ulcer disease and related conditions (without hemorrhage)	-	0.0%	-	0.0%	0	-
Persistent mental disorders due to conditions classified elsewhere	88	1.2%	91	1.3%	-0.045	-0.004
Personality disorders	106	1.5%	104	1.4%	0.034	0.003
Pervasive developmental disorders	19	0.3%	19	0.3%	0.006	0.001
Pneumonia	156	2.2%	155	2.1%	0.012	0.001
Post-traumatic stress disorder	144	2.0%	148	2.1%	-0.058	-0.004
Premenstrual dysphoric disorder	47	0.7%	51	0.7%	-0.05	-0.006
Prostate cancer	36	0.5%	35	0.5%	0.009	0.001
Psychotic conditions	115	1.6%	115	1.6%	-0.006	-0.001
Rheumatic fever	*****	*****	*****	*****	0.001	0.001

Table 1d. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 1-365 Days (Primary Outcome) (Matched, Aggregated), Ratio: 1:many, Caliper:0.05

	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Recorded history of:						
Rheumatic heart diseases	72	1.0%	65	0.9%	0.099	0.01
Rheumatoid arthritis	97	1.3%	103	1.4%	-0.078	-0.007
Schizophrenia	39	0.5%	40	0.5%	-0.01	-0.001
Secondary hypertension	*****	*****	*****	*****	-0.022	-0.009
Seizure disorder	137	1.9%	135	1.9%	0.031	0.002
Self Harm (Patrick algorithm and E codes)	63	0.9%	68	0.9%	-0.07	-0.007
Self Harm (Patrick algorithm)	52	0.7%	50	0.7%	0.029	0.003
Self harm (E codes)	38	0.5%	40	0.5%	-0.023	-0.003
Sepsis	43	0.6%	40	0.6%	0.044	0.006
Sleep disorder	711	9.8%	718	9.9%	-0.09	-0.003
Social anxiety disorder	36	0.5%	38	0.5%	-0.034	-0.005
Stroke or transient ischemic attack	223	3.1%	218	3.0%	0.071	0.004
Substance abuse disorders	259	3.6%	259	3.6%	-0.005	0
Transcranial magnetic stimulation	-	0.0%	0	0.0%	-0.004	-
Urinary incontinence	131	1.8%	128	1.8%	0.044	0.003
Vagus nerve stimulation	*****	*****	*****	*****	-0.006	-0.002
Ventricular arrhythmia	59	0.8%	61	0.8%	-0.022	-0.002
Health Service Utilization Intensity:	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters (AV)	10.5	10.3	10.3	10.7	0.159	0.015
Mean number of emergency room encounters (ED)	0.3	0.8	0.3	0.7	0.01	0.014
Mean number of inpatient hospital encounters (IP)	0.2	0.6	0.2	0.6	-0.007	-0.011
Mean number of non-acute institutional encounters (IS)	0	0.2	0	0.2	0.002	0.012
Mean number of other ambulatory encounters (OA)	1.6	3.5	1.6	3.7	0.034	0.009
Mean number of unique drug classes	4.9	4.2	4.9	4.1	0.023	0.006
Mean number of generics	5.3	4.8	5.3	4.6	0.028	0.006
Mean number of filled prescriptions	12.3	14	12.2	13.2	0.022	0.002
History of use:	Number	Percent	Number	Percent		
Antipsychotics	462	6.4%	459	6.4%	0.035	0.001
Anxiolytic medication	1,548	21.4%	1,582	21.9%	-0.467	-0.011
Lithium and other mood stabilizers	777	10.8%	770	10.7%	0.101	0.003
Non-sertraline SSRI	1,559	21.6%	1,574	21.8%	-0.213	-0.005
Non-sertraline antidepressants	2,760	38.2%	2,791	38.6%	-0.432	-0.009
Opioids used for medication assisted treatment	38	0.5%	42	0.6%	-0.061	-0.008
Pain requiring opiates	1,803	25.0%	1,843	25.5%	-0.557	-0.013

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 1e. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 15-365 Days (Primary Outcome) (Unmatched, Aggregated)

Characteristic ¹	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	6,354	100.0%	321,027	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	45	17	53.1	16.3	-8.05	-0.484
Age (years)	Number	Percent	Number	Percent		
12-17	461	7.3%	15,767	4.9%	2.344	0.098
18-24	595	9.4%	21,579	6.7%	2.642	0.097
25-54	3,449	54.3%	132,292	41.2%	13.072	0.264
55+	1,849	29.1%	151,389	47.2%	-18.058	-0.378
Gender						
Female	4,637	73.0%	220,560	68.7%	4.273	0.094
Male	1,717	27.0%	100,453	31.3%	-4.269	-0.094
Year						
2006	3,450	54.3%	4,758	1.5%	52.814	1.457
2007	421	6.6%	11,392	3.5%	3.077	0.14
2008	409	6.4%	15,885	4.9%	1.489	0.064
2009	428	6.7%	26,961	8.4%	-1.662	-0.063
2010	359	5.6%	49,245	15.3%	-9.69	-0.32
2011	360	5.7%	54,416	17.0%	-11.285	-0.362
2012	296	4.7%	43,093	13.4%	-8.765	-0.309
2013	274	4.3%	43,952	13.7%	-9.379	-0.332
2014	228	3.6%	44,792	14.0%	-10.364	-0.373
2015	129	2.0%	26,533	8.3%	-6.235	-0.285
Median household income	70,940.3	28,221.9	60,956.0	23,795.1	9,984.363	0.383
Median value of home	312,735.4	223,381.7	229,087.3	165,017.4	83,648.091	0.426
Percent unemployed	7.8	3.3	8.5	4	-0.681	-0.185
Recorded history of:	Mean	Standard Deviation	Mean	Standard Deviation		
Prior combined comorbidity raw score	0.7	1.4	1.3	2.2	-0.592	-0.32
	Number	Percent	Number	Percent		
ADHD	235	3.7%	9,784	3.0%	0.651	0.036
Akathisia	19	0.3%	886	0.3%	0.023	0.004
Anxiety	1,554	24.5%	83,825	26.1%	-1.654	-0.038
Atherosclerotic disease	127	2.0%	16,428	5.1%	-3.119	-0.169
Bipolar disorder	241	3.8%	17,846	5.6%	-1.766	-0.084
Breast cancer	82	1.3%	5,194	1.6%	-0.327	-0.027
Cardiomyopathy	52	0.8%	7,472	2.3%	-1.509	-0.122
Cerebral degenerations usually manifest in childhood	-	0.0%	35	0.0%	-0.011	-
Chronic lung disease	588	9.3%	55,088	17.2%	-7.906	-0.235
Colorectal cancer	19	0.3%	1,985	0.6%	-0.319	-0.047

Table 1e. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 15-365 Days (Primary Outcome) (Unmatched, Aggregated)

Recorded history of:	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Conduct disorder	40	0.6%	3,297	1.0%	-0.397	-0.044
Congenital heart diseases	29	0.5%	2,213	0.7%	-0.233	-0.031
Delirium	107	1.7%	12,963	4.0%	-2.354	-0.142
Dementias and other cerebral degenerations	113	1.8%	18,597	5.8%	-4.015	-0.212
Diabetes	554	8.7%	62,182	19.4%	-10.651	-0.31
Dyslipidemia	1,503	23.7%	111,628	34.8%	-11.118	-0.246
Electroconvulsive therapy	*****	*****	422	0.1%	*****	*****
Endocarditis, pericarditis, and myocarditis	*****	*****	701	0.2%	*****	*****
Essential hypertension	1,510	23.8%	135,081	42.1%	-18.313	-0.397
Gastrointestinal hemorrhage	94	1.5%	8,197	2.6%	-1.074	-0.076
Glaucoma	219	3.4%	17,526	5.5%	-2.013	-0.098
Gout	48	0.8%	6,639	2.1%	-1.313	-0.111
Hallucination	14	0.2%	2,236	0.7%	-0.476	-0.071
Heart failure	156	2.5%	26,026	8.1%	-5.652	-0.255
Hypertensive heart and kidney diseases	135	2.1%	21,813	6.8%	-4.67	-0.228
Hypnotics	795	12.5%	41,236	12.8%	-0.333	-0.01
Hypothyroidism	715	11.3%	43,843	13.7%	-2.404	-0.073
Injury other than poisoning	1,097	17.3%	66,003	20.6%	-3.295	-0.084
Lung cancer	22	0.3%	2,397	0.7%	-0.4	-0.054
Myocardial infarction	76	1.2%	11,697	3.6%	-2.448	-0.16
Nonrheumatic valve	206	3.2%	20,586	6.4%	-3.17	-0.148
Obsessive-compulsive disorder	121	1.9%	3,074	1.0%	0.947	0.08
Osteoarthritis	522	8.2%	51,237	16.0%	-7.745	-0.239
Other arrhythmia	395	6.2%	42,927	13.4%	-7.155	-0.242
Other chronic kidney diseases	82	1.3%	22,350	7.0%	-5.672	-0.288
Other congenital anomalies	15	0.2%	968	0.3%	-0.065	-0.013
Other heart diseases	381	6.0%	44,504	13.9%	-7.867	-0.265
Other malignant neoplasm	216	3.4%	16,204	5.0%	-1.648	-0.082
Other mental disorders	1,002	15.8%	44,615	13.9%	1.872	0.053
Parkinson disease	35	0.6%	4,072	1.3%	-0.718	-0.076
Peptic ulcer disease and related conditions (without hemorrhage)	-	0.0%	*****	*****	*****	-
Persistent mental disorders due to conditions classified elsewhere	76	1.2%	17,102	5.3%	-4.131	-0.234
Personality disorders	90	1.4%	4,398	1.4%	0.046	0.004
Pervasive developmental disorders	16	0.3%	697	0.2%	0.035	0.007
Pneumonia	135	2.1%	16,012	5.0%	-2.863	-0.155
Post-traumatic stress disorder	117	1.8%	6,962	2.2%	-0.327	-0.023
Premenstrual dysphoric disorder	45	0.7%	887	0.3%	0.432	0.062
Prostate cancer	33	0.5%	3,323	1.0%	-0.516	-0.059
Psychotic conditions	95	1.5%	13,815	4.3%	-2.808	-0.168
Rheumatic fever	*****	*****	79	0.0%	*****	*****

Table 1e. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 15-365 Days (Primary Outcome) (Unmatched, Aggregated)

Recorded history of:	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Rheumatic heart diseases	63	1.0%	6,410	2.0%	-1.005	-0.083
Rheumatoid arthritis	83	1.3%	7,786	2.4%	-1.119	-0.083
Schizophrenia	34	0.5%	6,473	2.0%	-1.481	-0.132
Secondary hypertension	*****	*****	545	0.2%	*****	*****
Seizure disorder	117	1.8%	11,768	3.7%	-1.824	-0.112
Self Harm (Patrick algorithm and E codes)	53	0.8%	3,132	1.0%	-0.141	-0.015
Self Harm (Patrick algorithm)	43	0.7%	2,219	0.7%	-0.014	-0.002
Self harm (E codes)	30	0.5%	1,825	0.6%	-0.096	-0.013
Sepsis	38	0.6%	6,797	2.1%	-1.519	-0.132
Sleep disorder	615	9.7%	39,457	12.3%	-2.612	-0.084
Social anxiety disorder	31	0.5%	1,161	0.4%	0.126	0.019
Stroke or transient ischemic attack	197	3.1%	22,852	7.1%	-4.018	-0.183
Substance abuse disorders	213	3.4%	7,834	2.4%	0.912	0.054
Transcranial magnetic stimulation	-	0.0%	22	0.0%	-0.007	-
Urinary incontinence	113	1.8%	10,274	3.2%	-1.422	-0.091
Vagus nerve stimulation	*****	*****	368	0.1%	*****	*****
Ventricular arrhythmia	49	0.8%	6,374	2.0%	-1.214	-0.104
Health Service Utilization Intensity:	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters (AV)	10.2	10.1	10	9.3	0.195	0.02
Mean number of emergency room encounters (ED)	0.3	0.8	0.5	1.3	-0.248	-0.227
Mean number of inpatient hospital encounters (IP)	0.2	0.6	0.4	0.8	-0.168	-0.223
Mean number of non-acute institutional encounters (IS)	0	0.2	0.1	0.4	-0.059	-0.193
Mean number of other ambulatory encounters (OA)	1.6	3.6	3.9	9.1	-2.335	-0.339
Mean number of unique drug classes	4.8	4.1	6.3	4.5	-1.502	-0.35
Mean number of generics	5.1	4.7	6.8	5.1	-1.663	-0.342
Mean number of filled prescriptions	11.6	13.2	17	16.2	-5.42	-0.367
History of use:	Number	Percent	Number	Percent		
Antipsychotics	362	5.7%	28,653	8.9%	-3.228	-0.124
Anxiolytic medication	1,327	20.9%	54,846	17.1%	3.8	0.097
Lithium and other mood stabilizers	604	9.5%	29,745	9.3%	0.24	0.008
Non-sertraline SSRI	1,272	20.0%	66,923	20.8%	-0.828	-0.021
Non-sertraline antidepressants	2,205	34.7%	115,857	36.1%	-1.387	-0.029
Opioids used for medication assisted treatment	28	0.4%	3,533	1.1%	-0.66	-0.076
Pain requiring opiates	1,580	24.9%	118,812	37.0%	-12.144	-0.265

¹Characteristics in blue show a standardized difference greater than 0.1.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 1f. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 15-365 Days (Primary Outcome) (Matched, Aggregated), Ratio: 1:many, Caliper:0.05

Characteristic ¹	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	6,350	99.9%	33,794	10.5%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	45	16.9	44.8	17.2	0.249	0.015
Age (years)	Number	Percent	Number	Percent		
12-17	461	7.3%	458	7.2%	0.055	0.002
18-24	595	9.4%	582	9.2%	0.209	0.007
25-54	3,447	54.3%	3,515	55.4%	-1.069	-0.022
55+	1,847	29.1%	1,796	28.3%	0.805	0.019
Gender						
Female	4,633	73.0%	4,598	72.4%	0.554	0.012
Male	1,717	27.0%	1,752	27.6%	-0.554	-0.012
Year						
2006	3,446	54.3%	3,445	54.3%	0.015	0
2007	421	6.6%	486	7.7%	-1.022	-0.04
2008	409	6.4%	406	6.4%	0.053	0.002
2009	428	6.7%	417	6.6%	0.178	0.008
2010	359	5.7%	330	5.2%	0.461	0.021
2011	360	5.7%	343	5.4%	0.26	0.012
2012	296	4.7%	307	4.8%	-0.18	-0.009
2013	274	4.3%	271	4.3%	0.049	0.003
2014	228	3.6%	219	3.4%	0.145	0.008
2015	129	2.0%	126	2.0%	0.041	0.003
Median household income	70,919.1	28,196.6	70,587.4	27,493.5	331.731	0.012
Median value of home	312,459.8	223,108.4	312,907.8	222,808.8	-447.946	-0.002
Percent unemployed	7.8	3.3	7.8	3.4	-0.007	-0.002
Recorded history of:	Mean	Standard Deviation	Mean	Standard Deviation		
Prior combined comorbidity raw score	0.7	1.4	0.7	1.4	0.021	0.015
	Number	Percent	Number	Percent		
ADHD	234	3.7%	245	3.9%	-0.169	-0.009
Akathisia	19	0.3%	22	0.4%	-0.051	-0.009
Anxiety	1,553	24.5%	1,523	24.0%	0.469	0.011
Atherosclerotic disease	126	2.0%	124	2.0%	0.027	0.002
Bipolar disorder	239	3.8%	249	3.9%	-0.155	-0.008
Breast cancer	82	1.3%	76	1.2%	0.088	0.008
Cardiomyopathy	52	0.8%	47	0.7%	0.079	0.009
Cerebral degenerations usually manifest in childhood	-	0.0%	0	0.0%	-0.003	-
Chronic lung disease	587	9.2%	572	9.0%	0.244	0.009
Colorectal cancer	19	0.3%	18	0.3%	0.009	0.002

Table 1f. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 15-365 Days (Primary Outcome) (Matched, Aggregated), Ratio: 1:many, Caliper:0.05

Recorded history of:	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Conduct disorder	40	0.6%	39	0.6%	0.018	0.002
Congenital heart diseases	29	0.5%	28	0.4%	0.02	0.003
Delirium	107	1.7%	106	1.7%	0.021	0.002
Dementias and other cerebral degenerations	112	1.8%	108	1.7%	0.07	0.005
Diabetes	553	8.7%	542	8.5%	0.172	0.006
Dyslipidemia	1,501	23.6%	1,484	23.4%	0.261	0.006
Electroconvulsive therapy	*****	*****	*****	*****	0.03	0.008
Endocarditis, pericarditis, and myocarditis	*****	*****	*****	*****	-0.023	-0.008
Essential hypertension	1,509	23.8%	1,465	23.1%	0.695	0.017
Gastrointestinal hemorrhage	94	1.5%	88	1.4%	0.101	0.008
Glaucoma	219	3.4%	213	3.4%	0.089	0.005
Gout	48	0.8%	48	0.7%	0.007	0.001
Hallucination	14	0.2%	13	0.2%	0.02	0.004
Heart failure	156	2.5%	149	2.3%	0.115	0.008
Hypertensive heart and kidney diseases	135	2.1%	132	2.1%	0.046	0.003
Hypnotics	792	12.5%	788	12.4%	0.063	0.002
Hypothyroidism	712	11.2%	698	11.0%	0.219	0.007
Injury other than poisoning	1,096	17.3%	1,099	17.3%	-0.049	-0.001
Lung cancer	22	0.3%	21	0.3%	0.02	0.004
Myocardial infarction	76	1.2%	73	1.1%	0.051	0.005
Nonrheumatic valve	206	3.2%	201	3.2%	0.075	0.004
Obsessive-compulsive disorder	120	1.9%	113	1.8%	0.113	0.008
Osteoarthritis	521	8.2%	513	8.1%	0.126	0.005
Other arrhythmia	395	6.2%	397	6.3%	-0.032	-0.001
Other chronic kidney diseases	82	1.3%	78	1.2%	0.06	0.005
Other congenital anomalies	15	0.2%	16	0.2%	-0.008	-0.002
Other heart diseases	381	6.0%	374	5.9%	0.118	0.005
Other malignant neoplasm	216	3.4%	214	3.4%	0.034	0.002
Other mental disorders	1,000	15.7%	1,012	15.9%	-0.191	-0.005
Parkinson disease	35	0.6%	31	0.5%	0.056	0.008
Peptic ulcer disease and related conditions (without hemorrhage)	-	0.0%	-	0.0%	0	-
Persistent mental disorders due to conditions classified elsewhere	76	1.2%	73	1.1%	0.053	0.005
Personality disorders	89	1.4%	81	1.3%	0.131	0.011
Pervasive developmental disorders	16	0.3%	16	0.2%	0.004	0.001
Pneumonia	135	2.1%	129	2.0%	0.091	0.006
Post-traumatic stress disorder	117	1.8%	125	2.0%	-0.121	-0.009
Premenstrual dysphoric disorder	45	0.7%	45	0.7%	0.005	0.001
Prostate cancer	33	0.5%	31	0.5%	0.033	0.005
Psychotic conditions	94	1.5%	98	1.5%	-0.066	-0.005
Rheumatic fever	*****	*****	*****	*****	0.005	0.003

Table 1f. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline, Risk Window 15-365 Days (Primary Outcome) (Matched, Aggregated), Ratio: 1:many, Caliper:0.05

	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Recorded history of:						
Rheumatic heart diseases	63	1.0%	60	0.9%	0.048	0.005
Rheumatoid arthritis	83	1.3%	88	1.4%	-0.072	-0.006
Schizophrenia	34	0.5%	35	0.5%	-0.013	-0.002
Secondary hypertension	*****	*****	*****	*****	-0.022	-0.009
Seizure disorder	117	1.8%	117	1.8%	-0.006	0
Self Harm (Patrick algorithm and E codes)	53	0.8%	55	0.9%	-0.033	-0.004
Self Harm (Patrick algorithm)	43	0.7%	40	0.6%	0.055	0.007
Self harm (E codes)	30	0.5%	33	0.5%	-0.046	-0.007
Sepsis	38	0.6%	36	0.6%	0.03	0.004
Sleep disorder	615	9.7%	623	9.8%	-0.122	-0.004
Social anxiety disorder	31	0.5%	31	0.5%	0.006	0.001
Stroke or transient ischemic attack	196	3.1%	193	3.0%	0.04	0.002
Substance abuse disorders	213	3.4%	213	3.4%	0.004	0
Transcranial magnetic stimulation	-	0.0%	*****	*****	*****	-
Urinary incontinence	113	1.8%	107	1.7%	0.089	0.007
Vagus nerve stimulation	*****	*****	*****	*****	0.003	0.001
Ventricular arrhythmia	49	0.8%	54	0.9%	-0.083	-0.009
Health Service Utilization Intensity:	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters (AV)	10.2	10	10	10.5	0.155	0.015
Mean number of emergency room encounters (ED)	0.3	0.7	0.3	0.7	-0.001	-0.001
Mean number of inpatient hospital encounters (IP)	0.2	0.6	0.2	0.6	-0.007	-0.011
Mean number of non-acute institutional encounters (IS)	0	0.2	0	0.2	0.003	0.017
Mean number of other ambulatory encounters (OA)	1.6	3.5	1.5	3.7	0.058	0.016
Mean number of unique drug classes	4.8	4.1	4.7	4	0.046	0.011
Mean number of generics	5.1	4.6	5.1	4.5	0.054	0.012
Mean number of filled prescriptions	11.5	13.2	11.5	12.5	0.073	0.006
History of use:	Number	Percent	Number	Percent		
Antipsychotics	359	5.7%	360	5.7%	-0.009	0
Anxiolytic medication	1,325	20.9%	1,324	20.8%	0.017	0
Lithium and other mood stabilizers	602	9.5%	599	9.4%	0.05	0.002
Non-sertraline SSRI	1,272	20.0%	1,293	20.4%	-0.327	-0.008
Non-sertraline antidepressants	2,203	34.7%	2,214	34.9%	-0.174	-0.004
Opioids used for medication assisted treatment	28	0.4%	31	0.5%	-0.044	-0.007
Pain requiring opiates	1,578	24.9%	1,599	25.2%	-0.337	-0.008

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Table 2. Effect Estimates for Risk Window 1-14 Days (Primary Outcome) 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 1000 Person Years	Risk per 1000 New Users	Incidence Rate Difference per 1000 Person Years	Difference in Risk per 1000 New Users	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	7,228	247.61	12.51	0.03	*****	*****	*****				
Authorized Generic Sertraline	363,168	12,326.46	12.40	0.03	219	17.77	0.60	*****	*****	0.22 (0.03, 1.57)	0.13
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	7,224	244.31	12.35	0.03	*****	*****	*****				
Authorized Generic Sertraline	39,800	1,296.97	11.90	0.03	24	18.50	0.60	*****	*****	0.19 (0.02, 1.51)	0.117

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Table 3. Effect Estimates for Risk Window 1-14 Days (Primary Outcome) 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 1000 Person Years	Risk per 1000 New Users	Incidence Rate Difference per 1000 Person Years	Difference in Risk per 1000 New Users	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Age Group: 12-17											
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	532	18.15	12.46	0.03	*****	*****	*****				
Authorized Generic Sertraline	17,510	605.64	12.63	0.03	27	44.58	1.54	*****	*****	1.28 (0.17, 9.55)	0.808
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	532	18.05	12.39	0.03	*****	*****	*****				
Authorized Generic Sertraline	3,247	106.56	11.99	0.03	*****	*****	*****	27.25	0.96	1.90 (0.17, 20.73)	0.597
Age Group: 18-24											
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	671	23.10	12.57	0.03	0	0.00	0.00				
Authorized Generic Sertraline	24,191	834.60	12.60	0.03	25	29.95	1.03	-29.95	-1.03	-	-
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	666	22.69	12.45	0.03	0	0.00	0.00				
Authorized Generic Sertraline	3,294	109.25	12.11	0.03	*****	*****	*****	*****	*****	-	-

Table 3. Effect Estimates for Risk Window 1-14 Days (Primary Outcome) 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 1000 Person Years	Risk per 1000 New Users	Incidence Rate Difference per 1000 Person Years	Difference in Risk per 1000 New Users	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Age Group: 25-54											
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	3,945	135.23	12.52	0.03	0	0.00	0.00				
Authorized Generic Sertraline	150,942	5,127.27	12.41	0.03	90	17.55	0.60	-17.55	-0.60	-	-
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	3,941	133.13	12.34	0.03	0	0.00	0.00				
Authorized Generic Sertraline	19,993	649.13	11.86	0.03	*****	*****	*****	*****	*****	-	-
Age Group: 55+											
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	2,080	71.14	12.49	0.03	0	0.00	0.00				
Authorized Generic Sertraline	170,525	5,758.95	12.34	0.03	77	13.37	0.45	-13.37	-0.45	-	-
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	2,079	70.30	12.35	0.03	0	0.00	0.00				
Authorized Generic Sertraline	13,244	430.80	11.88	0.03	*****	*****	*****	*****	*****	-	-

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Table 4. Effect Estimates for Risk Window 1-365 Days (Primary Outcome) 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 1000 Person Years	Risk per 1000 New Users	Incidence Rate Difference per 1000 Person Years	Difference in Risk per 1000 New Users	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	7,228	1,245.15	62.92	0.17	*****	*****	*****				
Authorized Generic Sertraline	363,168	91,066.97	91.59	0.25	731	8.03	2.01	*****	*****	0.83 (0.44, 1.55)	0.557
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	7,224	1,088.77	55.05	0.15	*****	*****	*****				
Authorized Generic Sertraline	39,800	4,465.57	40.98	0.11	53	11.87	1.33	*****	*****	0.85 (0.42, 1.73)	0.647

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Table 5. Effect Estimates for Risk Window 1-365 Days (Primary Outcome) 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 1000 Person Years	Risk per 1000 New Users	Incidence Rate Difference per 1000 Person Years	Difference in Risk per 1000 New Users	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Age Group: 12-17											
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	532	98.47	67.61	0.19	*****	*****	*****				
Authorized Generic Sertraline	17,510	4,669.83	97.41	0.27	128	27.41	7.31	*****	*****	0.75 (0.18, 3.04)	0.684
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	532	88.66	60.87	0.17	*****	*****	*****				
Authorized Generic Sertraline	3,247	403.42	45.38	0.12	13	32.22	4.00	*****	*****	0.82 (0.18, 3.74)	0.793
Age Group: 18-24											
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	671	100.71	54.82	0.15	*****	*****	*****				
Authorized Generic Sertraline	24,191	5,368.24	81.05	0.22	99	18.44	4.09	*****	*****	1.48 (0.47, 4.72)	0.504
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	666	87.37	47.92	0.13	*****	*****	*****				
Authorized Generic Sertraline	3,294	351.25	38.95	0.11	*****	*****	*****	0.12	0.57	1.27 (0.26, 6.28)	0.772

Table 5. Effect Estimates for Risk Window 1-365 Days (Primary Outcome) 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 1000 Person Years	Risk per 1000 New Users	Incidence Rate Difference per 1000 Person Years	Difference in Risk per 1000 New Users	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Age Group: 25-54											
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	3,945	637.06	58.98	0.16	*****	*****	*****				
Authorized Generic Sertraline	150,942	36,519.40	88.37	0.24	295	8.08	1.95	*****	*****	0.86 (0.32, 2.34)	0.774
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	3,941	554.69	51.41	0.14	*****	*****	*****				
Authorized Generic Sertraline	19,993	2,155.85	39.39	0.11	18	8.35	0.90	*****	*****	0.93 (0.29, 2.96)	0.898
Age Group: 55+											
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	2,080	408.91	71.81	0.20	*****	*****	*****				
Authorized Generic Sertraline	170,525	44,509.50	95.34	0.26	209	4.70	1.23	*****	*****	0.48 (0.07, 3.45)	0.464
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	2,079	363.18	63.81	0.17	0	0.00	0.00				
Authorized Generic Sertraline	13,244	1,557.26	42.95	0.12	*****	*****	*****	*****	*****	-	-

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Table 6. Effect Estimates for Risk Window 15-365 Days (Primary Outcome) 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 1000 Person Years	Risk per 1000 New Users	Incidence Rate Difference per 1000 Person Years	Difference in Risk per 1000 New Users	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	6,354	964.03	55.42	0.15	*****	*****	*****				
Authorized Generic Sertraline	321,027	76,764.86	87.34	0.24	497	6.47	1.55	*****	*****	0.82 (0.36, 1.84)	0.631
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	6,350	827.62	47.60	0.13	*****	*****	*****				
Authorized Generic Sertraline	33,794	3,304.59	35.72	0.10	25	7.57	0.74	*****	*****	0.80 (0.29, 2.17)	0.655

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 7. Effect Estimates for Risk Window 15-365 Days (Primary Outcome) 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 1000 Person Years	Risk per 1000 New Users	Incidence Rate Difference per 1000 Person Years	Difference in Risk per 1000 New Users	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Age Group: 12-17											
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	461	76.84	60.88	0.17	*****	*****	*****				
Authorized Generic Sertraline	15,767	3,889.59	90.10	0.25	98	25.20	6.22	*****	*****	0.53 (0.07, 3.84)	0.533
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	461	69.12	54.76	0.15	*****	*****	*****				
Authorized Generic Sertraline	2,742	294.55	39.24	0.11	*****	*****	*****	-19.48	-1.48	0.56 (0.07, 4.57)	0.587
Age Group: 18-24											
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	595	75.34	46.25	0.13	*****	*****	*****				
Authorized Generic Sertraline	21,579	4,312.53	72.99	0.20	70	16.23	3.24	*****	*****	1.53 (0.37, 6.30)	0.557
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	594	63.68	39.15	0.11	*****	*****	*****				
Authorized Generic Sertraline	2,830	252.44	32.58	0.09	*****	*****	*****	3.82	0.62	1.04 (0.09, 11.97)	0.972

Table 7. Effect Estimates for Risk Window 15-365 Days (Primary Outcome) 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 1000 Person Years	Risk per 1000 New Users	Incidence Rate Difference per 1000 Person Years	Difference in Risk per 1000 New Users	Hazard Ratio (95% Confidence Interval)	Wald P-Value
Age Group: 25-54											
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	3,449	481.06	50.94	0.14	*****	*****	*****				
Authorized Generic Sertraline	132,292	30,186.16	83.34	0.23	199	6.59	1.50	*****	*****	0.77 (0.19, 3.14)	0.718
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	3,445	414.81	43.98	0.12	*****	*****	*****				
Authorized Generic Sertraline	16,747	1,578.69	34.43	0.09	*****	*****	*****	-3.29	-0.25	0.55 (0.06, 4.77)	0.584
Age Group: 55+											
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	1,849	330.78	65.34	0.18	*****	*****	*****				
Authorized Generic Sertraline	151,389	38,376.58	92.59	0.25	130	3.39	0.86	*****	*****	0.92 (0.13, 6.71)	0.936
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	1,845	281.63	55.75	0.15	0	0.00	0.00				
Authorized Generic Sertraline	11,467	1,186.59	37.80	0.10	*****	*****	*****	*****	*****	-	-

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Figure 1a. Histogram Depicting Propensity Score Distributions Before Matching for Risk Window 1-14 Days (Primary Outcome)

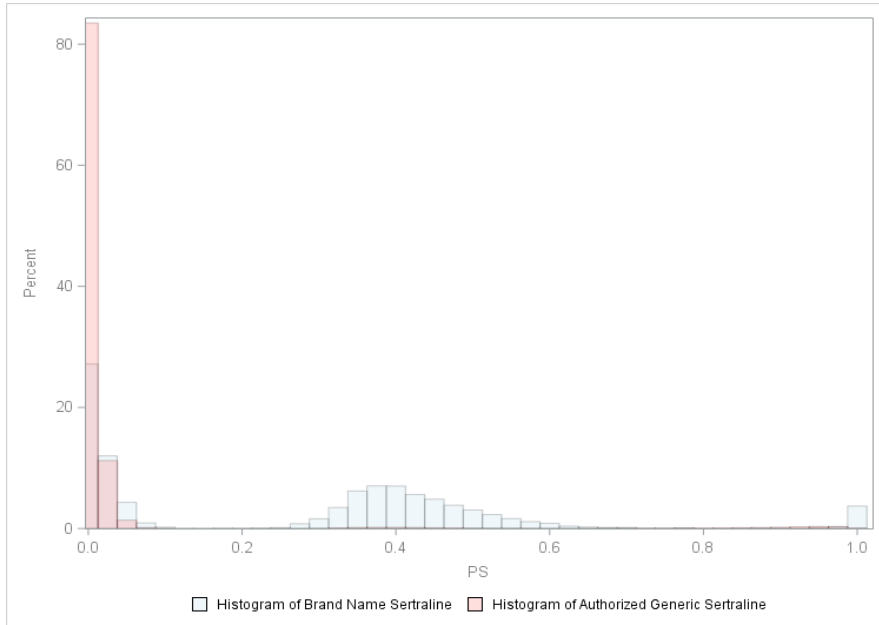


Figure 1b. Histogram Depicting Propensity Score Distributions Before Matching for Risk Window 1-365 Days (Primary Outcome)

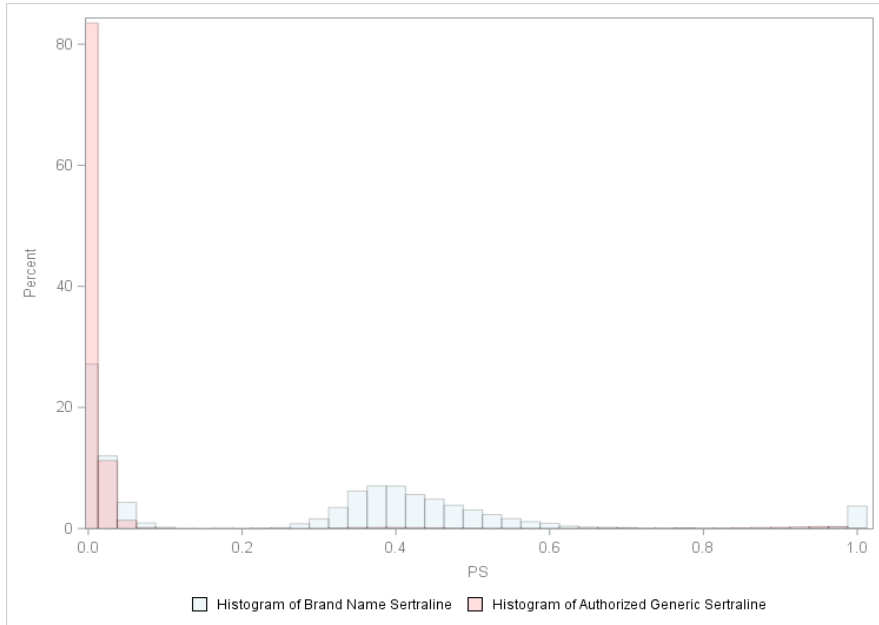


Figure 1c. Histogram Depicting Propensity Score Distributions Before Matching for Risk Window 15-365 Days (Primary Outcome)

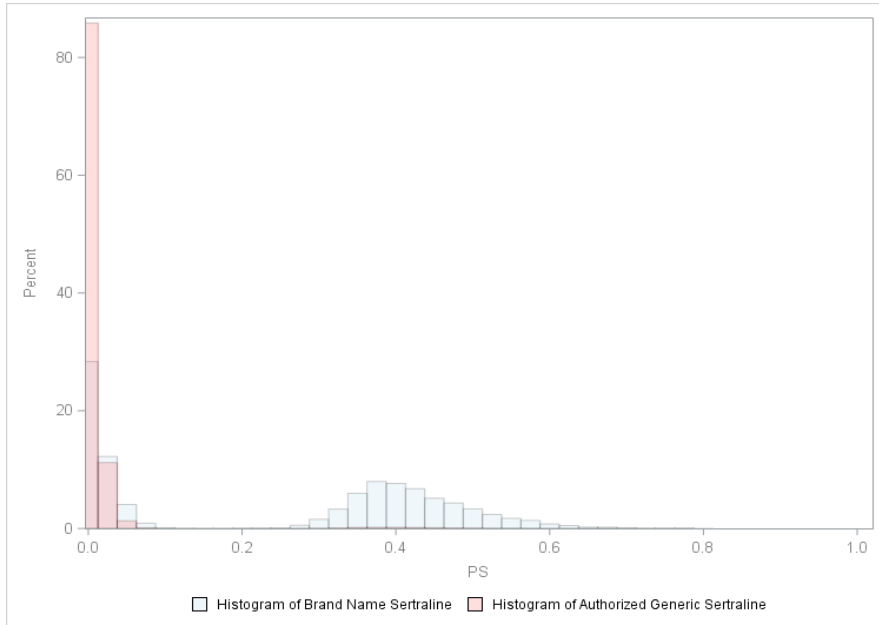


Figure 2a. Kaplan Meier Survival Curves of Weighted Informative Events and Follow-up Time for Risk Window 1-14 Days (Primary Outcome), Conditional Matched Cohort

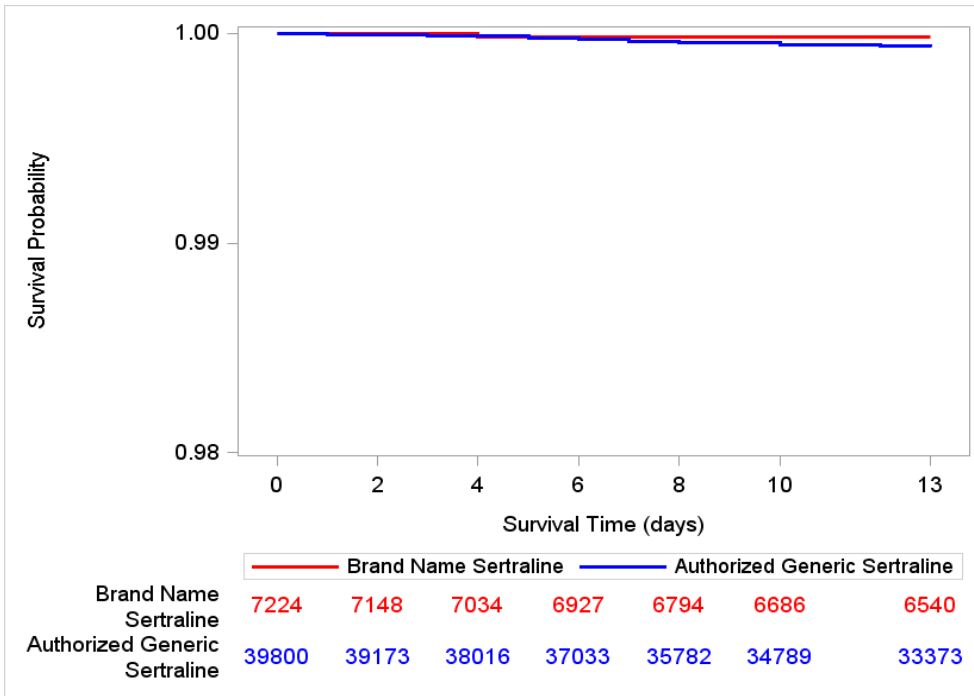


Figure 2b. Kaplan Meier Survival Curves of Weighted Informative Events and Follow-up Time for Risk Window 1-365 Days (Primary Outcome), Conditional Matched Cohort

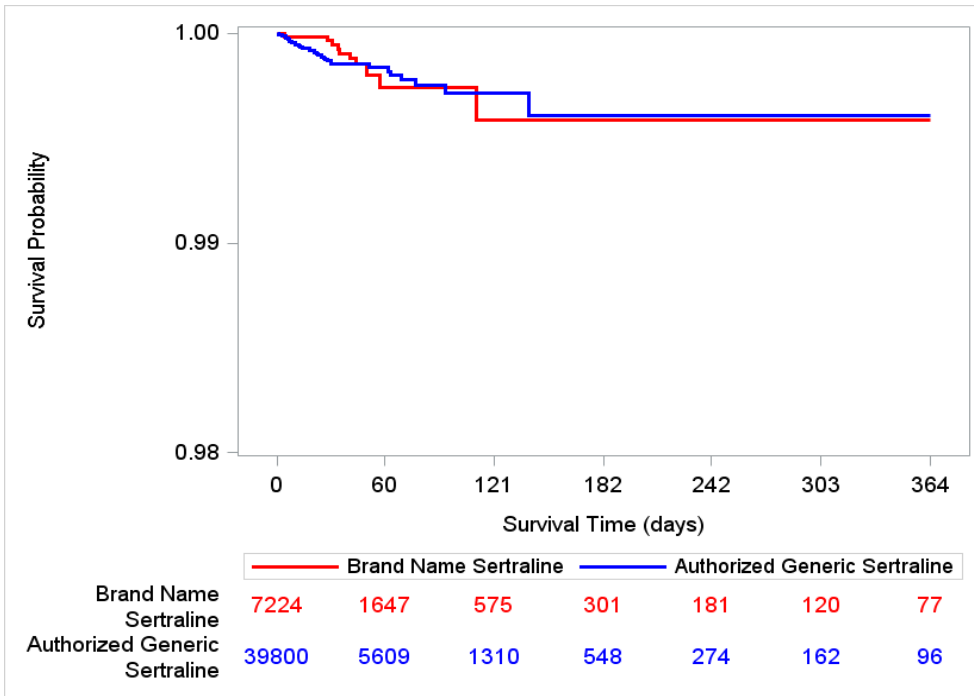
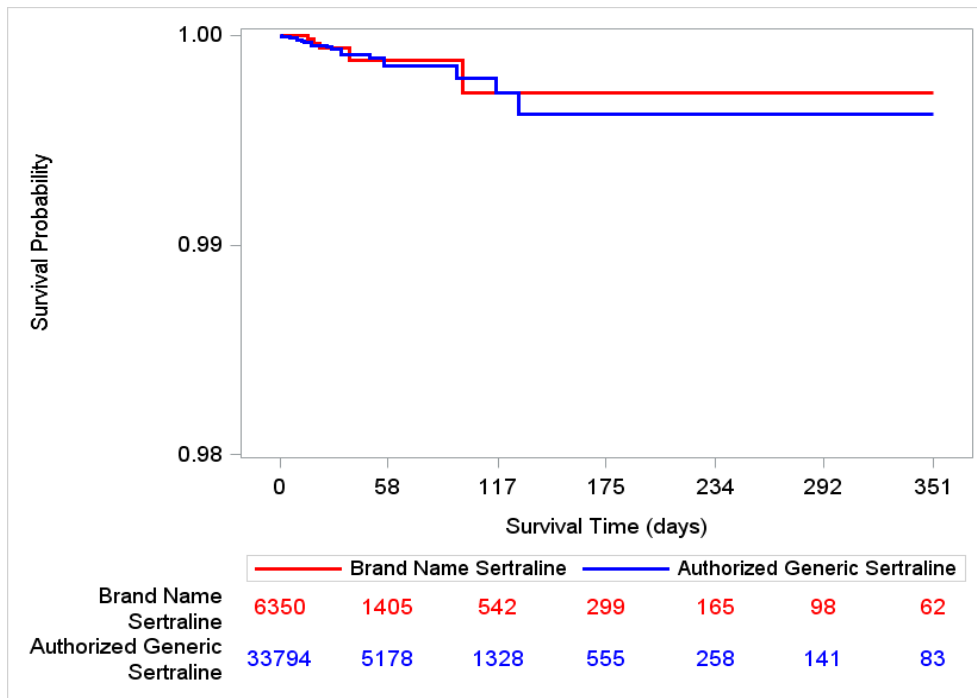


Figure 2c. Kaplan Meier Survival Curves of Weighted Informative Events and Follow-up Time for Risk Window 15-365 Days (Primary Outcome), Conditional Matched Cohort



Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request End Date (September 30, 2015)

DP ID	Start Date¹	End Date¹
DP01	1/1/2010	9/30/2015
DP02	1/1/2008	9/30/2015
DP03	1/1/2006	9/30/2015
DP04	1/1/2000	9/30/2015

¹The start and end dates are based on the minimum and maximum dates within each DP. The month with the maximum date must have at least 80% of the number of records in the previous month.

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

Generic Name	Brand Name
	Sertraline
sertraline HCL	Sertraline
	Zoloft

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Category	Code Type
Mental Health Diagnosis			
293.83	Mood disorder in conditions classified elsewhere	Diagnosis	ICD-9-CM
296.2	Major depressive disorder, single episode	Diagnosis	ICD-9-CM
296.20	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-9-CM
296.21	Major depressive disorder, single episode, mild	Diagnosis	ICD-9-CM
296.22	Major depressive disorder, single episode, moderate	Diagnosis	ICD-9-CM
296.23	Major depressive disorder, single episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.24	Major depressive disorder, single episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.25	Major depressive disorder, single episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.26	Major depressive disorder, single episode in full remission	Diagnosis	ICD-9-CM
296.3	Major depressive disorder, recurrent episode	Diagnosis	ICD-9-CM
296.30	Major depressive disorder, recurrent episode, unspecified	Diagnosis	ICD-9-CM
296.31	Major depressive disorder, recurrent episode, mild	Diagnosis	ICD-9-CM
296.32	Major depressive disorder, recurrent episode, moderate	Diagnosis	ICD-9-CM
296.33	Major depressive disorder, recurrent episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.34	Major depressive disorder, recurrent episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.35	Major depressive disorder, recurrent episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.36	Major depressive disorder, recurrent episode, in full remission	Diagnosis	ICD-9-CM
296.90	Unspecified episodic mood disorder	Diagnosis	ICD-9-CM
298.0	Depressive type psychosis	Diagnosis	ICD-9-CM
300.4	Dysthymic disorder	Diagnosis	ICD-9-CM
309.0	Adjustment disorder with depressed mood	Diagnosis	ICD-9-CM
309.1	Prolonged depressive reaction as adjustment reaction	Diagnosis	ICD-9-CM
309.28	Adjustment disorder with mixed anxiety and depressed mood	Diagnosis	ICD-9-CM
311	Depressive disorder, not elsewhere classified	Diagnosis	ICD-9-CM
296.0	Bipolar I disorder, single manic episode	Diagnosis	ICD-9-CM
296.00	Bipolar I disorder, single manic episode, unspecified	Diagnosis	ICD-9-CM
296.01	Bipolar I disorder, single manic episode, mild	Diagnosis	ICD-9-CM
296.02	Bipolar I disorder, single manic episode, moderate	Diagnosis	ICD-9-CM
296.03	Bipolar I disorder, single manic episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.04	Bipolar I disorder, single manic episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.05	Bipolar I disorder, single manic episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.06	Bipolar I disorder, single manic episode, in full remission	Diagnosis	ICD-9-CM
296.1	Manic disorder, recurrent episode	Diagnosis	ICD-9-CM
296.10	Manic disorder, recurrent episode, unspecified	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Category	Code Type
296.11	Manic disorder, recurrent episode, mild	Diagnosis	ICD-9-CM
296.12	Manic disorder, recurrent episode, moderate	Diagnosis	ICD-9-CM
296.13	Manic disorder, recurrent episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.14	Manic disorder, recurrent episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.15	Manic disorder, recurrent episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.16	Manic disorder, recurrent episode, in full remission	Diagnosis	ICD-9-CM
296.4	Bipolar I disorder, most recent episode (or current) manic	Diagnosis	ICD-9-CM
296.40	Bipolar I disorder, most recent episode (or current) manic, unspecified	Diagnosis	ICD-9-CM
296.41	Bipolar I disorder, most recent episode (or current) manic, mild	Diagnosis	ICD-9-CM
296.42	Bipolar I disorder, most recent episode (or current) manic, moderate	Diagnosis	ICD-9-CM
296.43	Bipolar I disorder, most recent episode (or current) manic, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.44	Bipolar I disorder, most recent episode (or current) manic, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.45	Bipolar I disorder, most recent episode (or current) manic, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.46	Bipolar I disorder, most recent episode (or current) manic, in full remission	Diagnosis	ICD-9-CM
296.5	Bipolar I disorder, most recent episode (or current), depressed	Diagnosis	ICD-9-CM
296.50	Bipolar I disorder, most recent episode (or current) depressed, unspecified	Diagnosis	ICD-9-CM
296.51	Bipolar I disorder, most recent episode (or current) depressed, mild	Diagnosis	ICD-9-CM
296.52	Bipolar I disorder, most recent episode (or current) depressed, moderate	Diagnosis	ICD-9-CM
296.53	Bipolar I disorder, most recent episode (or current) depressed, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.54	Bipolar I disorder, most recent episode (or current) depressed, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.55	Bipolar I disorder, most recent episode (or current) depressed, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.56	Bipolar I disorder, most recent episode (or current) depressed, in full remission	Diagnosis	ICD-9-CM
296.6	Bipolar I disorder, most recent episode (or current), mixed	Diagnosis	ICD-9-CM
296.60	Bipolar I disorder, most recent episode (or current) mixed, unspecified	Diagnosis	ICD-9-CM
296.61	Bipolar I disorder, most recent episode (or current) mixed, mild	Diagnosis	ICD-9-CM
296.62	Bipolar I disorder, most recent episode (or current) mixed, moderate	Diagnosis	ICD-9-CM
296.63	Bipolar I disorder, most recent episode (or current) mixed, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.64	Bipolar I disorder, most recent episode (or current) mixed, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.65	Bipolar I disorder, most recent episode (or current) mixed, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.66	Bipolar I disorder, most recent episode (or current) mixed, in full remission	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Category	Code Type
296.7	Bipolar I disorder, most recent episode (or current) unspecified	Diagnosis	ICD-9-CM
296.8	Other and unspecified bipolar disorders	Diagnosis	ICD-9-CM
296.80	Bipolar disorder, unspecified	Diagnosis	ICD-9-CM
296.81	Atypical manic disorder	Diagnosis	ICD-9-CM
296.82	Atypical depressive disorder	Diagnosis	ICD-9-CM
296.89	Other and unspecified bipolar disorders	Diagnosis	ICD-9-CM
296.99	Other specified episodic mood disorder	Diagnosis	ICD-9-CM
301.0	Paranoid personality disorder	Diagnosis	ICD-9-CM
301.1	Affective personality disorder	Diagnosis	ICD-9-CM
301.10	Affective personality disorder, unspecified	Diagnosis	ICD-9-CM
301.11	Chronic hypomanic personality disorder	Diagnosis	ICD-9-CM
301.12	Chronic depressive personality disorder	Diagnosis	ICD-9-CM
301.13	Cyclothymic disorder	Diagnosis	ICD-9-CM
301.2	Schizoid personality disorder	Diagnosis	ICD-9-CM
301.20	Schizoid personality disorder, unspecified	Diagnosis	ICD-9-CM
301.21	Introverted personality	Diagnosis	ICD-9-CM
301.22	Schizotypal personality disorder	Diagnosis	ICD-9-CM
301.3	Explosive personality disorder	Diagnosis	ICD-9-CM
301.4	Obsessive-compulsive personality disorder	Diagnosis	ICD-9-CM
301.5	Histrionic personality disorder	Diagnosis	ICD-9-CM
301.50	Histrionic personality disorder, unspecified	Diagnosis	ICD-9-CM
301.51	Chronic factitious illness with physical symptoms	Diagnosis	ICD-9-CM
301.59	Other histrionic personality disorder	Diagnosis	ICD-9-CM
301.6	Dependent personality disorder	Diagnosis	ICD-9-CM
301.7	Antisocial personality disorder	Diagnosis	ICD-9-CM
301.8	Other personality disorders	Diagnosis	ICD-9-CM
301.81	Narcissistic personality disorder	Diagnosis	ICD-9-CM
301.82	Avoidant personality disorder	Diagnosis	ICD-9-CM
301.83	Borderline personality disorder	Diagnosis	ICD-9-CM
301.84	Passive-aggressive personality	Diagnosis	ICD-9-CM
301.89	Other personality disorder	Diagnosis	ICD-9-CM
301.9	Unspecified personality disorder	Diagnosis	ICD-9-CM
309.2	Predominant disturbance of other emotions as adjustment reaction	Diagnosis	ICD-9-CM
309.21	Separation anxiety disorder	Diagnosis	ICD-9-CM
309.22	Emancipation disorder of adolescence and early adult life	Diagnosis	ICD-9-CM
309.23	Specific academic or work inhibition as adjustment reaction	Diagnosis	ICD-9-CM
309.24	Adjustment disorder with anxiety	Diagnosis	ICD-9-CM
309.28	Adjustment disorder with mixed anxiety and depressed mood	Diagnosis	ICD-9-CM
309.29	Other adjustment reaction with predominant disturbance of other emotions	Diagnosis	ICD-9-CM
309.3	Adjustment disorder with disturbance of conduct	Diagnosis	ICD-9-CM
309.4	Adjustment disorder with mixed disturbance of emotions and conduct	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Category	Code Type
309.8	Other specified adjustment reactions	Diagnosis	ICD-9-CM
309.81	Posttraumatic stress disorder	Diagnosis	ICD-9-CM
309.82	Adjustment reaction with physical symptoms	Diagnosis	ICD-9-CM
309.83	Adjustment reaction with withdrawal	Diagnosis	ICD-9-CM
309.89	Other specified adjustment reaction	Diagnosis	ICD-9-CM
309.9	Unspecified adjustment reaction	Diagnosis	ICD-9-CM
300.9	Unspecified nonpsychotic mental disorder	Diagnosis	ICD-9-CM
Self-Harm Diagnosis			
960	Poisoning by antibiotics	Diagnosis	ICD-9-CM
960.0	Poisoning by penicillins	Diagnosis	ICD-9-CM
960.1	Poisoning by antifungal antibiotics	Diagnosis	ICD-9-CM
960.2	Poisoning by chloramphenicol group	Diagnosis	ICD-9-CM
960.3	Poisoning by erythromycin and other macrolides	Diagnosis	ICD-9-CM
960.4	Poisoning by tetracycline group	Diagnosis	ICD-9-CM
960.5	Poisoning of cephalosporin group	Diagnosis	ICD-9-CM
960.6	Poisoning of antimycobacterial antibiotics	Diagnosis	ICD-9-CM
960.7	Poisoning by antineoplastic antibiotics	Diagnosis	ICD-9-CM
960.8	Poisoning by other specified antibiotics	Diagnosis	ICD-9-CM
960.9	Poisoning by unspecified antibiotic	Diagnosis	ICD-9-CM
961	Poisoning by other anti-infectives	Diagnosis	ICD-9-CM
961.0	Poisoning by sulfonamides	Diagnosis	ICD-9-CM
961.1	Poisoning by arsenical anti-infectives	Diagnosis	ICD-9-CM
961.2	Poisoning by heavy metal anti-infectives	Diagnosis	ICD-9-CM
961.3	Poisoning by quinoline and hydroxyquinoline derivatives	Diagnosis	ICD-9-CM
961.4	Poisoning by antimalarials and drugs acting on other blood protozoa	Diagnosis	ICD-9-CM
961.5	Poisoning by other antiprotozoal drugs	Diagnosis	ICD-9-CM
961.6	Poisoning by anthelmintics	Diagnosis	ICD-9-CM
961.7	Poisoning by antiviral drugs	Diagnosis	ICD-9-CM
961.8	Poisoning by other antimycobacterial drugs	Diagnosis	ICD-9-CM
961.9	Poisoning by other and unspecified anti-infectives	Diagnosis	ICD-9-CM
962	Poisoning by hormones and synthetic substitutes	Diagnosis	ICD-9-CM
962.0	Poisoning by adrenal cortical steroids	Diagnosis	ICD-9-CM
962.1	Poisoning by androgens and anabolic congeners	Diagnosis	ICD-9-CM
962.2	Poisoning by ovarian hormones and synthetic substitutes	Diagnosis	ICD-9-CM
962.3	Poisoning by insulins and antidiabetic agents	Diagnosis	ICD-9-CM
962.4	Poisoning by anterior pituitary hormones	Diagnosis	ICD-9-CM
962.5	Poisoning by posterior pituitary hormones	Diagnosis	ICD-9-CM
962.6	Poisoning by parathyroid and parathyroid derivatives	Diagnosis	ICD-9-CM
962.7	Poisoning by thyroid and thyroid derivatives	Diagnosis	ICD-9-CM
962.8	Poisoning by antithyroid agents	Diagnosis	ICD-9-CM
962.9	Poisoning by other and unspecified hormones and synthetic substitutes	Diagnosis	ICD-9-CM
963	Poisoning by primarily systemic agents	Diagnosis	ICD-9-CM
963.0	Poisoning by antiallergic and antiemetic drugs	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Category	Code Type
963.1	Poisoning by antineoplastic and immunosuppressive drugs	Diagnosis	ICD-9-CM
963.2	Poisoning by acidifying agents	Diagnosis	ICD-9-CM
963.3	Poisoning by alkalizing agents	Diagnosis	ICD-9-CM
963.4	Poisoning by enzymes, not elsewhere classified	Diagnosis	ICD-9-CM
963.5	Poisoning by vitamins, not elsewhere classified	Diagnosis	ICD-9-CM
963.8	Poisoning by other specified systemic agents	Diagnosis	ICD-9-CM
963.9	Poisoning by unspecified systemic agent	Diagnosis	ICD-9-CM
964	Poisoning by agents primarily affecting blood constituents	Diagnosis	ICD-9-CM
964.0	Poisoning by iron and its compounds	Diagnosis	ICD-9-CM
964.1	Poisoning by liver preparations and other antianemic agents	Diagnosis	ICD-9-CM
964.2	Poisoning by anticoagulants	Diagnosis	ICD-9-CM
964.3	Poisoning by vitamin K (phytonadione)	Diagnosis	ICD-9-CM
964.4	Poisoning by fibrinolysis-affecting drugs	Diagnosis	ICD-9-CM
964.5	Poisoning by anticoagulant antagonists and other coagulants	Diagnosis	ICD-9-CM
964.6	Poisoning by gamma globulin	Diagnosis	ICD-9-CM
964.7	Poisoning by natural blood and blood products	Diagnosis	ICD-9-CM
964.8	Poisoning by other specified agents affecting blood constituents	Diagnosis	ICD-9-CM
964.9	Poisoning by unspecified agent affecting blood constituents	Diagnosis	ICD-9-CM
965	Poisoning by analgesics, antipyretics, and antirheumatics	Diagnosis	ICD-9-CM
965.0	Poisoning by opiates and related narcotics	Diagnosis	ICD-9-CM
965.00	Poisoning by opium (alkaloids), unspecified	Diagnosis	ICD-9-CM
965.01	Poisoning by heroin	Diagnosis	ICD-9-CM
965.02	Poisoning by methadone	Diagnosis	ICD-9-CM
965.09	Poisoning by opiates and related narcotics, other	Diagnosis	ICD-9-CM
965.1	Poisoning by salicylates	Diagnosis	ICD-9-CM
965.4	Poisoning by aromatic analgesics, not elsewhere classified	Diagnosis	ICD-9-CM
965.5	Poisoning by pyrazole derivatives	Diagnosis	ICD-9-CM
965.6	Poisoning by antirheumatics (antiphlogistics)	Diagnosis	ICD-9-CM
965.61	Poisoning by propionic acid derivatives	Diagnosis	ICD-9-CM
965.69	Poisoning by other antirheumatics	Diagnosis	ICD-9-CM
965.7	Poisoning by other non-narcotic analgesics	Diagnosis	ICD-9-CM
965.8	Poisoning by other specified analgesics and antipyretics	Diagnosis	ICD-9-CM
965.9	Poisoning by unspecified analgesic and antipyretic	Diagnosis	ICD-9-CM
966	Poisoning by anticonvulsants and anti-Parkinsonism drugs	Diagnosis	ICD-9-CM
966.0	Poisoning by oxazolidine derivatives	Diagnosis	ICD-9-CM
966.1	Poisoning by hydantoin derivatives	Diagnosis	ICD-9-CM
966.2	Poisoning by succinimides	Diagnosis	ICD-9-CM
966.3	Poisoning by other and unspecified anticonvulsants	Diagnosis	ICD-9-CM
966.4	Poisoning by anti-Parkinsonism drugs	Diagnosis	ICD-9-CM
967	Poisoning by sedatives and hypnotics	Diagnosis	ICD-9-CM
967.0	Poisoning by barbiturates	Diagnosis	ICD-9-CM
967.1	Poisoning by chloral hydrate group	Diagnosis	ICD-9-CM
967.2	Poisoning by paraldehyde	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Category	Code Type
967.3	Poisoning by bromine compounds	Diagnosis	ICD-9-CM
967.4	Poisoning by methaqualone compounds	Diagnosis	ICD-9-CM
967.5	Poisoning by glutethimide group	Diagnosis	ICD-9-CM
967.6	Poisoning by mixed sedatives, not elsewhere classified	Diagnosis	ICD-9-CM
967.8	Poisoning by other sedatives and hypnotics	Diagnosis	ICD-9-CM
967.9	Poisoning by unspecified sedative or hypnotic	Diagnosis	ICD-9-CM
968	Poisoning by other central nervous system depressants and anesthetics	Diagnosis	ICD-9-CM
968.0	Poisoning by central nervous system muscle-tone depressants	Diagnosis	ICD-9-CM
968.1	Poisoning by halothane	Diagnosis	ICD-9-CM
968.2	Poisoning by other gaseous anesthetics	Diagnosis	ICD-9-CM
968.3	Poisoning by intravenous anesthetics	Diagnosis	ICD-9-CM
968.4	Poisoning by other and unspecified general anesthetics	Diagnosis	ICD-9-CM
968.5	Poisoning by other central nervous system depressants and anesthetics, Surface (topi	Diagnosis	ICD-9-CM
968.6	Poisoning by peripheral nerve- and plexus-blocking anesthetics	Diagnosis	ICD-9-CM
968.7	Poisoning by spinal anesthetics	Diagnosis	ICD-9-CM
968.9	Poisoning by other and unspecified local anesthetics	Diagnosis	ICD-9-CM
969	Poisoning by psychotropic agents	Diagnosis	ICD-9-CM
969.0	Poisoning by antidepressants	Diagnosis	ICD-9-CM
969.00	Poisoning by antidepressant, unspecified	Diagnosis	ICD-9-CM
969.01	Poisoning by monoamine oxidase inhibitors	Diagnosis	ICD-9-CM
969.02	Poisoning by selective serotonin and norepinephrine reuptake inhibitors	Diagnosis	ICD-9-CM
969.03	Poisoning by selective serotonin reuptake inhibitors	Diagnosis	ICD-9-CM
969.04	Poisoning by tetracyclic antidepressants	Diagnosis	ICD-9-CM
969.05	Poisoning by tricyclic antidepressants	Diagnosis	ICD-9-CM
969.09	Poisoning by other antidepressants	Diagnosis	ICD-9-CM
969.1	Poisoning by phenothiazine-based tranquilizers	Diagnosis	ICD-9-CM
969.2	Poisoning by butyrophenone-based tranquilizers	Diagnosis	ICD-9-CM
969.3	Poisoning by other antipsychotics, neuroleptics, and major tranquilizers	Diagnosis	ICD-9-CM
969.4	Poisoning by benzodiazepine-based tranquilizers	Diagnosis	ICD-9-CM
969.5	Poisoning by other tranquilizers	Diagnosis	ICD-9-CM
969.6	Poisoning by psychodysleptics (hallucinogens)	Diagnosis	ICD-9-CM
969.7	Poisoning by psychostimulants	Diagnosis	ICD-9-CM
969.70	Poisoning by psychostimulant, unspecified	Diagnosis	ICD-9-CM
969.71	Poisoning by caffeine	Diagnosis	ICD-9-CM
969.72	Poisoning by amphetamines	Diagnosis	ICD-9-CM
969.73	Poisoning by methylphenidate	Diagnosis	ICD-9-CM
969.79	Poisoning by other psychostimulants	Diagnosis	ICD-9-CM
969.8	Poisoning by other specified psychotropic agents	Diagnosis	ICD-9-CM
969.9	Poisoning by unspecified psychotropic agent	Diagnosis	ICD-9-CM
970	Poisoning by central nervous system stimulants	Diagnosis	ICD-9-CM
970.0	Poisoning by analeptics	Diagnosis	ICD-9-CM
970.1	Poisoning by opiate antagonists	Diagnosis	ICD-9-CM
970.8	Poisoning by other specified central nervous system stimulants	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Category	Code Type
970.81	Poisoning by cocaine	Diagnosis	ICD-9-CM
970.89	Poisoning by other central nervous system stimulants	Diagnosis	ICD-9-CM
970.9	Poisoning by unspecified central nervous system stimulant	Diagnosis	ICD-9-CM
971	Poisoning by drugs primarily affecting the autonomic nervous system	Diagnosis	ICD-9-CM
971.0	Poisoning by parasympathomimetics (cholinergics)	Diagnosis	ICD-9-CM
971.1	Poisoning by parasympatholytics (anticholinergics and antimuscarinics) and spasmolytic	Diagnosis	ICD-9-CM
971.2	Poisoning by sympathomimetics (adrenergics)	Diagnosis	ICD-9-CM
971.3	Poisoning by sympatholytics (antiadrenergics)	Diagnosis	ICD-9-CM
971.9	Poisoning by unspecified drug primarily affecting autonomic nervous system	Diagnosis	ICD-9-CM
972	Poisoning by agents primarily affecting the cardiovascular system	Diagnosis	ICD-9-CM
972.0	Poisoning by cardiac rhythm regulators	Diagnosis	ICD-9-CM
972.1	Poisoning by cardiotonic glycosides and drugs of similar action	Diagnosis	ICD-9-CM
972.2	Poisoning by antilipemic and antiarteriosclerotic drugs	Diagnosis	ICD-9-CM
972.3	Poisoning by ganglion-blocking agents	Diagnosis	ICD-9-CM
972.4	Poisoning by coronary vasodilators	Diagnosis	ICD-9-CM
972.5	Poisoning by other vasodilators	Diagnosis	ICD-9-CM
972.6	Poisoning by other antihypertensive agents	Diagnosis	ICD-9-CM
972.7	Poisoning by antivaricose drugs, including sclerosing agents	Diagnosis	ICD-9-CM
972.8	Poisoning by capillary-active drugs	Diagnosis	ICD-9-CM
972.9	Poisoning by other and unspecified agents primarily affecting the cardiovascular system	Diagnosis	ICD-9-CM
973	Poisoning by agents primarily affecting the gastrointestinal system	Diagnosis	ICD-9-CM
973.0	Poisoning by antacids and antigastric secretion drugs	Diagnosis	ICD-9-CM
973.1	Poisoning by irritant cathartics	Diagnosis	ICD-9-CM
973.2	Poisoning by emollient cathartics	Diagnosis	ICD-9-CM
973.3	Poisoning by other cathartics, including intestinal atonia drugs	Diagnosis	ICD-9-CM
973.4	Poisoning by digestants	Diagnosis	ICD-9-CM
973.5	Poisoning by antidiarrheal drugs	Diagnosis	ICD-9-CM
973.6	Poisoning by emetics	Diagnosis	ICD-9-CM
973.8	Poisoning by other specified agents primarily affecting the gastrointestinal system	Diagnosis	ICD-9-CM
973.9	Poisoning by unspecified agent primarily affecting the gastrointestinal system	Diagnosis	ICD-9-CM
974	Poisoning by water, mineral, and uric acid metabolism drugs	Diagnosis	ICD-9-CM
974.0	Poisoning by mercurial diuretics	Diagnosis	ICD-9-CM
974.1	Poisoning by purine derivative diuretics	Diagnosis	ICD-9-CM
974.2	Poisoning by carbonic acid anhydrase inhibitors	Diagnosis	ICD-9-CM
974.3	Poisoning by saluretics	Diagnosis	ICD-9-CM
974.4	Poisoning by other diuretics	Diagnosis	ICD-9-CM
974.5	Poisoning by electrolytic, caloric, and water-balance agents	Diagnosis	ICD-9-CM
974.6	Poisoning by other mineral salts, not elsewhere classified	Diagnosis	ICD-9-CM
974.7	Poisoning by uric acid metabolism drugs	Diagnosis	ICD-9-CM
975	Poisoning by agents primarily acting on the smooth and skeletal muscles and respiratory system	Diagnosis	ICD-9-CM
975.0	Poisoning by oxytocic agents	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Category	Code Type
975.1	Poisoning by smooth muscle relaxants	Diagnosis	ICD-9-CM
975.2	Poisoning by skeletal muscle relaxants	Diagnosis	ICD-9-CM
975.3	Poisoning by other and unspecified drugs acting on muscles	Diagnosis	ICD-9-CM
975.4	Poisoning by antitussives	Diagnosis	ICD-9-CM
975.5	Poisoning by expectorants	Diagnosis	ICD-9-CM
975.6	Poisoning by anti-common cold drugs	Diagnosis	ICD-9-CM
975.7	Poisoning by antiasthmatics	Diagnosis	ICD-9-CM
975.8	Poisoning by other and unspecified respiratory drugs	Diagnosis	ICD-9-CM
976	Poisoning by agents primarily affecting skin and mucous membrane, ophthalmological, otorhinolaryngological, and dental drugs	Diagnosis	ICD-9-CM
976.0	Poisoning by local anti-infectives and anti-inflammatory drugs	Diagnosis	ICD-9-CM
976.1	Poisoning by antipruritics	Diagnosis	ICD-9-CM
976.2	Poisoning by local astringents and local detergents	Diagnosis	ICD-9-CM
976.3	Poisoning by emollients, demulcents, and protectants	Diagnosis	ICD-9-CM
976.4	Poisoning by keratolytics, keratoplastics, other hair treatment drugs and preparations	Diagnosis	ICD-9-CM
976.5	Poisoning by eye anti-infectives and other eye drugs	Diagnosis	ICD-9-CM
976.6	Poisoning by anti-infectives and other drugs and preparations for ear, nose, and throat	Diagnosis	ICD-9-CM
976.7	Poisoning by dental drugs topically applied	Diagnosis	ICD-9-CM
976.8	Poisoning by other agents primarily affecting skin and mucous membrane	Diagnosis	ICD-9-CM
976.9	Poisoning by unspecified agent primarily affecting skin and mucous membrane	Diagnosis	ICD-9-CM
977	Poisoning by other and unspecified drugs and medicinal substances	Diagnosis	ICD-9-CM
977.0	Poisoning by dietetics	Diagnosis	ICD-9-CM
977.1	Poisoning by lipotropic drugs	Diagnosis	ICD-9-CM
977.2	Poisoning by antidotes and chelating agents, not elsewhere classified	Diagnosis	ICD-9-CM
977.3	Poisoning by alcohol deterrents	Diagnosis	ICD-9-CM
977.4	Poisoning by pharmaceutical excipients	Diagnosis	ICD-9-CM
977.8	Poisoning by other specified drugs and medicinal substances	Diagnosis	ICD-9-CM
977.9	Poisoning by unspecified drug or medicinal substance	Diagnosis	ICD-9-CM
978	Poisoning by bacterial vaccines	Diagnosis	ICD-9-CM
978.0	Poisoning by BCG vaccine	Diagnosis	ICD-9-CM
978.1	Poisoning by typhoid and paratyphoid vaccine	Diagnosis	ICD-9-CM
978.2	Poisoning by cholera vaccine	Diagnosis	ICD-9-CM
978.3	Poisoning by plague vaccine	Diagnosis	ICD-9-CM
978.4	Poisoning by tetanus vaccine	Diagnosis	ICD-9-CM
978.5	Poisoning by diphtheria vaccine	Diagnosis	ICD-9-CM
978.6	Poisoning by pertussis vaccine, including combinations with pertussis component	Diagnosis	ICD-9-CM
978.8	Poisoning by other and unspecified bacterial vaccines	Diagnosis	ICD-9-CM
978.9	Poisoning by mixed bacterial vaccines, except combinations with pertussis component	Diagnosis	ICD-9-CM
979	Poisoning by other vaccines and biological substances	Diagnosis	ICD-9-CM
979.0	Poisoning by smallpox vaccine	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Category	Code Type
979.1	Poisoning by rabies vaccine	Diagnosis	ICD-9-CM
979.2	Poisoning by typhus vaccine	Diagnosis	ICD-9-CM
979.3	Poisoning by yellow fever vaccine	Diagnosis	ICD-9-CM
979.4	Poisoning by measles vaccine	Diagnosis	ICD-9-CM
979.5	Poisoning by poliomyelitis vaccine	Diagnosis	ICD-9-CM
979.6	Poisoning by other and unspecified viral and rickettsial vaccines	Diagnosis	ICD-9-CM
979.7	Poisoning by mixed viral-rickettsial and bacterial vaccines, except combinations with pertussis component	Diagnosis	ICD-9-CM
979.9	Poisoning by other and unspecified vaccines and biological substances	Diagnosis	ICD-9-CM
881	Open wound of elbow, forearm, and wrist	Diagnosis	ICD-9-CM
980	Toxic effect of alcohol	Diagnosis	ICD-9-CM
980.0	Toxic effect of ethyl alcohol	Diagnosis	ICD-9-CM
980.1	Toxic effect of methyl alcohol	Diagnosis	ICD-9-CM
980.2	Toxic effect of isopropyl alcohol	Diagnosis	ICD-9-CM
980.3	Toxic effect of fusel oil	Diagnosis	ICD-9-CM
980.8	Toxic effect of other specified alcohols	Diagnosis	ICD-9-CM
980.9	Toxic effect of unspecified alcohol	Diagnosis	ICD-9-CM
981	Toxic effect of petroleum products	Diagnosis	ICD-9-CM
982	Toxic effect of solvents other than petroleum-based	Diagnosis	ICD-9-CM
982.0	Toxic effect of benzene and homologues	Diagnosis	ICD-9-CM
982.1	Toxic effect of carbon tetrachloride	Diagnosis	ICD-9-CM
982.2	Toxic effect of carbon disulfide	Diagnosis	ICD-9-CM
982.3	Toxic effect of other chlorinated hydrocarbon solvents	Diagnosis	ICD-9-CM
982.4	Toxic effect of nitroglycol	Diagnosis	ICD-9-CM
982.8	Toxic effect of other nonpetroleum-based solvents	Diagnosis	ICD-9-CM
983	Toxic effect of corrosive aromatics, acids, and caustic alkalis	Diagnosis	ICD-9-CM
983.0	Toxic effect of corrosive aromatics	Diagnosis	ICD-9-CM
983.1	Toxic effect of acids	Diagnosis	ICD-9-CM
983.2	Toxic effect of caustic alkalis	Diagnosis	ICD-9-CM
983.9	Toxic effect of caustic, unspecified	Diagnosis	ICD-9-CM
984	Toxic effect of lead and its compounds (including fumes)	Diagnosis	ICD-9-CM
984.0	Toxic effect of inorganic lead compounds	Diagnosis	ICD-9-CM
984.1	Toxic effect of organic lead compounds	Diagnosis	ICD-9-CM
984.8	Toxic effect of other lead compounds	Diagnosis	ICD-9-CM
984.9	Toxic effect of unspecified lead compound	Diagnosis	ICD-9-CM
985	Toxic effect of other metals	Diagnosis	ICD-9-CM
985.0	Toxic effect of mercury and its compounds	Diagnosis	ICD-9-CM
985.1	Toxic effect of arsenic and its compounds	Diagnosis	ICD-9-CM
985.2	Toxic effect of manganese and its compounds	Diagnosis	ICD-9-CM
985.3	Toxic effect of beryllium and its compounds	Diagnosis	ICD-9-CM
985.4	Toxic effect of antimony and its compounds	Diagnosis	ICD-9-CM
985.5	Toxic effect of cadmium and its compounds	Diagnosis	ICD-9-CM
985.6	Toxic effect of chromium	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Category	Code Type
985.8	Toxic effect of other specified metals	Diagnosis	ICD-9-CM
985.9	Toxic effect of unspecified metal	Diagnosis	ICD-9-CM
986	Toxic effect of carbon monoxide	Diagnosis	ICD-9-CM
987	Toxic effect of other gases, fumes, or vapors	Diagnosis	ICD-9-CM
987.0	Toxic effect of liquefied petroleum gases	Diagnosis	ICD-9-CM
987.1	Toxic effect of other hydrocarbon gas	Diagnosis	ICD-9-CM
987.2	Toxic effect of nitrogen oxides	Diagnosis	ICD-9-CM
987.3	Toxic effect of sulfur dioxide	Diagnosis	ICD-9-CM
987.4	Toxic effect of freon	Diagnosis	ICD-9-CM
987.5	Toxic effect of lacrimogenic gas	Diagnosis	ICD-9-CM
987.6	Toxic effect of chlorine gas	Diagnosis	ICD-9-CM
987.7	Toxic effect of hydrocyanic acid gas	Diagnosis	ICD-9-CM
987.8	Toxic effect of other specified gases, fumes, or vapors	Diagnosis	ICD-9-CM
987.9	Toxic effect of unspecified gas, fume, or vapor	Diagnosis	ICD-9-CM
988	Toxic effect of noxious substances eaten as food	Diagnosis	ICD-9-CM
988.0	Toxic effect of fish and shellfish	Diagnosis	ICD-9-CM
988.1	Toxic effect of mushrooms	Diagnosis	ICD-9-CM
988.2	Toxic effect of berries and other plants	Diagnosis	ICD-9-CM
988.8	Toxic effect of other specified noxious substances	Diagnosis	ICD-9-CM
988.9	Toxic effect of unspecified noxious substance	Diagnosis	ICD-9-CM
989	Toxic effect of other substances, chiefly nonmedicinal as to source	Diagnosis	ICD-9-CM
989.0	Toxic effect of hydrocyanic acid and cyanides	Diagnosis	ICD-9-CM
989.1	Toxic effect of strychnine and salts	Diagnosis	ICD-9-CM
989.2	Toxic effect of chlorinated hydrocarbons	Diagnosis	ICD-9-CM
989.3	Toxic effect of organophosphate and carbamate	Diagnosis	ICD-9-CM
989.4	Toxic effect of other pesticides, not elsewhere classified	Diagnosis	ICD-9-CM
989.5	Toxic effect of venom	Diagnosis	ICD-9-CM
989.6	Toxic effect of soaps and detergents	Diagnosis	ICD-9-CM
989.7	Toxic effect of aflatoxin and other mycotoxin (food contaminants)	Diagnosis	ICD-9-CM
989.8	Toxic effect of other substances, chiefly nonmedicinal as to source	Diagnosis	ICD-9-CM
989.81	Toxic effect of asbestos	Diagnosis	ICD-9-CM
989.82	Toxic effect of latex	Diagnosis	ICD-9-CM
989.83	Toxic effect of silicone	Diagnosis	ICD-9-CM
989.84	Toxic effect of tobacco	Diagnosis	ICD-9-CM
989.89	Toxic effect of other substances	Diagnosis	ICD-9-CM
989.9	Toxic effect of unspecified substance, chiefly nonmedicinal as to source	Diagnosis	ICD-9-CM
994.7	Asphyxiation and strangulation	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Category	Code Type
Mood or Depressive Disorder (Inclusion)			
311	Depressive disorder, not elsewhere classified	Diagnosis	ICD-9-CM
293.83	Mood disorder in conditions classified elsewhere	Diagnosis	ICD-9-CM
296.2	Major depressive disorder, single episode	Diagnosis	ICD-9-CM
296.20	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-9-CM
296.21	Major depressive disorder, single episode, mild	Diagnosis	ICD-9-CM
296.22	Major depressive disorder, single episode, moderate	Diagnosis	ICD-9-CM
296.23	Major depressive disorder, single episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.24	Major depressive disorder, single episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.25	Major depressive disorder, single episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.26	Major depressive disorder, single episode in full remission	Diagnosis	ICD-9-CM
296.3	Major depressive disorder, recurrent episode	Diagnosis	ICD-9-CM
296.30	Major depressive disorder, recurrent episode, unspecified	Diagnosis	ICD-9-CM
296.31	Major depressive disorder, recurrent episode, mild	Diagnosis	ICD-9-CM
296.32	Major depressive disorder, recurrent episode, moderate	Diagnosis	ICD-9-CM
296.33	Major depressive disorder, recurrent episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.34	Major depressive disorder, recurrent episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.35	Major depressive disorder, recurrent episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.36	Major depressive disorder, recurrent episode, in full remission	Diagnosis	ICD-9-CM
296.5	Bipolar I disorder, most recent episode (or current), depressed	Diagnosis	ICD-9-CM
296.50	Bipolar I disorder, most recent episode (or current) depressed, unspecified	Diagnosis	ICD-9-CM
296.51	Bipolar I disorder, most recent episode (or current) depressed, mild	Diagnosis	ICD-9-CM
296.52	Bipolar I disorder, most recent episode (or current) depressed, moderate	Diagnosis	ICD-9-CM
296.53	Bipolar I disorder, most recent episode (or current) depressed, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.54	Bipolar I disorder, most recent episode (or current) depressed, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.55	Bipolar I disorder, most recent episode (or current) depressed, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.56	Bipolar I disorder, most recent episode (or current) depressed, in full remission	Diagnosis	ICD-9-CM
296.90	Unspecified episodic mood disorder	Diagnosis	ICD-9-CM
298.0	Depressive type psychosis	Diagnosis	ICD-9-CM
300.4	Dysthymic disorder	Diagnosis	ICD-9-CM
301.12	Chronic depressive personality disorder	Diagnosis	ICD-9-CM
309.0	Adjustment disorder with depressed mood	Diagnosis	ICD-9-CM
309.1	Prolonged depressive reaction as adjustment reaction	Diagnosis	ICD-9-CM
309.28	Adjustment disorder with mixed anxiety and depressed mood	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Category	Code Type
Traumatic Brain Injury (Exclusion)			
851	Cerebral laceration and contusion	Diagnosis	ICD-9-CM
851.0	Cortex (cerebral) contusion without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.00	Cortex (cerebral) contusion without mention of open intracranial wound, state of consciousness unspecified	Diagnosis	ICD-9-CM
851.01	Cortex (cerebral) contusion without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.02	Cortex (cerebral) contusion without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.03	Cortex (cerebral) contusion without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.04	Cortex (cerebral) contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.05	Cortex (cerebral) contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.06	Cortex (cerebral) contusion without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.09	Cortex (cerebral) contusion without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.1	Cortex (cerebral) contusion with open intracranial wound	Diagnosis	ICD-9-CM
851.10	Cortex (cerebral) contusion with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.11	Cortex (cerebral) contusion with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.12	Cortex (cerebral) contusion with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.13	Cortex (cerebral) contusion with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.14	Cortex (cerebral) contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.15	Cortex (cerebral) contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.16	Cortex (cerebral) contusion with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.19	Cortex (cerebral) contusion with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.2	Cortex (cerebral) laceration without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.20	Cortex (cerebral) laceration without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Category	Code Type
851.21	Cortex (cerebral) laceration without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.22	Cortex (cerebral) laceration without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.23	Cortex (cerebral) laceration without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.24	Cortex (cerebral) laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.25	Cortex (cerebral) laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.26	Cortex (cerebral) laceration without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.29	Cortex (cerebral) laceration without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.3	Cortex (cerebral) laceration with open intracranial wound	Diagnosis	ICD-9-CM
851.30	Cortex (cerebral) laceration with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.31	Cortex (cerebral) laceration with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.32	Cortex (cerebral) laceration with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.33	Cortex (cerebral) laceration with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.34	Cortex (cerebral) laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.35	Cortex (cerebral) laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.36	Cortex (cerebral) laceration with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.39	Cortex (cerebral) laceration with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.4	Cerebellar or brain stem contusion without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.40	Cerebellar or brain stem contusion without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.41	Cerebellar or brain stem contusion without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.42	Cerebellar or brain stem contusion without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Category	Code Type
851.43	Cerebellar or brain stem contusion without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.44	Cerebellar or brain stem contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.45	Cerebellar or brain stem contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.46	Cerebellar or brain stem contusion without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.49	Cerebellar or brain stem contusion without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.5	Cerebellar or brain stem contusion with open intracranial wound	Diagnosis	ICD-9-CM
851.50	Cerebellar or brain stem contusion with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.51	Cerebellar or brain stem contusion with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.52	Cerebellar or brain stem contusion with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.53	Cerebellar or brain stem contusion with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.54	Cerebellar or brain stem contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.55	Cerebellar or brain stem contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.56	Cerebellar or brain stem contusion with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.59	Cerebellar or brain stem contusion with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.6	Cerebellar or brain stem laceration without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.60	Cerebellar or brain stem laceration without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.61	Cerebellar or brain stem laceration without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.62	Cerebellar or brain stem laceration without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.63	Cerebellar or brain stem laceration without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Category	Code Type
851.64	Cerebellar or brain stem laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.65	Cerebellar or brain stem laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.66	Cerebellar or brain stem laceration without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.69	Cerebellar or brain stem laceration without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.7	Cerebellar or brain stem laceration with open intracranial wound	Diagnosis	ICD-9-CM
851.70	Cerebellar or brain stem laceration with open intracranial wound, state of consciousness unspecified	Diagnosis	ICD-9-CM
851.71	Cerebellar or brain stem laceration with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.72	Cerebellar or brain stem laceration with open intracranial wound, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
851.73	Cerebellar or brain stem laceration with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.74	Cerebellar or brain stem laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.75	Cerebellar or brain stem laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.76	Cerebellar or brain stem laceration with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.79	Cerebellar or brain stem laceration with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.8	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.80	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.81	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.82	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.83	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.84	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to preexisting conscious level	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Category	Code Type
851.85	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.86	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.89	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.9	Other and unspecified cerebral laceration and contusion, with open intracranial wound	Diagnosis	ICD-9-CM
851.90	Other and unspecified cerebral laceration and contusion, with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.91	Other and unspecified cerebral laceration and contusion, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.92	Other and unspecified cerebral laceration and contusion, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.93	Other and unspecified cerebral laceration and contusion, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.94	Other and unspecified cerebral laceration and contusion, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.95	Other and unspecified cerebral laceration and contusion, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.96	Other and unspecified cerebral laceration and contusion, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.99	Other and unspecified cerebral laceration and contusion, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852	Subarachnoid, subdural, and extradural hemorrhage, following injury	Diagnosis	ICD-9-CM
852.0	Subarachnoid hemorrhage following injury without mention of open intracranial wound	Diagnosis	ICD-9-CM
852.00	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
852.01	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.02	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.03	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Category	Code Type
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	Diagnosis	ICD-9-CM
852.06	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.09	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.1	Subarachnoid hemorrhage following injury, with open intracranial wound	Diagnosis	ICD-9-CM
852.10	Subarachnoid hemorrhage following injury, with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
852.11	Subarachnoid hemorrhage following injury, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.12	Subarachnoid hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.13	Subarachnoid hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
852.14	Subarachnoid hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.15	Subarachnoid hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.16	Subarachnoid hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.19	Subarachnoid hemorrhage following injury, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.2	Subdural hemorrhage following injury without mention of open intracranial wound	Diagnosis	ICD-9-CM
852.20	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
852.21	Subdural hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.22	Subdural hemorrhage following injury, without mention of open intracranial wound, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
852.23	Subdural hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-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	Diagnosis	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	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Category	Code Type
852.26	Subdural hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.29	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.3	Subdural hemorrhage following injury, with open intracranial wound	Diagnosis	ICD-9-CM
852.30	Subdural hemorrhage following injury, with open intracranial wound, state of consciousness unspecified	Diagnosis	ICD-9-CM
852.31	Subdural hemorrhage following injury, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.32	Subdural hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.33	Subdural hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
852.34	Subdural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.35	Subdural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.36	Subdural hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.39	Subdural hemorrhage following injury, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.4	Extradural hemorrhage following injury without mention of open intracranial wound	Diagnosis	ICD-9-CM
852.40	Extradural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
852.41	Extradural hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.42	Extradural hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.43	Extradural hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
852.46	Extradural hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.49	Extradural hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Category	Code Type
852.5	Extradural hemorrhage following injury with open intracranial wound	Diagnosis	ICD-9-CM
852.50	Extradural hemorrhage following injury, with open intracranial wound, state of consciousness unspecified	Diagnosis	ICD-9-CM
852.51	Extradural hemorrhage following injury, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.52	Extradural hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.53	Extradural hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
852.54	Extradural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.55	Extradural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.56	Extradural hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.59	Extradural hemorrhage following injury, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
853	Other and unspecified intracranial hemorrhage following injury	Diagnosis	ICD-9-CM
853.0	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound	Diagnosis	ICD-9-CM
853.00	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
853.01	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
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	Diagnosis	ICD-9-CM
853.06	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
853.09	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Category	Code Type
853.1	Other and unspecified intracranial hemorrhage following injury with open intracranial wound	Diagnosis	ICD-9-CM
853.10	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
853.11	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
853.12	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
853.13	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
853.14	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
853.15	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
853.16	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
853.19	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
854	Intracranial injury of other and unspecified nature	Diagnosis	ICD-9-CM
854.0	Intracranial injury of other and unspecified nature without mention of open intracranial wound	Diagnosis	ICD-9-CM
854.00	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
854.01	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
854.02	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
854.03	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
854.04	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
854.05	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
854.06	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
854.09	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
854.1	Intracranial injury of other and unspecified nature with open intracranial wound	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Category	Code Type
854.10	Intracranial injury of other and unspecified nature, with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
854.11	Intracranial injury of other and unspecified nature, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
854.12	Intracranial injury of other and unspecified nature, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
854.13	Intracranial injury of other and unspecified nature, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
854.14	Intracranial injury of other and unspecified nature, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
854.15	Intracranial injury of other and unspecified nature, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
854.16	Intracranial injury of other and unspecified nature, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
854.19	Intracranial injury of other and unspecified nature, with open intracranial wound, with unspecified concussion	Diagnosis	ICD-9-CM
959.01	Head injury, unspecified		

Appendix E. List of Generic and Brand Name Medical Products Used to Define Incidence in this Request

Generic Name	Brand Name
Other Generic Sertraline	
sertraline HCL	sertraline
Non-Sertraline Antidepressants	
amitriptyline HCl	amitriptyline
amitriptyline HCl	Vanatrip
amitriptyline HCl/chlordiazepoxide	Limbitrol
amitriptyline HCl/chlordiazepoxide	Limbitrol DS
amitriptyline HCl/chlordiazepoxide	amitriptyline-chlordiazepoxide
amoxapine	amoxapine
bupropion HBr	Aplenzin
bupropion HCl	bupropion HCl
bupropion HCl	Budeprion XL
bupropion HCl	Budeprion SR
bupropion HCl	Wellbutrin SR
bupropion HCl	Wellbutrin
bupropion HCl	Wellbutrin XL
bupropion HCl	Forfivo XL
bupropion HCl/dietary supplement combination no.15	Appbutamone-D
bupropion HCl/dietary supplement combination no.16	Appbutamone
citalopram hydrobromide	citalopram
citalopram hydrobromide	Celexa
clomipramine HCl	clomipramine
clomipramine HCl	Anafranil
desipramine HCl	Norpramin
desipramine HCl	desipramine
desvenlafaxine	desvenlafaxine
desvenlafaxine	Khedezla
desvenlafaxine fumarate	desvenlafaxine fumarate
desvenlafaxine succinate	Pristiq
desvenlafaxine succinate	desvenlafaxine succinate
doxepin HCl	Sinequan
doxepin HCl	doxepin
doxepin HCl	Silenor
duloxetine HCl	Cymbalta
duloxetine HCl	duloxetine
duloxetine HCl	Irenka
escitalopram oxalate	escitalopram oxalate
escitalopram oxalate	Lexapro
fluoxetine HCl	Prozac Weekly
fluoxetine HCl	fluoxetine
fluoxetine HCl	Selfemra
fluoxetine HCl	Prozac
fluoxetine HCl	Sarafem
fluoxetine HCl	Rapiflux

Appendix E. List of Generic and Brand Name Medical Products Used to Define Incidence in this Request

Generic Name	Brand Name
fluoxetine HCl/dietary supplement no.17	Gaboxetine
fluoxetine HCl/dietary supplement no.8	Sentroxatine
fluvoxamine maleate	fluvoxamine
fluvoxamine maleate	Luvox CR
imipramine HCl	Tofranil
imipramine HCl	imipramine HCl
imipramine pamoate	imipramine pamoate
imipramine pamoate	Tofranil-PM
isocarboxazid	Marplan
levomilnacipran HCl	Fetzima
maprotiline HCl	maprotiline
mirtazapine	Remeron
mirtazapine	Remeron SolTab
mirtazapine	mirtazapine
nefazodone HCl	nefazodone
nefazodone HCl	Serzone
nortriptyline HCl	Pamelor
nortriptyline HCl	nortriptyline
olanzapine/fluoxetine HCl	Symbyax
olanzapine/fluoxetine HCl	olanzapine-fluoxetine
paroxetine HCl	Paxil CR
paroxetine HCl	Paxil
paroxetine HCl	paroxetine HCl
paroxetine mesylate	paroxetine mesylate(menop.sym)
paroxetine mesylate	Peveva
paroxetine mesylate	Brisdelle
perphenazine/amitriptyline HCl	perphenazine-amitriptyline
perphenazine/amitriptyline HCl	Duo-Vil 2-10
perphenazine/amitriptyline HCl	Duo-Vil 2-25
phenelzine sulfate	Nardil
phenelzine sulfate	phenelzine
protriptyline HCl	protriptyline
protriptyline HCl	Vivactil
selegiline	Emsam
tranylcypromine sulfate	Parnate
tranylcypromine sulfate	tranylcypromine
trazodone HCl	Desyrel
trazodone HCl	trazodone
trazodone HCl	Olepto ER
trazodone HCl/dietary supplement no.8	Trazamine
trimipramine maleate	trimipramine
trimipramine maleate	Surmontil
venlafaxine HCl	Effexor
venlafaxine HCl	Effexor XR

Appendix E. List of Generic and Brand Name Medical Products Used to Define Incidence in this Request

Generic Name	Brand Name
venlafaxine HCl	venlafaxine
vortioxetine hydrobromide	Brintellix
vortioxetine hydrobromide	Trintellix

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

Code	Description	Code Category	Code Type
Attention-Deficit/Hyperactivity Disorder			
314	Hyperkinetic syndrome of childhood	Diagnosis	ICD-9-CM
314.0	Attention deficit disorder of childhood	Diagnosis	ICD-9-CM
314.00	Attention deficit disorder without mention of hyperactivity	Diagnosis	ICD-9-CM
314.01	Attention deficit disorder with hyperactivity	Diagnosis	ICD-9-CM
314.1	Hyperkinesis with developmental delay	Diagnosis	ICD-9-CM
314.2	Hyperkinetic conduct disorder	Diagnosis	ICD-9-CM
314.8	Other specified manifestations of hyperkinetic syndrome	Diagnosis	ICD-9-CM
314.9	Unspecified hyperkinetic syndrome	Diagnosis	ICD-9-CM
Akathisia			
333.99	Other extrapyramidal disease and abnormal movement disorder	Diagnosis	ICD-9-CM
Anxiety			
300.02	Generalized anxiety disorder	Diagnosis	ICD-9-CM
300.0	Anxiety states	Diagnosis	ICD-9-CM
300.00	Anxiety state, unspecified	Diagnosis	ICD-9-CM
300.09	Other anxiety states	Diagnosis	ICD-9-CM
300.2	Phobic disorders	Diagnosis	ICD-9-CM
300.20	Phobia, unspecified	Diagnosis	ICD-9-CM
300.22	Agoraphobia without mention of panic attacks	Diagnosis	ICD-9-CM
300.29	Other isolated or specific phobias	Diagnosis	ICD-9-CM
300.01	Panic disorder without agoraphobia	Diagnosis	ICD-9-CM
300.21	Agoraphobia with panic disorder	Diagnosis	ICD-9-CM
Atherosclerotic disease			
437.0	Cerebral atherosclerosis	Diagnosis	ICD-9-CM
440	Atherosclerosis	Diagnosis	ICD-9-CM
440.0	Atherosclerosis of aorta	Diagnosis	ICD-9-CM
440.1	Atherosclerosis of renal artery	Diagnosis	ICD-9-CM
440.2	Atherosclerosis of native arteries of the extremities	Diagnosis	ICD-9-CM
440.20	Atherosclerosis of native arteries of the extremities, unspecified	Diagnosis	ICD-9-CM
440.21	Atherosclerosis of native arteries of the extremities with intermittent claudication	Diagnosis	ICD-9-CM
440.22	Atherosclerosis of native arteries of the extremities with rest pain	Diagnosis	ICD-9-CM
440.23	Atherosclerosis of native arteries of the extremities with ulceration	Diagnosis	ICD-9-CM
440.24	Atherosclerosis of native arteries of the extremities with gangrene	Diagnosis	ICD-9-CM
440.29	Other atherosclerosis of native arteries of the extremities	Diagnosis	ICD-9-CM
440.3	Atherosclerosis of bypass graft of extremities	Diagnosis	ICD-9-CM
440.30	Atherosclerosis of unspecified bypass graft of extremities	Diagnosis	ICD-9-CM
440.31	Atherosclerosis of autologous vein bypass graft of extremities	Diagnosis	ICD-9-CM
440.32	Atherosclerosis of nonautologous biological bypass graft of extremities	Diagnosis	ICD-9-CM
440.4	Chronic total occlusion of artery of the extremities	Diagnosis	ICD-9-CM
440.8	Atherosclerosis of other specified arteries	Diagnosis	ICD-9-CM
440.9	Generalized and unspecified atherosclerosis	Diagnosis	ICD-9-CM
445	Atheroembolism	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
445.0	Atheroembolism of extremities	Diagnosis	ICD-9-CM
445.01	Atheroembolism of upper extremity	Diagnosis	ICD-9-CM
445.02	Atheroembolism of lower extremity	Diagnosis	ICD-9-CM
445.8	Atheroembolism of other sites	Diagnosis	ICD-9-CM
445.81	Atheroembolism of kidney	Diagnosis	ICD-9-CM
445.89	Atheroembolism of other site	Diagnosis	ICD-9-CM
Bipolar disorder			
296.0	Bipolar I disorder, single manic episode	Diagnosis	ICD-9-CM
296.00	Bipolar I disorder, single manic episode, unspecified	Diagnosis	ICD-9-CM
296.01	Bipolar I disorder, single manic episode, mild	Diagnosis	ICD-9-CM
296.02	Bipolar I disorder, single manic episode, moderate	Diagnosis	ICD-9-CM
296.03	Bipolar I disorder, single manic episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.04	Bipolar I disorder, single manic episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.05	Bipolar I disorder, single manic episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.06	Bipolar I disorder, single manic episode, in full remission	Diagnosis	ICD-9-CM
296.1	Manic disorder, recurrent episode	Diagnosis	ICD-9-CM
296.10	Manic disorder, recurrent episode, unspecified	Diagnosis	ICD-9-CM
296.11	Manic disorder, recurrent episode, mild	Diagnosis	ICD-9-CM
296.12	Manic disorder, recurrent episode, moderate	Diagnosis	ICD-9-CM
296.13	Manic disorder, recurrent episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.14	Manic disorder, recurrent episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.15	Manic disorder, recurrent episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.16	Manic disorder, recurrent episode, in full remission	Diagnosis	ICD-9-CM
296.4	Bipolar I disorder, most recent episode (or current) manic	Diagnosis	ICD-9-CM
296.40	Bipolar I disorder, most recent episode (or current) manic, unspecified	Diagnosis	ICD-9-CM
296.41	Bipolar I disorder, most recent episode (or current) manic, mild	Diagnosis	ICD-9-CM
296.42	Bipolar I disorder, most recent episode (or current) manic, moderate	Diagnosis	ICD-9-CM
296.43	Bipolar I disorder, most recent episode (or current) manic, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.44	Bipolar I disorder, most recent episode (or current) manic, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.45	Bipolar I disorder, most recent episode (or current) manic, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.46	Bipolar I disorder, most recent episode (or current) manic, in full remission	Diagnosis	ICD-9-CM
296.5	Bipolar I disorder, most recent episode (or current), depressed	Diagnosis	ICD-9-CM
296.50	Bipolar I disorder, most recent episode (or current) depressed, unspecified	Diagnosis	ICD-9-CM
296.51	Bipolar I disorder, most recent episode (or current) depressed, mild	Diagnosis	ICD-9-CM
296.52	Bipolar I disorder, most recent episode (or current) depressed, moderate	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
296.53	Bipolar I disorder, most recent episode (or current) depressed, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.54	Bipolar I disorder, most recent episode (or current) depressed, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.55	Bipolar I disorder, most recent episode (or current) depressed, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.56	Bipolar I disorder, most recent episode (or current) depressed, in full remission	Diagnosis	ICD-9-CM
296.6	Bipolar I disorder, most recent episode (or current), mixed	Diagnosis	ICD-9-CM
296.60	Bipolar I disorder, most recent episode (or current) mixed, unspecified	Diagnosis	ICD-9-CM
296.61	Bipolar I disorder, most recent episode (or current) mixed, mild	Diagnosis	ICD-9-CM
296.62	Bipolar I disorder, most recent episode (or current) mixed, moderate	Diagnosis	ICD-9-CM
296.63	Bipolar I disorder, most recent episode (or current) mixed, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.64	Bipolar I disorder, most recent episode (or current) mixed, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.65	Bipolar I disorder, most recent episode (or current) mixed, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.66	Bipolar I disorder, most recent episode (or current) mixed, in full remission	Diagnosis	ICD-9-CM
296.7	Bipolar I disorder, most recent episode (or current) unspecified	Diagnosis	ICD-9-CM
296.8	Other and unspecified bipolar disorders	Diagnosis	ICD-9-CM
296.80	Bipolar disorder, unspecified	Diagnosis	ICD-9-CM
296.81	Atypical manic disorder	Diagnosis	ICD-9-CM
296.82	Atypical depressive disorder	Diagnosis	ICD-9-CM
296.89	Other and unspecified bipolar disorders	Diagnosis	ICD-9-CM
296.99	Other specified episodic mood disorder	Diagnosis	ICD-9-CM
Breast cancer			
174.0	Malignant neoplasm of nipple and areola of female breast	Diagnosis	ICD-9-CM
174.1	Malignant neoplasm of central portion of female breast	Diagnosis	ICD-9-CM
174.2	Malignant neoplasm of upper-inner quadrant of female breast	Diagnosis	ICD-9-CM
174.3	Malignant neoplasm of lower-inner quadrant of female breast	Diagnosis	ICD-9-CM
174.4	Malignant neoplasm of upper-outer quadrant of female breast	Diagnosis	ICD-9-CM
174.5	Malignant neoplasm of lower-outer quadrant of female breast	Diagnosis	ICD-9-CM
174.6	Malignant neoplasm of axillary tail of female breast	Diagnosis	ICD-9-CM
174.8	Malignant neoplasm of other specified sites of female breast	Diagnosis	ICD-9-CM
174.9	Malignant neoplasm of breast (female), unspecified site	Diagnosis	ICD-9-CM
233.0	Carcinoma in situ of breast	Diagnosis	ICD-9-CM
Cardiomyopathy			
425	Cardiomyopathy	Diagnosis	ICD-9-CM
425.0	Endomyocardial fibrosis	Diagnosis	ICD-9-CM
425.1	Hypertrophic cardiomyopathy	Diagnosis	ICD-9-CM
425.11	Hypertrophic obstructive cardiomyopathy	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
425.18	Other hypertrophic cardiomyopathy	Diagnosis	ICD-9-CM
425.2	Obscure cardiomyopathy of Africa	Diagnosis	ICD-9-CM
425.3	Endocardial fibroelastosis	Diagnosis	ICD-9-CM
425.4	Other primary cardiomyopathies	Diagnosis	ICD-9-CM
425.5	Alcoholic cardiomyopathy	Diagnosis	ICD-9-CM
425.7	Nutritional and metabolic cardiomyopathy	Diagnosis	ICD-9-CM
425.8	Cardiomyopathy in other diseases classified elsewhere	Diagnosis	ICD-9-CM
425.9	Unspecified secondary cardiomyopathy	Diagnosis	ICD-9-CM
Cerebral degenerations usually manifest in childhood			
330	Cerebral degenerations usually manifest in childhood	Diagnosis	ICD-9-CM
330.0	Leukodystrophy	Diagnosis	ICD-9-CM
330.1	Cerebral lipidoses	Diagnosis	ICD-9-CM
330.2	Cerebral degeneration in generalized lipidoses	Diagnosis	ICD-9-CM
330.3	Cerebral degeneration of childhood in other diseases classified elsewhere	Diagnosis	ICD-9-CM
330.8	Other specified cerebral degenerations in childhood	Diagnosis	ICD-9-CM
330.9	Unspecified cerebral degeneration in childhood	Diagnosis	ICD-9-CM
Chronic lung disease			
491.0	Simple chronic bronchitis	Diagnosis	ICD-9-CM
491.1	Mucopurulent chronic bronchitis	Diagnosis	ICD-9-CM
491.2	Obstructive chronic bronchitis	Diagnosis	ICD-9-CM
491.20	Obstructive chronic bronchitis, without exacerbation	Diagnosis	ICD-9-CM
491.21	Obstructive chronic bronchitis, with (acute) exacerbation	Diagnosis	ICD-9-CM
491.22	Obstructive chronic bronchitis with acute bronchitis	Diagnosis	ICD-9-CM
491.8	Other chronic bronchitis	Diagnosis	ICD-9-CM
491.9	Unspecified chronic bronchitis	Diagnosis	ICD-9-CM
492.0	Emphysematous bleb	Diagnosis	ICD-9-CM
492.8	Other emphysema	Diagnosis	ICD-9-CM
493.0	Extrinsic asthma	Diagnosis	ICD-9-CM
493.00	Extrinsic asthma, unspecified	Diagnosis	ICD-9-CM
493.01	Extrinsic asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.02	Extrinsic asthma, with (acute) exacerbation	Diagnosis	ICD-9-CM
493.1	Intrinsic asthma	Diagnosis	ICD-9-CM
493.10	Intrinsic asthma, unspecified	Diagnosis	ICD-9-CM
493.11	Intrinsic asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.12	Intrinsic asthma, with (acute) exacerbation	Diagnosis	ICD-9-CM
493.2	Chronic obstructive asthma	Diagnosis	ICD-9-CM
493.20	Chronic obstructive asthma, unspecified	Diagnosis	ICD-9-CM
493.21	Chronic obstructive asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.22	Chronic obstructive asthma, with (acute) exacerbation	Diagnosis	ICD-9-CM
493.8	Other forms of asthma	Diagnosis	ICD-9-CM
493.81	Exercise induced bronchospasm	Diagnosis	ICD-9-CM
493.82	Cough variant asthma	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
493.9	Unspecified asthma	Diagnosis	ICD-9-CM
493.90	Asthma, unspecified, unspecified status	Diagnosis	ICD-9-CM
493.91	Asthma, unspecified with status asthmaticus	Diagnosis	ICD-9-CM
493.92	Asthma, unspecified, with (acute) exacerbation	Diagnosis	ICD-9-CM
494.0	Bronchiectasis without acute exacerbation	Diagnosis	ICD-9-CM
494.1	Bronchiectasis with acute exacerbation	Diagnosis	ICD-9-CM
495.0	Farmers' lung	Diagnosis	ICD-9-CM
495.1	Bagassosis	Diagnosis	ICD-9-CM
495.2	Bird-fanciers' lung	Diagnosis	ICD-9-CM
495.3	Suberosis	Diagnosis	ICD-9-CM
495.4	Malt workers' lung	Diagnosis	ICD-9-CM
495.5	Mushroom workers' lung	Diagnosis	ICD-9-CM
495.6	Maple bark-strippers' lung	Diagnosis	ICD-9-CM
495.7	Ventilation pneumonitis	Diagnosis	ICD-9-CM
495.8	Other specified allergic alveolitis and pneumonitis	Diagnosis	ICD-9-CM
495.9	Unspecified allergic alveolitis and pneumonitis	Diagnosis	ICD-9-CM
496	Chronic airway obstruction, not elsewhere classified	Diagnosis	ICD-9-CM
Colorectal cancer			
153.0	Malignant neoplasm of hepatic flexure	Diagnosis	ICD-9-CM
153.1	Malignant neoplasm of transverse colon	Diagnosis	ICD-9-CM
153.2	Malignant neoplasm of descending colon	Diagnosis	ICD-9-CM
153.3	Malignant neoplasm of sigmoid colon	Diagnosis	ICD-9-CM
153.4	Malignant neoplasm of cecum	Diagnosis	ICD-9-CM
153.5	Malignant neoplasm of appendix	Diagnosis	ICD-9-CM
153.6	Malignant neoplasm of ascending colon	Diagnosis	ICD-9-CM
153.7	Malignant neoplasm of splenic flexure	Diagnosis	ICD-9-CM
153.8	Malignant neoplasm of other specified sites of large intestine	Diagnosis	ICD-9-CM
153.9	Malignant neoplasm of colon, unspecified site	Diagnosis	ICD-9-CM
154.0	Malignant neoplasm of rectosigmoid junction	Diagnosis	ICD-9-CM
154.1	Malignant neoplasm of rectum	Diagnosis	ICD-9-CM
154.8	Malignant neoplasm of other sites of rectum, rectosigmoid junction, and anus	Diagnosis	ICD-9-CM
230.3	Carcinoma in situ of colon	Diagnosis	ICD-9-CM
230.4	Carcinoma in situ of rectum	Diagnosis	ICD-9-CM
Conduct disorder			
312	Disturbance of conduct not elsewhere classified	Diagnosis	ICD-9-CM
312.0	Undersocialized conduct disorder aggressive type	Diagnosis	ICD-9-CM
312.00	Undersocialized conduct disorder aggressive type, unspecified	Diagnosis	ICD-9-CM
312.01	Undersocialized conduct disorder aggressive type, mild	Diagnosis	ICD-9-CM
312.02	Undersocialized conduct disorder aggressive type, moderate	Diagnosis	ICD-9-CM
312.03	Undersocialized conduct disorder aggressive, severe	Diagnosis	ICD-9-CM
312.1	Undersocialized conduct disorder unaggressive type	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
312.10	Undersocialized conduct disorder unaggressive type, unspecified	Diagnosis	ICD-9-CM
312.11	Undersocialized conduct disorder unaggressive type, mild	Diagnosis	ICD-9-CM
312.12	Undersocialized conduct disorder unaggressive type, moderate	Diagnosis	ICD-9-CM
312.13	Undersocialized conduct disorder unaggressive, severe	Diagnosis	ICD-9-CM
312.2	Socialized conduct disorder	Diagnosis	ICD-9-CM
312.20	Socialized conduct disorder, unspecified	Diagnosis	ICD-9-CM
312.21	Socialized conduct disorder, mild	Diagnosis	ICD-9-CM
312.22	Socialized conduct disorder, moderate	Diagnosis	ICD-9-CM
312.23	Socialized conduct disorder, severe	Diagnosis	ICD-9-CM
312.3	Disorders of impulse control not elsewhere classified	Diagnosis	ICD-9-CM
312.30	Impulse control disorder, unspecified	Diagnosis	ICD-9-CM
312.31	Pathological gambling	Diagnosis	ICD-9-CM
312.32	Kleptomania	Diagnosis	ICD-9-CM
312.33	Pyromania	Diagnosis	ICD-9-CM
312.34	Intermittent explosive disorder	Diagnosis	ICD-9-CM
312.35	Isolated explosive disorder	Diagnosis	ICD-9-CM
312.39	Other disorders of impulse control	Diagnosis	ICD-9-CM
312.4	Mixed disturbance of conduct and emotions	Diagnosis	ICD-9-CM
312.8	Other specified disturbances of conduct not elsewhere classified	Diagnosis	ICD-9-CM
312.81	Conduct disorder, childhood onset type	Diagnosis	ICD-9-CM
312.82	Conduct disorder, adolescent onset type	Diagnosis	ICD-9-CM
312.89	Other conduct disorder	Diagnosis	ICD-9-CM
312.9	Unspecified disturbance of conduct	Diagnosis	ICD-9-CM
Congenital heart diseases			
745.0	Bulbus cordis anomalies and anomalies of cardiac septal closure, common truncus	Diagnosis	ICD-9-CM
745.1	Transposition of great vessels	Diagnosis	ICD-9-CM
745.10	Complete transposition of great vessels	Diagnosis	ICD-9-CM
745.11	Transposition of great vessels, double outlet right ventricle	Diagnosis	ICD-9-CM
745.12	Corrected transposition of great vessels	Diagnosis	ICD-9-CM
745.19	Other transposition of great vessels	Diagnosis	ICD-9-CM
745.2	Tetralogy of Fallot	Diagnosis	ICD-9-CM
745.3	Bulbus cordis anomalies and anomalies of cardiac septal closure, common ventricle	Diagnosis	ICD-9-CM
745.4	Ventricular septal defect	Diagnosis	ICD-9-CM
745.5	Ostium secundum type atrial septal defect	Diagnosis	ICD-9-CM
745.6	Endocardial cushion defects	Diagnosis	ICD-9-CM
745.60	Unspecified type congenital endocardial cushion defect	Diagnosis	ICD-9-CM
745.61	Ostium primum defect	Diagnosis	ICD-9-CM
745.69	Other congenital endocardial cushion defect	Diagnosis	ICD-9-CM
745.7	Cor biloculare	Diagnosis	ICD-9-CM
745.8	Other bulbus cordis anomalies and anomalies of cardiac septal closure	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
745.9	Unspecified congenital defect of septal closure	Diagnosis	ICD-9-CM
746.0	Congenital anomalies of pulmonary valve	Diagnosis	ICD-9-CM
746.00	Unspecified congenital pulmonary valve anomaly	Diagnosis	ICD-9-CM
746.01	Congenital atresia of pulmonary valve	Diagnosis	ICD-9-CM
746.02	Congenital stenosis of pulmonary valve	Diagnosis	ICD-9-CM
746.09	Other congenital anomalies of pulmonary valve	Diagnosis	ICD-9-CM
746.1	Congenital tricuspid atresia and stenosis	Diagnosis	ICD-9-CM
746.2	Ebstein's anomaly	Diagnosis	ICD-9-CM
746.3	Congenital stenosis of aortic valve	Diagnosis	ICD-9-CM
746.4	Congenital insufficiency of aortic valve	Diagnosis	ICD-9-CM
746.5	Congenital mitral stenosis	Diagnosis	ICD-9-CM
746.6	Congenital mitral insufficiency	Diagnosis	ICD-9-CM
746.7	Hypoplastic left heart syndrome	Diagnosis	ICD-9-CM
746.8	Other specified congenital anomaly of heart	Diagnosis	ICD-9-CM
746.81	Congenital subaortic stenosis	Diagnosis	ICD-9-CM
746.82	Cor triatriatum	Diagnosis	ICD-9-CM
746.83	Congenital infundibular pulmonic stenosis	Diagnosis	ICD-9-CM
746.84	Congenital obstructive anomalies of heart, not elsewhere classified	Diagnosis	ICD-9-CM
746.85	Congenital coronary artery anomaly	Diagnosis	ICD-9-CM
746.86	Congenital heart block	Diagnosis	ICD-9-CM
746.87	Congenital malposition of heart and cardiac apex	Diagnosis	ICD-9-CM
746.89	Other specified congenital anomaly of heart	Diagnosis	ICD-9-CM
746.9	Unspecified congenital anomaly of heart	Diagnosis	ICD-9-CM
Delirium			
291.0	Alcohol withdrawal delirium	Diagnosis	ICD-9-CM
292.81	Drug-induced delirium	Diagnosis	ICD-9-CM
293	Transient mental disorders due to conditions classified elsewhere	Diagnosis	ICD-9-CM
293.0	Delirium due to conditions classified elsewhere	Diagnosis	ICD-9-CM
293.1	Subacute delirium	Diagnosis	ICD-9-CM
293.8	Other specified transient mental disorders due to conditions classified elsewhere	Diagnosis	ICD-9-CM
293.81	Psychotic disorder with delusions in conditions classified elsewhere	Diagnosis	ICD-9-CM
293.82	Psychotic disorder with hallucinations in conditions classified elsewhere	Diagnosis	ICD-9-CM
293.83	Mood disorder in conditions classified elsewhere	Diagnosis	ICD-9-CM
293.84	Anxiety disorder in conditions classified elsewhere	Diagnosis	ICD-9-CM
293.89	Other specified transient mental disorders due to conditions classified elsewhere	Diagnosis	ICD-9-CM
293.9	Unspecified transient mental disorder in conditions classified elsewhere	Diagnosis	ICD-9-CM
348.3	Encephalopathy, not elsewhere classified	Diagnosis	ICD-9-CM
348.30	Encephalopathy, unspecified	Diagnosis	ICD-9-CM
348.31	Metabolic encephalopathy	Diagnosis	ICD-9-CM
348.39	Other encephalopathy	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
Dementias and other cerebral degenerations			
290	Dementias	Diagnosis	ICD-9-CM
290.0	Senile dementia, uncomplicated	Diagnosis	ICD-9-CM
290.1	Presenile dementia	Diagnosis	ICD-9-CM
290.10	Presenile dementia, uncomplicated	Diagnosis	ICD-9-CM
290.11	Presenile dementia, with delirium	Diagnosis	ICD-9-CM
290.12	Presenile dementia, with delusional features	Diagnosis	ICD-9-CM
290.13	Presenile dementia, with depressive features	Diagnosis	ICD-9-CM
290.2	Senile dementia with delusional or depressive features	Diagnosis	ICD-9-CM
290.20	Senile dementia with delusional features	Diagnosis	ICD-9-CM
290.21	Senile dementia with depressive features	Diagnosis	ICD-9-CM
290.3	Senile dementia with delirium	Diagnosis	ICD-9-CM
290.4	Vascular dementia	Diagnosis	ICD-9-CM
290.40	Vascular dementia, uncomplicated	Diagnosis	ICD-9-CM
290.41	Vascular dementia, with delirium	Diagnosis	ICD-9-CM
290.42	Vascular dementia, with delusions	Diagnosis	ICD-9-CM
290.43	Vascular dementia, with depressed mood	Diagnosis	ICD-9-CM
331	Other cerebral degenerations	Diagnosis	ICD-9-CM
331.0	Alzheimer's disease	Diagnosis	ICD-9-CM
331.1	Frontotemporal dementia	Diagnosis	ICD-9-CM
331.11	Pick's disease	Diagnosis	ICD-9-CM
331.19	Other frontotemporal dementia	Diagnosis	ICD-9-CM
331.2	Senile degeneration of brain	Diagnosis	ICD-9-CM
331.3	Communicating hydrocephalus	Diagnosis	ICD-9-CM
331.4	Obstructive hydrocephalus	Diagnosis	ICD-9-CM
331.5	Idiopathic normal pressure hydrocephalus (INPH)	Diagnosis	ICD-9-CM
331.6	Corticobasal degeneration	Diagnosis	ICD-9-CM
331.7	Cerebral degeneration in diseases classified elsewhere	Diagnosis	ICD-9-CM
331.8	Other cerebral degeneration	Diagnosis	ICD-9-CM
331.81	Reye's syndrome	Diagnosis	ICD-9-CM
331.82	Dementia with lewy bodies	Diagnosis	ICD-9-CM
331.83	Mild cognitive impairment, so stated	Diagnosis	ICD-9-CM
331.89	Other cerebral degeneration	Diagnosis	ICD-9-CM
331.9	Cerebral degeneration, unspecified	Diagnosis	ICD-9-CM
Diabetes			
250.0	Diabetes mellitus without mention of complication	Diagnosis	ICD-9-CM
250.00	Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.01	Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.02	Diabetes mellitus without mention of complication, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
250.03	Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.1	Diabetes with ketoacidosis	Diagnosis	ICD-9-CM
250.10	Diabetes with ketoacidosis, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.11	Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.12	Diabetes with ketoacidosis, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.13	Diabetes with ketoacidosis, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.2	Diabetes with hyperosmolarity	Diagnosis	ICD-9-CM
250.20	Diabetes with hyperosmolarity, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.21	Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.22	Diabetes with hyperosmolarity, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.23	Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.3	Diabetes with other coma	Diagnosis	ICD-9-CM
250.30	Diabetes with other coma, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.31	Diabetes with other coma, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.32	Diabetes with other coma, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.33	Diabetes with other coma, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.4	Diabetes with renal manifestations	Diagnosis	ICD-9-CM
250.40	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.41	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.42	Diabetes with renal manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.43	Diabetes with renal manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.5	Diabetes with ophthalmic manifestations	Diagnosis	ICD-9-CM
250.50	Diabetes with ophthalmic manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.51	Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.52	Diabetes with ophthalmic manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.53	Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.6	Diabetes with neurological manifestations	Diagnosis	ICD-9-CM
250.60	Diabetes with neurological manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.61	Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
250.62	Diabetes with neurological manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.63	Diabetes with neurological manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.7	Diabetes with peripheral circulatory disorders	Diagnosis	ICD-9-CM
250.70	Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.71	Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.72	Diabetes with peripheral circulatory disorders, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.73	Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.8	Diabetes with other specified manifestations	Diagnosis	ICD-9-CM
250.80	Diabetes with other specified manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.81	Diabetes with other specified manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.82	Diabetes with other specified manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.83	Diabetes with other specified manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.9	Diabetes with unspecified complication	Diagnosis	ICD-9-CM
250.90	Diabetes with unspecified complication, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.91	Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.92	Diabetes with unspecified complication, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.93	Diabetes with unspecified complication, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
357.2	Polyneuropathy in diabetes	Diagnosis	ICD-9-CM
362.0	Diabetic retinopathy	Diagnosis	ICD-9-CM
362.07	Diabetic macular edema	Diagnosis	ICD-9-CM
Dyslipidemia			
272.0	Pure hypercholesterolemia	Diagnosis	ICD-9-CM
272.1	Pure hyperglyceridemia	Diagnosis	ICD-9-CM
272.2	Mixed hyperlipidemia	Diagnosis	ICD-9-CM
272.3	Hyperchylomicronemia	Diagnosis	ICD-9-CM
272.4	Other and unspecified hyperlipidemia	Diagnosis	ICD-9-CM
272.5	Lipoprotein deficiencies	Diagnosis	ICD-9-CM
272.6	Lipodystrophy	Diagnosis	ICD-9-CM
272.7	Lipidoses	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
272.8	Other disorders of lipoid metabolism	Diagnosis	ICD-9-CM
272.9	Unspecified disorder of lipoid metabolism	Diagnosis	ICD-9-CM
Electroconvulsive therapy			
90870	Electroconvulsive therapy (includes necessary monitoring)	Procedure	CPT-4
90871	Electroconvulsive therapy (includes necessary monitoring); multiple seizures, per day	Procedure	CPT-4
Endocarditis, pericarditis, and myocarditis			
420.0	Acute pericarditis in diseases classified elsewhere	Diagnosis	ICD-9-CM
420.9	Other and unspecified acute pericarditis	Diagnosis	ICD-9-CM
420.90	Unspecified acute pericarditis	Diagnosis	ICD-9-CM
420.91	Acute idiopathic pericarditis	Diagnosis	ICD-9-CM
420.99	Other acute pericarditis	Diagnosis	ICD-9-CM
421.0	Acute and subacute bacterial endocarditis	Diagnosis	ICD-9-CM
421.1	Acute and subacute infective endocarditis in diseases classified elsewhere	Diagnosis	ICD-9-CM
421.9	Unspecified acute endocarditis	Diagnosis	ICD-9-CM
422.0	Acute myocarditis in diseases classified elsewhere	Diagnosis	ICD-9-CM
422.9	Other and unspecified acute myocarditis	Diagnosis	ICD-9-CM
422.90	Unspecified acute myocarditis	Diagnosis	ICD-9-CM
422.91	Idiopathic myocarditis	Diagnosis	ICD-9-CM
422.92	Septic myocarditis	Diagnosis	ICD-9-CM
422.93	Toxic myocarditis	Diagnosis	ICD-9-CM
422.99	Other acute myocarditis	Diagnosis	ICD-9-CM
Essential hypertension			
401	Essential hypertension	Diagnosis	ICD-9-CM
401.0	Essential hypertension, malignant	Diagnosis	ICD-9-CM
401.1	Essential hypertension, benign	Diagnosis	ICD-9-CM
401.9	Unspecified essential hypertension	Diagnosis	ICD-9-CM
Gastrointestinal hemorrhage			
531.0	Acute gastric ulcer with hemorrhage	Diagnosis	ICD-9-CM
531.2	Acute gastric ulcer with hemorrhage and perforation	Diagnosis	ICD-9-CM
531.4	Chronic or unspecified gastric ulcer with hemorrhage	Diagnosis	ICD-9-CM
531.6	Chronic or unspecified gastric ulcer with hemorrhage and perforation	Diagnosis	ICD-9-CM
532.0	Acute duodenal ulcer with hemorrhage	Diagnosis	ICD-9-CM
532.2	Acute duodenal ulcer with hemorrhage and perforation	Diagnosis	ICD-9-CM
532.4	Chronic or unspecified duodenal ulcer with hemorrhage	Diagnosis	ICD-9-CM
532.6	Chronic or unspecified duodenal ulcer with hemorrhage and perforation	Diagnosis	ICD-9-CM
533.0	Acute peptic ulcer, unspecified site, with hemorrhage	Diagnosis	ICD-9-CM
533.2	Acute peptic ulcer, unspecified site, with hemorrhage and perforation	Diagnosis	ICD-9-CM
533.4	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage	Diagnosis	ICD-9-CM
533.6	Chronic or unspecified peptic ulcer, unspecified site, with hemorrhage and perforation	Diagnosis	ICD-9-CM
534.0	Acute gastrojejunal ulcer with hemorrhage	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
534.2	Acute gastrojejunal ulcer with hemorrhage and perforation	Diagnosis	ICD-9-CM
534.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage	Diagnosis	ICD-9-CM
534.6	Chronic or unspecified gastrojejunal ulcer with hemorrhage and perforation	Diagnosis	ICD-9-CM
578.0	Hematemesis	Diagnosis	ICD-9-CM
578.1	Blood in stool	Diagnosis	ICD-9-CM
578.9	Hemorrhage of gastrointestinal tract, unspecified	Diagnosis	ICD-9-CM
Glaucoma			
365.0	Borderline glaucoma (glaucoma suspect)	Diagnosis	ICD-9-CM
365.00	Unspecified preglaucoma	Diagnosis	ICD-9-CM
365.01	Borderline glaucoma, open angle with borderline findings, low risk	Diagnosis	ICD-9-CM
365.02	Borderline glaucoma with anatomical narrow angle	Diagnosis	ICD-9-CM
365.03	Borderline glaucoma with steroid responders	Diagnosis	ICD-9-CM
365.04	Borderline glaucoma with ocular hypertension	Diagnosis	ICD-9-CM
365.05	Open angle with borderline findings, high risk	Diagnosis	ICD-9-CM
365.06	Primary angle closure without glaucoma damage	Diagnosis	ICD-9-CM
365.1	Open-angle glaucoma	Diagnosis	ICD-9-CM
365.10	Unspecified open-angle glaucoma	Diagnosis	ICD-9-CM
365.11	Primary open-angle glaucoma	Diagnosis	ICD-9-CM
365.12	Low tension open-angle glaucoma	Diagnosis	ICD-9-CM
365.13	Pigmentary open-angle glaucoma	Diagnosis	ICD-9-CM
365.14	Open-angle glaucoma of childhood	Diagnosis	ICD-9-CM
365.15	Residual stage of open angle glaucoma	Diagnosis	ICD-9-CM
365.2	Primary angle-closure glaucoma	Diagnosis	ICD-9-CM
365.20	Unspecified primary angle-closure glaucoma	Diagnosis	ICD-9-CM
365.21	Intermittent angle-closure glaucoma	Diagnosis	ICD-9-CM
365.22	Acute angle-closure glaucoma	Diagnosis	ICD-9-CM
365.23	Chronic angle-closure glaucoma	Diagnosis	ICD-9-CM
365.24	Residual stage of angle-closure glaucoma	Diagnosis	ICD-9-CM
365.3	Corticosteroid-induced glaucoma	Diagnosis	ICD-9-CM
365.31	Corticosteroid-induced glaucoma, glaucomatous stage	Diagnosis	ICD-9-CM
365.32	Corticosteroid-induced glaucoma, residual stage	Diagnosis	ICD-9-CM
365.4	Glaucoma associated with congenital anomalies, dystrophies, and systemic syndromes	Diagnosis	ICD-9-CM
365.41	Glaucoma associated with chamber angle anomalies	Diagnosis	ICD-9-CM
365.42	Glaucoma associated with anomalies of iris	Diagnosis	ICD-9-CM
365.43	Glaucoma associated with other anterior segment anomalies	Diagnosis	ICD-9-CM
365.44	Glaucoma associated with systemic syndromes	Diagnosis	ICD-9-CM
365.5	Glaucoma associated with disorders of the lens	Diagnosis	ICD-9-CM
365.51	Phacolytic glaucoma	Diagnosis	ICD-9-CM
365.52	Pseudoexfoliation glaucoma	Diagnosis	ICD-9-CM
365.59	Glaucoma associated with other lens disorders	Diagnosis	ICD-9-CM
365.6	Glaucoma associated with other ocular disorders	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
365.60	Glaucoma associated with unspecified ocular disorder	Diagnosis	ICD-9-CM
365.61	Glaucoma associated with pupillary block	Diagnosis	ICD-9-CM
365.62	Glaucoma associated with ocular inflammations	Diagnosis	ICD-9-CM
365.63	Glaucoma associated with vascular disorders of eye	Diagnosis	ICD-9-CM
365.64	Glaucoma associated with tumors or cysts	Diagnosis	ICD-9-CM
365.65	Glaucoma associated with ocular trauma	Diagnosis	ICD-9-CM
365.7	Glaucoma stage	Diagnosis	ICD-9-CM
365.70	Glaucoma stage, unspecified	Diagnosis	ICD-9-CM
365.71	Mild stage glaucoma	Diagnosis	ICD-9-CM
365.72	Moderate stage glaucoma	Diagnosis	ICD-9-CM
365.73	Severe stage glaucoma	Diagnosis	ICD-9-CM
365.74	Indeterminate stage glaucoma	Diagnosis	ICD-9-CM
365.8	Other specified forms of glaucoma	Diagnosis	ICD-9-CM
365.81	Hypersecretion glaucoma	Diagnosis	ICD-9-CM
365.82	Glaucoma with increased episcleral venous pressure	Diagnosis	ICD-9-CM
365.83	Aqueous misdirection	Diagnosis	ICD-9-CM
365.89	Other specified glaucoma	Diagnosis	ICD-9-CM
365.9	Unspecified glaucoma	Diagnosis	ICD-9-CM
Gout			
274.0	Gouty arthropathy	Diagnosis	ICD-9-CM
274.00	Gouty arthropathy, unspecified	Diagnosis	ICD-9-CM
274.01	Acute gouty arthropathy	Diagnosis	ICD-9-CM
274.02	Chronic gouty arthropathy without mention of tophus (tophi)	Diagnosis	ICD-9-CM
274.03	Chronic gouty arthropathy with tophus (tophi)	Diagnosis	ICD-9-CM
274.1	Gouty nephropathy	Diagnosis	ICD-9-CM
274.10	Gouty nephropathy, unspecified	Diagnosis	ICD-9-CM
274.11	Uric acid nephrolithiasis	Diagnosis	ICD-9-CM
274.19	Other gouty nephropathy	Diagnosis	ICD-9-CM
274.8	Gout with other specified manifestations	Diagnosis	ICD-9-CM
274.81	Gouty tophi of ear	Diagnosis	ICD-9-CM
274.82	Gouty tophi of other sites	Diagnosis	ICD-9-CM
274.89	Gout with other specified manifestations	Diagnosis	ICD-9-CM
274.9	Gout, unspecified	Diagnosis	ICD-9-CM
Hallucination			
780.1	Hallucinations	Diagnosis	ICD-9-CM
Heart failure			
398.91	Rheumatic heart failure (congestive)	Diagnosis	ICD-9-CM
402.01	Malignant hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.11	Benign hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.91	Hypertensive heart disease, unspecified, with heart failure	Diagnosis	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	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
428.0	Congestive heart failure, unspecified	Diagnosis	ICD-9-CM
428.1	Left heart failure	Diagnosis	ICD-9-CM
428.2	Systolic heart failure	Diagnosis	ICD-9-CM
428.20	Unspecified systolic heart failure	Diagnosis	ICD-9-CM
428.21	Acute systolic heart failure	Diagnosis	ICD-9-CM
428.22	Chronic systolic heart failure	Diagnosis	ICD-9-CM
428.23	Acute on chronic systolic heart failure	Diagnosis	ICD-9-CM
428.3	Diastolic heart failure	Diagnosis	ICD-9-CM
428.30	Unspecified diastolic heart failure	Diagnosis	ICD-9-CM
428.31	Acute diastolic heart failure	Diagnosis	ICD-9-CM
428.32	Chronic diastolic heart failure	Diagnosis	ICD-9-CM
428.33	Acute on chronic diastolic heart failure	Diagnosis	ICD-9-CM
428.4	Combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.40	Unspecified combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.41	Acute combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.42	Chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.43	Acute on chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.9	Unspecified heart failure	Diagnosis	ICD-9-CM
Hypertensive heart and kidney diseases			
402	Hypertensive heart disease	Diagnosis	ICD-9-CM
402.0	Malignant hypertensive heart disease	Diagnosis	ICD-9-CM
402.00	Malignant hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
402.1	Benign hypertensive heart disease	Diagnosis	ICD-9-CM
402.10	Benign hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
402.9	Unspecified hypertensive heart disease	Diagnosis	ICD-9-CM
402.90	Unspecified hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
403	Hypertensive chronic kidney disease	Diagnosis	ICD-9-CM
403.0	Hypertensive chronic kidney disease, malignant	Diagnosis	ICD-9-CM
403.00	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
403.01	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
403.1	Hypertensive chronic kidney disease, benign	Diagnosis	ICD-9-CM
403.10	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.11	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
403.9	Hypertensive chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
403.90	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.91	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404	Hypertensive heart and chronic kidney disease	Diagnosis	ICD-9-CM
404.0	Hypertensive heart and chronic kidney disease, malignant	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
404.1	Hypertensive heart and chronic kidney disease, benign	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
404.9	Hypertensive heart and chronic kidney disease, unspecified	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
Hypothyroidism			
243	Congenital hypothyroidism	Diagnosis	ICD-9-CM
244.0	Postsurgical hypothyroidism	Diagnosis	ICD-9-CM
244.1	Other postablative hypothyroidism	Diagnosis	ICD-9-CM
244.2	Iodine hypothyroidism	Diagnosis	ICD-9-CM
244.3	Other iatrogenic hypothyroidism	Diagnosis	ICD-9-CM
244.8	Other specified acquired hypothyroidism	Diagnosis	ICD-9-CM
244.9	Unspecified hypothyroidism	Diagnosis	ICD-9-CM
Injury other than poisoning			
800.0	Closed fracture of vault of skull without mention of intracranial injury	Diagnosis	ICD-9-CM
800.00	Closed fracture of vault of skull without mention of intracranial injury, unspecified state of consciousness	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
800.01	Closed fracture of vault of skull without mention of intracranial injury, no loss of consciousness	Diagnosis	ICD-9-CM
800.02	Closed fracture of vault of skull without mention of intracranial injury, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
800.03	Closed fracture of vault of skull without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
800.06	Closed fracture of vault of skull without mention of intracranial injury, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
800.09	Closed fracture of vault of skull without mention of intracranial injury, unspecified concussion	Diagnosis	ICD-9-CM
800.1	Closed fracture of vault of skull with cerebral laceration and contusion	Diagnosis	ICD-9-CM
800.10	Closed fracture of vault of skull with cerebral laceration and contusion, unspecified state of consciousness	Diagnosis	ICD-9-CM
800.11	Closed fracture of vault of skull with cerebral laceration and contusion, no loss of consciousness	Diagnosis	ICD-9-CM
800.12	Closed fracture of vault of skull with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
800.13	Closed fracture of vault of skull with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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 level	Diagnosis	ICD-9-CM
800.16	Closed fracture of vault of skull with cerebral laceration and contusion, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
800.19	Closed fracture of vault of skull with cerebral laceration and contusion, unspecified concussion	Diagnosis	ICD-9-CM
800.2	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage	Diagnosis	ICD-9-CM
800.20	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
800.21	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
800.22	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
800.23	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
800.26	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
800.29	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
800.3	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage	Diagnosis	ICD-9-CM
800.30	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
800.31	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, no loss of consciousness	Diagnosis	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	Diagnosis	ICD-9-CM
800.33	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
800.36	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
800.39	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
800.4	Closed fracture of vault of skull with intercranial injury of other and unspecified nature	Diagnosis	ICD-9-CM
800.40	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, unspecified state of consciousness	Diagnosis	ICD-9-CM
800.41	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, no loss of consciousness	Diagnosis	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	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
800.43	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
800.49	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, unspecified concussion	Diagnosis	ICD-9-CM
800.5	Open fracture of vault of skull without mention of intracranial injury	Diagnosis	ICD-9-CM
800.50	Open fracture of vault of skull without mention of intracranial injury, unspecified state of consciousness	Diagnosis	ICD-9-CM
800.51	Open fracture of vault of skull without mention of intracranial injury, no loss of consciousness	Diagnosis	ICD-9-CM
800.52	Open fracture of vault of skull without mention of intracranial injury, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
800.53	Open fracture of vault of skull without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
800.56	Open fracture of vault of skull without mention of intracranial injury, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
800.59	Open fracture of vault of skull without mention of intracranial injury, unspecified concussion	Diagnosis	ICD-9-CM
800.6	Open fracture of vault of skull with cerebral laceration and contusion	Diagnosis	ICD-9-CM
800.60	Open fracture of vault of skull with cerebral laceration and contusion, unspecified state of consciousness	Diagnosis	ICD-9-CM
800.61	Open fracture of vault of skull with cerebral laceration and contusion, no loss of consciousness	Diagnosis	ICD-9-CM
800.62	Open fracture of vault of skull with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
800.63	Open fracture of vault of skull with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
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	Diagnosis	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	Diagnosis	ICD-9-CM
800.66	Open fracture of vault of skull with cerebral laceration and contusion, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
800.69	Open fracture of vault of skull with cerebral laceration and contusion, unspecified concussion	Diagnosis	ICD-9-CM
800.7	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage	Diagnosis	ICD-9-CM
800.70	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
800.71	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	Diagnosis	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	Diagnosis	ICD-9-CM
800.73	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
800.76	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
800.79	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
800.8	Open fracture of vault of skull with other and unspecified intracranial hemorrhage	Diagnosis	ICD-9-CM
800.80	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
800.81	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, no loss of consciousness	Diagnosis	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	Diagnosis	ICD-9-CM
800.83	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
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	Diagnosis	ICD-9-CM
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	Diagnosis	ICD-9-CM
800.86	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
800.89	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
800.9	Open fracture of vault of skull with intracranial injury of other and unspecified nature	Diagnosis	ICD-9-CM
800.90	Open fracture of vault of skull with intracranial injury of other and unspecified nature, unspecified state of consciousness	Diagnosis	ICD-9-CM
800.91	Open fracture of vault of skull with intracranial injury of other and unspecified nature, no loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
800.99	Open fracture of vault of skull with intracranial injury of other and unspecified nature, unspecified concussion	Diagnosis	ICD-9-CM
801.0	Closed fracture of base of skull without mention of intracranial injury	Diagnosis	ICD-9-CM
801.00	Closed fracture of base of skull without mention of intracranial injury, unspecified state of consciousness	Diagnosis	ICD-9-CM
801.01	Closed fracture of base of skull without mention of intracranial injury, no loss of consciousness	Diagnosis	ICD-9-CM
801.02	Closed fracture of base of skull without mention of intracranial injury, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
801.03	Closed fracture of base of skull without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
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	Diagnosis	ICD-9-CM
801.06	Closed fracture of base of skull without mention of intracranial injury, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
801.09	Closed fracture of base of skull without mention of intracranial injury, unspecified concussion	Diagnosis	ICD-9-CM
801.1	Closed fracture of base of skull with cerebral laceration and contusion	Diagnosis	ICD-9-CM
801.10	Closed fracture of base of skull with cerebral laceration and contusion, unspecified state of consciousness	Diagnosis	ICD-9-CM
801.11	Closed fracture of base of skull with cerebral laceration and contusion, no loss of consciousness	Diagnosis	ICD-9-CM
801.12	Closed fracture of base of skull with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
801.13	Closed fracture of base of skull with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
801.16	Closed fracture of base of skull with cerebral laceration and contusion, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
801.19	Closed fracture of base of skull with cerebral laceration and contusion, unspecified concussion	Diagnosis	ICD-9-CM
801.2	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage	Diagnosis	ICD-9-CM
801.20	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
801.21	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	Diagnosis	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	Diagnosis	ICD-9-CM
801.23	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
801.26	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
801.29	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
801.3	Closed fracture of base of skull with other and unspecified intracranial hemorrhage	Diagnosis	ICD-9-CM
801.30	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
801.31	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, no loss of consciousness	Diagnosis	ICD-9-CM
801.32	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
801.33	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
801.36	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
801.39	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
801.4	Closed fracture of base of skull with intracranial injury of other and unspecified nature	Diagnosis	ICD-9-CM
801.40	Closed fracture of base of skull with intracranial injury of other and unspecified nature, unspecified state of consciousness	Diagnosis	ICD-9-CM
801.41	Closed fracture of base of skull with intracranial injury of other and unspecified nature, no loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
801.49	Closed fracture of base of skull with intracranial injury of other and unspecified nature, unspecified concussion	Diagnosis	ICD-9-CM
801.5	Open fracture of base of skull without mention of intracranial injury	Diagnosis	ICD-9-CM
801.50	Open fracture of base of skull without mention of intracranial injury, unspecified state of consciousness	Diagnosis	ICD-9-CM
801.51	Open fracture of base of skull without mention of intracranial injury, no loss of consciousness	Diagnosis	ICD-9-CM
801.52	Open fracture of base of skull without mention of intracranial injury, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
801.53	Open fracture of base of skull without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
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	Diagnosis	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	Diagnosis	ICD-9-CM
801.56	Open fracture of base of skull without mention of intracranial injury, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
801.59	Open fracture of base of skull without mention of intracranial injury, unspecified concussion	Diagnosis	ICD-9-CM
801.6	Open fracture of base of skull with cerebral laceration and contusion	Diagnosis	ICD-9-CM
801.60	Open fracture of base of skull with cerebral laceration and contusion, unspecified state of consciousness	Diagnosis	ICD-9-CM
801.61	Open fracture of base of skull with cerebral laceration and contusion, no loss of consciousness	Diagnosis	ICD-9-CM
801.62	Open fracture of base of skull with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
801.63	Open fracture of base of skull with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
801.66	Open fracture of base of skull with cerebral laceration and contusion, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
801.69	Open fracture of base of skull with cerebral laceration and contusion, unspecified concussion	Diagnosis	ICD-9-CM
801.7	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
801.70	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
801.71	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	Diagnosis	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	Diagnosis	ICD-9-CM
801.73	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
801.76	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
801.79	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
801.8	Open fracture of base of skull with other and unspecified intracranial hemorrhage	Diagnosis	ICD-9-CM
801.80	Open fracture of base of skull with other and unspecified intracranial hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
801.81	Open fracture of base of skull with other and unspecified intracranial hemorrhage, no loss of consciousness	Diagnosis	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	Diagnosis	ICD-9-CM
801.83	Open fracture of base of skull with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
801.86	Open fracture of base of skull with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
801.89	Open fracture of base of skull with other and unspecified intracranial hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
801.9	Open fracture of base of skull with intracranial injury of other and unspecified nature	Diagnosis	ICD-9-CM
801.90	Open fracture of base of skull with intracranial injury of other and unspecified nature, unspecified state of consciousness	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
801.91	Open fracture of base of skull with intracranial injury of other and unspecified nature, no loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
801.99	Open fracture of base of skull with intracranial injury of other and unspecified nature, unspecified concussion	Diagnosis	ICD-9-CM
802.0	Nasal bones, closed fracture	Diagnosis	ICD-9-CM
802.1	Nasal bones, open fracture	Diagnosis	ICD-9-CM
802.2	Mandible, closed fracture	Diagnosis	ICD-9-CM
802.20	Closed fracture of unspecified site of mandible	Diagnosis	ICD-9-CM
802.21	Closed fracture of condylar process of mandible	Diagnosis	ICD-9-CM
802.22	Closed fracture of subcondylar process of mandible	Diagnosis	ICD-9-CM
802.23	Closed fracture of coronoid process of mandible	Diagnosis	ICD-9-CM
802.24	Closed fracture of unspecified part of ramus of mandible	Diagnosis	ICD-9-CM
802.25	Closed fracture of angle of jaw	Diagnosis	ICD-9-CM
802.26	Closed fracture of symphysis of body of mandible	Diagnosis	ICD-9-CM
802.27	Closed fracture of alveolar border of body of mandible	Diagnosis	ICD-9-CM
802.28	Closed fracture of other and unspecified part of body of mandible	Diagnosis	ICD-9-CM
802.29	Closed fracture of multiple sites of mandible	Diagnosis	ICD-9-CM
802.3	Mandible, open fracture	Diagnosis	ICD-9-CM
802.30	Open fracture of unspecified site of mandible	Diagnosis	ICD-9-CM
802.31	Open fracture of condylar process of mandible	Diagnosis	ICD-9-CM
802.32	Open fracture of subcondylar process of mandible	Diagnosis	ICD-9-CM
802.33	Open fracture of coronoid process of mandible	Diagnosis	ICD-9-CM
802.34	Open fracture of unspecified part of ramus of mandible	Diagnosis	ICD-9-CM
802.35	Open fracture of angle of jaw	Diagnosis	ICD-9-CM
802.36	Open fracture of symphysis of body of mandible	Diagnosis	ICD-9-CM
802.37	Open fracture of alveolar border of body of mandible	Diagnosis	ICD-9-CM
802.38	Open fracture of other and unspecified part of body of mandible	Diagnosis	ICD-9-CM
802.39	Open fracture of multiple sites of mandible	Diagnosis	ICD-9-CM
802.4	Malar and maxillary bones, closed fracture	Diagnosis	ICD-9-CM
802.5	Malar and maxillary bones, open fracture	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
802.6	Orbital floor (blow-out), closed fracture	Diagnosis	ICD-9-CM
802.7	Orbital floor (blow-out), open fracture	Diagnosis	ICD-9-CM
802.8	Other facial bones, closed fracture	Diagnosis	ICD-9-CM
802.9	Other facial bones, open fracture	Diagnosis	ICD-9-CM
803.0	Other closed skull fracture without mention of intracranial injury	Diagnosis	ICD-9-CM
803.00	Other closed skull fracture without mention of intracranial injury, unspecified state of consciousness	Diagnosis	ICD-9-CM
803.01	Other closed skull fracture without mention of intracranial injury, no loss of consciousness	Diagnosis	ICD-9-CM
803.02	Other closed skull fracture without mention of intracranial injury, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
803.03	Other closed skull fracture without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
803.06	Other closed skull fracture without mention of intracranial injury, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
803.09	Other closed skull fracture without mention of intracranial injury, unspecified concussion	Diagnosis	ICD-9-CM
803.1	Other closed skull fracture with cerebral laceration and contusion	Diagnosis	ICD-9-CM
803.10	Other closed skull fracture with cerebral laceration and contusion, unspecified state of consciousness	Diagnosis	ICD-9-CM
803.11	Other closed skull fracture with cerebral laceration and contusion, no loss of consciousness	Diagnosis	ICD-9-CM
803.12	Other closed skull fracture with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
803.13	Other closed skull fracture with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
803.16	Other closed skull fracture with cerebral laceration and contusion, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
803.19	Other closed skull fracture with cerebral laceration and contusion, unspecified concussion	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
803.2	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage	Diagnosis	ICD-9-CM
803.20	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
803.21	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	Diagnosis	ICD-9-CM
803.22	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
803.23	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
803.26	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
803.29	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
803.3	Closed skull fracture with other and unspecified intracranial hemorrhage	Diagnosis	ICD-9-CM
803.30	Other closed skull fracture with other and unspecified intracranial hemorrhage, unspecified state of unconsciousness	Diagnosis	ICD-9-CM
803.31	Other closed skull fracture with other and unspecified intracranial hemorrhage, no loss of consciousness	Diagnosis	ICD-9-CM
803.32	Other closed skull fracture with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
803.33	Other closed skull fracture with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
803.36	Other closed skull fracture with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
803.39	Other closed skull fracture with other and unspecified intracranial hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
803.4	Other closed skull fracture with intracranial injury of other and unspecified nature	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
803.40	Other closed skull fracture with intracranial injury of other and unspecified nature, unspecified state of consciousness	Diagnosis	ICD-9-CM
803.41	Other closed skull fracture with intracranial injury of other and unspecified nature, no loss of consciousness	Diagnosis	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	Diagnosis	ICD-9-CM
803.43	Other closed skull fracture with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
803.46	Other closed skull fracture with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
803.49	Other closed skull fracture with intracranial injury of other and unspecified nature, unspecified concussion	Diagnosis	ICD-9-CM
803.5	Other open skull fracture without mention of intracranial injury	Diagnosis	ICD-9-CM
803.50	Other open skull fracture without mention of injury, state of consciousness unspecified	Diagnosis	ICD-9-CM
803.51	Other open skull fracture without mention of intracranial injury, no loss of consciousness	Diagnosis	ICD-9-CM
803.52	Other open skull fracture without mention of intracranial injury, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
803.53	Other open skull fracture without mention of intracranial injury, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
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	Diagnosis	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	Diagnosis	ICD-9-CM
803.56	Other open skull fracture without mention of intracranial injury, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
803.59	Other open skull fracture without mention of intracranial injury, unspecified concussion	Diagnosis	ICD-9-CM
803.6	Other open skull fracture with cerebral laceration and contusion	Diagnosis	ICD-9-CM
803.60	Other open skull fracture with cerebral laceration and contusion, unspecified state of consciousness	Diagnosis	ICD-9-CM
803.61	Other open skull fracture with cerebral laceration and contusion, no loss of consciousness	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
803.62	Other open skull fracture with cerebral laceration and contusion, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
803.63	Other open skull fracture with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
803.66	Other open skull fracture with cerebral laceration and contusion, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
803.69	Other open skull fracture with cerebral laceration and contusion, unspecified concussion	Diagnosis	ICD-9-CM
803.7	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage	Diagnosis	ICD-9-CM
803.70	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
803.71	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	Diagnosis	ICD-9-CM
803.72	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
803.73	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
803.76	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
803.79	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
803.8	Other open skull fracture with other and unspecified intracranial hemorrhage	Diagnosis	ICD-9-CM
803.80	Other open skull fracture with other and unspecified intracranial hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
803.81	Other open skull fracture with other and unspecified intracranial hemorrhage, no loss of consciousness	Diagnosis	ICD-9-CM
803.82	Other open skull fracture with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
803.83	Other open skull fracture with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness	Diagnosis	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 conscious level	Diagnosis	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	Diagnosis	ICD-9-CM
803.86	Other open skull fracture with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
803.89	Other open skull fracture with other and unspecified intracranial hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
803.9	Other open skull fracture with intracranial injury of other and unspecified nature	Diagnosis	ICD-9-CM
803.90	Other open skull fracture with intracranial injury of other and unspecified nature, unspecified state of consciousness	Diagnosis	ICD-9-CM
803.91	Other open skull fracture with intracranial injury of other and unspecified nature, no loss of consciousness	Diagnosis	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	Diagnosis	ICD-9-CM
803.93	Other open skull fracture with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
803.96	Other open skull fracture with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
803.99	Other open skull fracture with intracranial injury of other and unspecified nature, unspecified concussion	Diagnosis	ICD-9-CM
804.0	Closed fractures involving skull or face with other bones, without mention of intracranial injury	Diagnosis	ICD-9-CM
804.00	Closed fractures involving skull or face with other bones, without mention of intracranial injury, unspecified state of consciousness	Diagnosis	ICD-9-CM
804.01	Closed fractures involving skull or face with other bones, without mention of intracranial injury, no loss of consciousness	Diagnosis	ICD-9-CM
804.02	Closed fractures involving skull or face with other bones, without mention of intracranial injury, brief (less than one hour) loss of consciousness	Diagnosis	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	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
804.09	Closed fractures involving skull of face with other bones, without mention of intracranial injury, unspecified concussion	Diagnosis	ICD-9-CM
804.1	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion	Diagnosis	ICD-9-CM
804.10	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, unspecified state of consciousness	Diagnosis	ICD-9-CM
804.11	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, no loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
804.19	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, unspecified concussion	Diagnosis	ICD-9-CM
804.2	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage	Diagnosis	ICD-9-CM
804.20	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
804.21	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	Diagnosis	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	Diagnosis	ICD-9-CM
804.23	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
804.29	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
804.3	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage	Diagnosis	ICD-9-CM
804.30	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
804.31	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, no loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
804.39	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
804.4	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
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	Diagnosis	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	Diagnosis	ICD-9-CM
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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
804.49	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, unspecified concussion	Diagnosis	ICD-9-CM
804.5	Open fractures involving skull or face with other bones, without mention of intracranial injury	Diagnosis	ICD-9-CM
804.50	Open fractures involving skull or face with other bones, without mention of intracranial injury, unspecified state of consciousness	Diagnosis	ICD-9-CM
804.51	Open fractures involving skull or face with other bones, without mention of intracranial injury, no loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
804.59	Open fractures involving skull or face with other bones, without mention of intracranial injury, unspecified concussion	Diagnosis	ICD-9-CM
804.6	Open fractures involving skull or face with other bones, with cerebral laceration and contusion	Diagnosis	ICD-9-CM
804.60	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, unspecified state of consciousness	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
804.61	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, no loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
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	Diagnosis	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	Diagnosis	ICD-9-CM
804.69	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, unspecified concussion	Diagnosis	ICD-9-CM
804.7	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage	Diagnosis	ICD-9-CM
804.70	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
804.71	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
804.79	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
804.8	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
804.80	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, unspecified state of consciousness	Diagnosis	ICD-9-CM
804.81	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, no loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
804.86	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
804.89	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, unspecified concussion	Diagnosis	ICD-9-CM
804.9	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
804.99	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, unspecified concussion	Diagnosis	ICD-9-CM
805.0	Closed fracture of cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.00	Closed fracture of cervical vertebra, unspecified level without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.01	Closed fracture of first cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.02	Closed fracture of second cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.03	Closed fracture of third cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.04	Closed fracture of fourth cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.05	Closed fracture of fifth cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.06	Closed fracture of sixth cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.07	Closed fracture of seventh cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.08	Closed fracture of multiple cervical vertebrae without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.1	Open fracture of cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.10	Open fracture of cervical vertebra, unspecified level without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.11	Open fracture of first cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.12	Open fracture of second cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.13	Open fracture of third cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.14	Open fracture of fourth cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.15	Open fracture of fifth cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.16	Open fracture of sixth cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.17	Open fracture of seventh cervical vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.18	Open fracture of multiple cervical vertebrae without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.2	Closed fracture of dorsal (thoracic) vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.3	Open fracture of dorsal (thoracic) vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.4	Closed fracture of lumbar vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.5	Open fracture of lumbar vertebra without mention of spinal cord injury	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
805.6	Closed fracture of sacrum and coccyx without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.7	Open fracture of sacrum and coccyx without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.8	Closed fracture of unspecified part of vertebral column without mention of spinal cord injury	Diagnosis	ICD-9-CM
805.9	Open fracture of unspecified part of vertebral column without mention of spinal cord injury	Diagnosis	ICD-9-CM
806.0	Closed fracture of cervical vertebra with spinal cord injury	Diagnosis	ICD-9-CM
806.00	Closed fracture of C1-C4 level with unspecified spinal cord injury	Diagnosis	ICD-9-CM
806.01	Closed fracture of C1-C4 level with complete lesion of cord	Diagnosis	ICD-9-CM
806.02	Closed fracture of C1-C4 level with anterior cord syndrome	Diagnosis	ICD-9-CM
806.03	Closed fracture of C1-C4 level with central cord syndrome	Diagnosis	ICD-9-CM
806.04	Closed fracture of C1-C4 level with other specified spinal cord injury	Diagnosis	ICD-9-CM
806.05	Closed fracture of C5-C7 level with unspecified spinal cord injury	Diagnosis	ICD-9-CM
806.06	Closed fracture of C5-C7 level with complete lesion of cord	Diagnosis	ICD-9-CM
806.07	Closed fracture of C5-C7 level with anterior cord syndrome	Diagnosis	ICD-9-CM
806.08	Closed fracture of C5-C7 level with central cord syndrome	Diagnosis	ICD-9-CM
806.09	Closed fracture of C5-C7 level with other specified spinal cord injury	Diagnosis	ICD-9-CM
806.1	Open fracture of cervical vertebra with spinal cord injury	Diagnosis	ICD-9-CM
806.10	Open fracture of C1-C4 level with unspecified spinal cord injury	Diagnosis	ICD-9-CM
806.11	Open fracture of C1-C4 level with complete lesion of cord	Diagnosis	ICD-9-CM
806.12	Open fracture of C1-C4 level with anterior cord syndrome	Diagnosis	ICD-9-CM
806.13	Open fracture of C1-C4 level with central cord syndrome	Diagnosis	ICD-9-CM
806.14	Open fracture of C1-C4 level with other specified spinal cord injury	Diagnosis	ICD-9-CM
806.15	Open fracture of C5-C7 level with unspecified spinal cord injury	Diagnosis	ICD-9-CM
806.16	Open fracture of C5-C7 level with complete lesion of cord	Diagnosis	ICD-9-CM
806.17	Open fracture of C5-C7 level with anterior cord syndrome	Diagnosis	ICD-9-CM
806.18	Open fracture of C5-C7 level with central cord syndrome	Diagnosis	ICD-9-CM
806.19	Open fracture of C5-C7 level with other specified spinal cord injury	Diagnosis	ICD-9-CM
806.2	Closed fracture of dorsal (thoracic) vertebra with spinal cord injury	Diagnosis	ICD-9-CM
806.20	Closed fracture of T1-T6 level with unspecified spinal cord injury	Diagnosis	ICD-9-CM
806.21	Closed fracture of T1-T6 level with complete lesion of cord	Diagnosis	ICD-9-CM
806.22	Closed fracture of T1-T6 level with anterior cord syndrome	Diagnosis	ICD-9-CM
806.23	Closed fracture of T1-T6 level with central cord syndrome	Diagnosis	ICD-9-CM
806.24	Closed fracture of T1-T6 level with other specified spinal cord injury	Diagnosis	ICD-9-CM
806.25	Closed fracture of T7-T12 level with unspecified spinal cord injury	Diagnosis	ICD-9-CM
806.26	Closed fracture of T7-T12 level with complete lesion of cord	Diagnosis	ICD-9-CM
806.27	Closed fracture of T7-T12 level with anterior cord syndrome	Diagnosis	ICD-9-CM
806.28	Closed fracture of T7-T12 level with central cord syndrome	Diagnosis	ICD-9-CM
806.29	Closed fracture of T7-T12 level with other specified spinal cord injury	Diagnosis	ICD-9-CM
806.3	Open fracture of dorsal vertebra with spinal cord injury	Diagnosis	ICD-9-CM
806.30	Open fracture of T1-T6 level with unspecified spinal cord injury	Diagnosis	ICD-9-CM
806.31	Open fracture of T1-T6 level with complete lesion of cord	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
806.32	Open fracture of T1-T6 level with anterior cord syndrome	Diagnosis	ICD-9-CM
806.33	Open fracture of T1-T6 level with central cord syndrome	Diagnosis	ICD-9-CM
806.34	Open fracture of T1-T6 level with other specified spinal cord injury	Diagnosis	ICD-9-CM
806.35	Open fracture of T7-T12 level with unspecified spinal cord injury	Diagnosis	ICD-9-CM
806.36	Open fracture of T7-T12 level with complete lesion of cord	Diagnosis	ICD-9-CM
806.37	Open fracture of T7-T12 level with anterior cord syndrome	Diagnosis	ICD-9-CM
806.38	Open fracture of T7-T12 level with central cord syndrome	Diagnosis	ICD-9-CM
806.39	Open fracture of T7-T12 level with other specified spinal cord injury	Diagnosis	ICD-9-CM
806.4	Closed fracture of lumbar spine with spinal cord injury	Diagnosis	ICD-9-CM
806.5	Open fracture of lumbar spine with spinal cord injury	Diagnosis	ICD-9-CM
806.6	Closed fracture of sacrum and coccyx with spinal cord injury	Diagnosis	ICD-9-CM
806.60	Closed fracture of sacrum and coccyx with unspecified spinal cord injury	Diagnosis	ICD-9-CM
806.61	Closed fracture of sacrum and coccyx with complete cauda equina lesion	Diagnosis	ICD-9-CM
806.62	Closed fracture of sacrum and coccyx with other cauda equina injury	Diagnosis	ICD-9-CM
806.69	Closed fracture of sacrum and coccyx with other spinal cord injury	Diagnosis	ICD-9-CM
806.7	Open fracture of sacrum and coccyx with spinal cord injury	Diagnosis	ICD-9-CM
806.70	Open fracture of sacrum and coccyx with unspecified spinal cord injury	Diagnosis	ICD-9-CM
806.71	Open fracture of sacrum and coccyx with complete cauda equina lesion	Diagnosis	ICD-9-CM
806.72	Open fracture of sacrum and coccyx with other cauda equina injury	Diagnosis	ICD-9-CM
806.79	Open fracture of sacrum and coccyx with other spinal cord injury	Diagnosis	ICD-9-CM
806.8	Closed fracture of unspecified vertebra with spinal cord injury	Diagnosis	ICD-9-CM
806.9	Open fracture of unspecified vertebra with spinal cord injury	Diagnosis	ICD-9-CM
807.0	Closed fracture of rib(s)	Diagnosis	ICD-9-CM
807.00	Closed fracture of rib(s), unspecified	Diagnosis	ICD-9-CM
807.01	Closed fracture of one rib	Diagnosis	ICD-9-CM
807.02	Closed fracture of two ribs	Diagnosis	ICD-9-CM
807.03	Closed fracture of three ribs	Diagnosis	ICD-9-CM
807.04	Closed fracture of four ribs	Diagnosis	ICD-9-CM
807.05	Closed fracture of five ribs	Diagnosis	ICD-9-CM
807.06	Closed fracture of six ribs	Diagnosis	ICD-9-CM
807.07	Closed fracture of seven ribs	Diagnosis	ICD-9-CM
807.08	Closed fracture of eight or more ribs	Diagnosis	ICD-9-CM
807.09	Closed fracture of multiple ribs, unspecified	Diagnosis	ICD-9-CM
807.1	Open fracture of rib(s)	Diagnosis	ICD-9-CM
807.10	Open fracture of rib(s), unspecified	Diagnosis	ICD-9-CM
807.11	Open fracture of one rib	Diagnosis	ICD-9-CM
807.12	Open fracture of two ribs	Diagnosis	ICD-9-CM
807.13	Open fracture of three ribs	Diagnosis	ICD-9-CM
807.14	Open fracture of four ribs	Diagnosis	ICD-9-CM
807.15	Open fracture of five ribs	Diagnosis	ICD-9-CM
807.16	Open fracture of six ribs	Diagnosis	ICD-9-CM
807.17	Open fracture of seven ribs	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
807.18	Open fracture of eight or more ribs	Diagnosis	ICD-9-CM
807.19	Open fracture of multiple ribs, unspecified	Diagnosis	ICD-9-CM
807.2	Closed fracture of sternum	Diagnosis	ICD-9-CM
807.3	Open fracture of sternum	Diagnosis	ICD-9-CM
807.4	Flail chest	Diagnosis	ICD-9-CM
807.5	Closed fracture of larynx and trachea	Diagnosis	ICD-9-CM
807.6	Open fracture of larynx and trachea	Diagnosis	ICD-9-CM
808.0	Closed fracture of acetabulum	Diagnosis	ICD-9-CM
808.1	Open fracture of acetabulum	Diagnosis	ICD-9-CM
808.2	Closed fracture of pubis	Diagnosis	ICD-9-CM
808.3	Open fracture of pubis	Diagnosis	ICD-9-CM
808.4	Closed fracture of other specified part of pelvis	Diagnosis	ICD-9-CM
808.41	Closed fracture of ilium	Diagnosis	ICD-9-CM
808.42	Closed fracture of ischium	Diagnosis	ICD-9-CM
808.43	Multiple closed pelvic fractures with disruption of pelvic circle	Diagnosis	ICD-9-CM
808.44	Multiple closed pelvic fractures without disruption of pelvic circle	Diagnosis	ICD-9-CM
808.49	Closed fracture of other specified part of pelvis	Diagnosis	ICD-9-CM
808.5	Open fracture of other specified part of pelvis	Diagnosis	ICD-9-CM
808.51	Open fracture of ilium	Diagnosis	ICD-9-CM
808.52	Open fracture of ischium	Diagnosis	ICD-9-CM
808.53	Multiple open pelvic fractures with disruption of pelvic circle	Diagnosis	ICD-9-CM
808.54	Multiple open pelvic fractures without disruption of pelvic circle	Diagnosis	ICD-9-CM
808.59	Open fracture of other specified part of pelvis	Diagnosis	ICD-9-CM
808.8	Unspecified closed fracture of pelvis	Diagnosis	ICD-9-CM
808.9	Unspecified open fracture of pelvis	Diagnosis	ICD-9-CM
809.0	Fracture of bones of trunk, closed	Diagnosis	ICD-9-CM
809.1	Fracture of bones of trunk, open	Diagnosis	ICD-9-CM
810.0	Closed fracture of clavicle	Diagnosis	ICD-9-CM
810.00	Unspecified part of closed fracture of clavicle	Diagnosis	ICD-9-CM
810.01	Closed fracture of sternal end of clavicle	Diagnosis	ICD-9-CM
810.02	Closed fracture of shaft of clavicle	Diagnosis	ICD-9-CM
810.03	Closed fracture of acromial end of clavicle	Diagnosis	ICD-9-CM
810.1	Open fracture of clavicle	Diagnosis	ICD-9-CM
810.10	Unspecified part of open fracture of clavicle	Diagnosis	ICD-9-CM
810.11	Open fracture of sternal end of clavicle	Diagnosis	ICD-9-CM
810.12	Open fracture of shaft of clavicle	Diagnosis	ICD-9-CM
810.13	Open fracture of acromial end of clavicle	Diagnosis	ICD-9-CM
811.0	Closed fracture of scapula	Diagnosis	ICD-9-CM
811.00	Closed fracture of unspecified part of scapula	Diagnosis	ICD-9-CM
811.01	Closed fracture of acromial process of scapula	Diagnosis	ICD-9-CM
811.02	Closed fracture of coracoid process of scapula	Diagnosis	ICD-9-CM
811.03	Closed fracture of glenoid cavity and neck of scapula	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
811.09	Closed fracture of other part of scapula	Diagnosis	ICD-9-CM
811.1	Open fracture of scapula	Diagnosis	ICD-9-CM
811.10	Open fracture of unspecified part of scapula	Diagnosis	ICD-9-CM
811.11	Open fracture of acromial process of scapula	Diagnosis	ICD-9-CM
811.12	Open fracture of coracoid process	Diagnosis	ICD-9-CM
811.13	Open fracture of glenoid cavity and neck of scapula	Diagnosis	ICD-9-CM
811.19	Open fracture of other part of scapula	Diagnosis	ICD-9-CM
812.0	Closed fracture of upper end of humerus	Diagnosis	ICD-9-CM
812.00	Closed fracture of unspecified part of upper end of humerus	Diagnosis	ICD-9-CM
812.01	Closed fracture of surgical neck of humerus	Diagnosis	ICD-9-CM
812.02	Closed fracture of anatomical neck of humerus	Diagnosis	ICD-9-CM
812.03	Closed fracture of greater tuberosity of humerus	Diagnosis	ICD-9-CM
812.09	Other closed fractures of upper end of humerus	Diagnosis	ICD-9-CM
812.1	Open fracture of upper end of humerus	Diagnosis	ICD-9-CM
812.10	Open fracture of unspecified part of upper end of humerus	Diagnosis	ICD-9-CM
812.11	Open fracture of surgical neck of humerus	Diagnosis	ICD-9-CM
812.12	Open fracture of anatomical neck of humerus	Diagnosis	ICD-9-CM
812.13	Open fracture of greater tuberosity of humerus	Diagnosis	ICD-9-CM
812.19	Other open fracture of upper end of humerus	Diagnosis	ICD-9-CM
812.2	Closed fracture of shaft or unspecified part of humerus	Diagnosis	ICD-9-CM
812.20	Closed fracture of unspecified part of humerus	Diagnosis	ICD-9-CM
812.21	Closed fracture of shaft of humerus	Diagnosis	ICD-9-CM
812.3	Open fracture of shaft or unspecified part of humerus	Diagnosis	ICD-9-CM
812.30	Open fracture of unspecified part of humerus	Diagnosis	ICD-9-CM
812.31	Open fracture of shaft of humerus	Diagnosis	ICD-9-CM
812.4	Closed fracture of lower end of humerus	Diagnosis	ICD-9-CM
812.40	Closed fracture of unspecified part of lower end of humerus	Diagnosis	ICD-9-CM
812.41	Closed fracture of supracondylar humerus	Diagnosis	ICD-9-CM
812.42	Closed fracture of lateral condyle of humerus	Diagnosis	ICD-9-CM
812.43	Closed fracture of medial condyle of humerus	Diagnosis	ICD-9-CM
812.44	Closed fracture of unspecified condyle(s) of humerus	Diagnosis	ICD-9-CM
812.49	Other closed fracture of lower end of humerus	Diagnosis	ICD-9-CM
812.5	Open fracture of lower end of humerus	Diagnosis	ICD-9-CM
812.50	Open fracture of unspecified part of lower end of humerus	Diagnosis	ICD-9-CM
812.51	Open fracture of supracondylar humerus	Diagnosis	ICD-9-CM
812.52	Open fracture of lateral condyle of humerus	Diagnosis	ICD-9-CM
812.53	Open fracture of medial condyle of humerus	Diagnosis	ICD-9-CM
812.54	Open fracture of unspecified condyle(s) of humerus	Diagnosis	ICD-9-CM
812.59	Other open fracture of lower end of humerus	Diagnosis	ICD-9-CM
813.0	Closed fracture of upper end of radius and ulna	Diagnosis	ICD-9-CM
813.00	Unspecified fracture of radius and ulna, upper end of forearm, closed	Diagnosis	ICD-9-CM
813.01	Closed fracture of olecranon process of ulna	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
813.02	Closed fracture of coronoid process of ulna	Diagnosis	ICD-9-CM
813.03	Closed Monteggia's fracture	Diagnosis	ICD-9-CM
813.04	Other and unspecified closed fractures of proximal end of ulna (alone)	Diagnosis	ICD-9-CM
813.05	Closed fracture of head of radius	Diagnosis	ICD-9-CM
813.06	Closed fracture of neck of radius	Diagnosis	ICD-9-CM
813.07	Other and unspecified closed fractures of proximal end of radius (alone)	Diagnosis	ICD-9-CM
813.08	Closed fracture of radius with ulna, upper end (any part)	Diagnosis	ICD-9-CM
813.1	Open fracture of upper end of radius and ulna	Diagnosis	ICD-9-CM
813.10	Unspecified open fracture of upper end of forearm	Diagnosis	ICD-9-CM
813.11	Open fracture of olecranon process of ulna	Diagnosis	ICD-9-CM
813.12	Open fracture of coronoid process of ulna	Diagnosis	ICD-9-CM
813.13	Open Monteggia's fracture	Diagnosis	ICD-9-CM
813.14	Other and unspecified open fractures of proximal end of ulna (alone)	Diagnosis	ICD-9-CM
813.15	Open fracture of head of radius	Diagnosis	ICD-9-CM
813.16	Open fracture of neck of radius	Diagnosis	ICD-9-CM
813.17	Other and unspecified open fractures of proximal end of radius (alone)	Diagnosis	ICD-9-CM
813.18	Open fracture of radius with ulna, upper end (any part)	Diagnosis	ICD-9-CM
813.2	Closed fracture of shaft of radius and ulna	Diagnosis	ICD-9-CM
813.20	Unspecified closed fracture of shaft of radius or ulna	Diagnosis	ICD-9-CM
813.21	Closed fracture of shaft of radius (alone)	Diagnosis	ICD-9-CM
813.22	Closed fracture of shaft of ulna (alone)	Diagnosis	ICD-9-CM
813.23	Closed fracture of shaft of radius with ulna	Diagnosis	ICD-9-CM
813.3	Open fracture of shaft of radius and ulna	Diagnosis	ICD-9-CM
813.30	Unspecified open fracture of shaft of radius or ulna	Diagnosis	ICD-9-CM
813.31	Open fracture of shaft of radius (alone)	Diagnosis	ICD-9-CM
813.32	Open fracture of shaft of ulna (alone)	Diagnosis	ICD-9-CM
813.33	Open fracture of shaft of radius with ulna	Diagnosis	ICD-9-CM
813.4	Closed fracture of lower end of radius and ulna	Diagnosis	ICD-9-CM
813.40	Unspecified closed fracture of lower end of forearm	Diagnosis	ICD-9-CM
813.41	Closed Colles' fracture	Diagnosis	ICD-9-CM
813.42	Other closed fractures of distal end of radius (alone)	Diagnosis	ICD-9-CM
813.43	Closed fracture of distal end of ulna (alone)	Diagnosis	ICD-9-CM
813.44	Closed fracture of lower end of radius with ulna	Diagnosis	ICD-9-CM
813.45	Torus fracture of radius (alone)	Diagnosis	ICD-9-CM
813.46	Torus fracture of ulna (alone)	Diagnosis	ICD-9-CM
813.47	Torus fracture of radius and ulna	Diagnosis	ICD-9-CM
813.5	Open fracture of lower end of radius and ulna	Diagnosis	ICD-9-CM
813.50	Unspecified open fracture of lower end of forearm	Diagnosis	ICD-9-CM
813.51	Open Colles' fracture	Diagnosis	ICD-9-CM
813.52	Other open fractures of distal end of radius (alone)	Diagnosis	ICD-9-CM
813.53	Open fracture of distal end of ulna (alone)	Diagnosis	ICD-9-CM
813.54	Open fracture of lower end of radius with ulna	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
813.8	Closed fracture of unspecified part of radius with ulna	Diagnosis	ICD-9-CM
813.80	Closed fracture of unspecified part of forearm	Diagnosis	ICD-9-CM
813.81	Closed fracture of unspecified part of radius (alone)	Diagnosis	ICD-9-CM
813.82	Closed fracture of unspecified part of ulna (alone)	Diagnosis	ICD-9-CM
813.83	Closed fracture of unspecified part of radius with ulna	Diagnosis	ICD-9-CM
813.9	Open fracture of unspecified part of radius with ulna	Diagnosis	ICD-9-CM
813.90	Open fracture of unspecified part of forearm	Diagnosis	ICD-9-CM
813.91	Open fracture of unspecified part of radius (alone)	Diagnosis	ICD-9-CM
813.92	Open fracture of unspecified part of ulna (alone)	Diagnosis	ICD-9-CM
813.93	Open fracture of unspecified part of radius with ulna	Diagnosis	ICD-9-CM
814.0	Closed fractures of carpal bones	Diagnosis	ICD-9-CM
814.00	Unspecified closed fracture of carpal bone	Diagnosis	ICD-9-CM
814.01	Closed fracture of navicular (scaphoid) bone of wrist	Diagnosis	ICD-9-CM
814.02	Closed fracture of lunate (semilunar) bone of wrist	Diagnosis	ICD-9-CM
814.03	Closed fracture of triquetral (cuneiform) bone of wrist	Diagnosis	ICD-9-CM
814.04	Closed fracture of pisiform bone of wrist	Diagnosis	ICD-9-CM
814.05	Closed fracture of trapezium bone (larger multangular) of wrist	Diagnosis	ICD-9-CM
814.06	Closed fracture of trapezoid bone (smaller multangular) of wrist	Diagnosis	ICD-9-CM
814.07	Closed fracture of capitate bone (os magnum) of wrist	Diagnosis	ICD-9-CM
814.08	Closed fracture of hamate (unciform) bone of wrist	Diagnosis	ICD-9-CM
814.09	Closed fracture of other bone of wrist	Diagnosis	ICD-9-CM
814.1	Open fractures of carpal bones	Diagnosis	ICD-9-CM
814.10	Unspecified open fracture of carpal bone	Diagnosis	ICD-9-CM
814.11	Open fracture of navicular (scaphoid) bone of wrist	Diagnosis	ICD-9-CM
814.12	Open fracture of lunate (semilunar) bone of wrist	Diagnosis	ICD-9-CM
814.13	Open fracture of triquetral (cuneiform) bone of wrist	Diagnosis	ICD-9-CM
814.14	Open fracture of pisiform bone of wrist	Diagnosis	ICD-9-CM
814.15	Open fracture of trapezium bone (larger multangular) of wrist	Diagnosis	ICD-9-CM
814.16	Open fracture of trapezoid bone (smaller multangular) of wrist	Diagnosis	ICD-9-CM
814.17	Open fracture of capitate bone (os magnum) of wrist	Diagnosis	ICD-9-CM
814.18	Open fracture of hamate (unciform) bone of wrist	Diagnosis	ICD-9-CM
814.19	Open fracture of other bone of wrist	Diagnosis	ICD-9-CM
815.0	Closed fracture of metacarpal bones	Diagnosis	ICD-9-CM
815.00	Closed fracture of metacarpal bone(s), site unspecified	Diagnosis	ICD-9-CM
815.01	Closed fracture of base of thumb (first) metacarpal bone(s)	Diagnosis	ICD-9-CM
815.02	Closed fracture of base of other metacarpal bone(s)	Diagnosis	ICD-9-CM
815.03	Closed fracture of shaft of metacarpal bone(s)	Diagnosis	ICD-9-CM
815.04	Closed fracture of neck of metacarpal bone(s)	Diagnosis	ICD-9-CM
815.09	Closed fracture of multiple sites of metacarpus	Diagnosis	ICD-9-CM
815.1	Open fracture of metacarpal bones	Diagnosis	ICD-9-CM
815.10	Open fracture of metacarpal bone(s), site unspecified	Diagnosis	ICD-9-CM
815.11	Open fracture of base of thumb (first) metacarpal bone(s)	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
815.12	Open fracture of base of other metacarpal bone(s)	Diagnosis	ICD-9-CM
815.13	Open fracture of shaft of metacarpal bone(s)	Diagnosis	ICD-9-CM
815.14	Open fracture of neck of metacarpal bone(s)	Diagnosis	ICD-9-CM
815.19	Open fracture of multiple sites of metacarpus	Diagnosis	ICD-9-CM
816.0	Closed fracture of one or more phalanges of hand	Diagnosis	ICD-9-CM
816.00	Closed fracture of unspecified phalanx or phalanges of hand	Diagnosis	ICD-9-CM
816.01	Closed fracture of middle or proximal phalanx or phalanges of hand	Diagnosis	ICD-9-CM
816.02	Closed fracture of distal phalanx or phalanges of hand	Diagnosis	ICD-9-CM
816.03	Closed fracture of multiple sites of phalanx or phalanges of hand	Diagnosis	ICD-9-CM
816.1	Open fracture of one or more phalanges of hand	Diagnosis	ICD-9-CM
816.10	Open fracture of phalanx or phalanges of hand, unspecified	Diagnosis	ICD-9-CM
816.11	Open fracture of middle or proximal phalanx or phalanges of hand	Diagnosis	ICD-9-CM
816.12	Open fracture of distal phalanx or phalanges of hand	Diagnosis	ICD-9-CM
816.13	Open fractures of multiple sites of phalanx or phalanges of hand	Diagnosis	ICD-9-CM
817.0	Multiple closed fractures of hand bones	Diagnosis	ICD-9-CM
817.1	Multiple open fractures of hand bones	Diagnosis	ICD-9-CM
818.0	Ill-defined closed fractures of upper limb	Diagnosis	ICD-9-CM
818.1	Ill-defined open fractures of upper limb	Diagnosis	ICD-9-CM
819.0	Multiple closed fractures involving both upper limbs, and upper limb with rib(s) and sternum	Diagnosis	ICD-9-CM
819.1	Multiple open fractures involving both upper limbs, and upper limb with rib(s) and sternum	Diagnosis	ICD-9-CM
820.0	Closed transcervical fracture	Diagnosis	ICD-9-CM
820.00	Closed fracture of unspecified intracapsular section of neck of femur	Diagnosis	ICD-9-CM
820.01	Closed fracture of epiphysis (separation) (upper) of neck of femur	Diagnosis	ICD-9-CM
820.02	Closed fracture of midcervical section of femur	Diagnosis	ICD-9-CM
820.03	Closed fracture of base of neck of femur	Diagnosis	ICD-9-CM
820.09	Other closed transcervical fracture of femur	Diagnosis	ICD-9-CM
820.1	Open transcervical fracture	Diagnosis	ICD-9-CM
820.10	Open fracture of unspecified intracapsular section of neck of femur	Diagnosis	ICD-9-CM
820.11	Open fracture of epiphysis (separation) (upper) of neck of femur	Diagnosis	ICD-9-CM
820.12	Open fracture of midcervical section of femur	Diagnosis	ICD-9-CM
820.13	Open fracture of base of neck of femur	Diagnosis	ICD-9-CM
820.19	Other open transcervical fracture of femur	Diagnosis	ICD-9-CM
820.2	Closed pertrochanteric fracture of femur	Diagnosis	ICD-9-CM
820.20	Closed fracture of unspecified trochanteric section of femur	Diagnosis	ICD-9-CM
820.21	Closed fracture of intertrochanteric section of femur	Diagnosis	ICD-9-CM
820.22	Closed fracture of subtrochanteric section of femur	Diagnosis	ICD-9-CM
820.3	Open pertrochanteric fracture of femur	Diagnosis	ICD-9-CM
820.30	Open fracture of unspecified trochanteric section of femur	Diagnosis	ICD-9-CM
820.31	Open fracture of intertrochanteric section of femur	Diagnosis	ICD-9-CM
820.32	Open fracture of subtrochanteric section of femur	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
820.8	Closed fracture of unspecified part of neck of femur	Diagnosis	ICD-9-CM
820.9	Open fracture of unspecified part of neck of femur	Diagnosis	ICD-9-CM
821.0	Closed fracture of shaft or unspecified part of femur	Diagnosis	ICD-9-CM
821.00	Closed fracture of unspecified part of femur	Diagnosis	ICD-9-CM
821.01	Closed fracture of shaft of femur	Diagnosis	ICD-9-CM
821.1	Open fracture of shaft or unspecified part of femur	Diagnosis	ICD-9-CM
821.10	Open fracture of unspecified part of femur	Diagnosis	ICD-9-CM
821.11	Open fracture of shaft of femur	Diagnosis	ICD-9-CM
821.2	Closed fracture of lower end of femur	Diagnosis	ICD-9-CM
821.20	Closed fracture of unspecified part of lower end of femur	Diagnosis	ICD-9-CM
821.21	Closed fracture of femoral condyle	Diagnosis	ICD-9-CM
821.22	Closed fracture of lower epiphysis of femur	Diagnosis	ICD-9-CM
821.23	Closed supracondylar fracture of femur	Diagnosis	ICD-9-CM
821.29	Other closed fracture of lower end of femur	Diagnosis	ICD-9-CM
821.3	Open fracture of lower end of femur	Diagnosis	ICD-9-CM
821.30	Open fracture of unspecified part of lower end of femur	Diagnosis	ICD-9-CM
821.31	Open fracture of femoral condyle	Diagnosis	ICD-9-CM
821.32	Open fracture of lower epiphysis of femur	Diagnosis	ICD-9-CM
821.33	Open supracondylar fracture of femur	Diagnosis	ICD-9-CM
821.39	Other open fracture of lower end of femur	Diagnosis	ICD-9-CM
822.0	Closed fracture of patella	Diagnosis	ICD-9-CM
822.1	Open fracture of patella	Diagnosis	ICD-9-CM
823.0	Closed fracture of upper end of tibia and fibula	Diagnosis	ICD-9-CM
823.00	Closed fracture of upper end of tibia	Diagnosis	ICD-9-CM
823.01	Closed fracture of upper end of fibula	Diagnosis	ICD-9-CM
823.02	Closed fracture of upper end of fibula with tibia	Diagnosis	ICD-9-CM
823.1	Open fracture of upper end of tibia and fibula	Diagnosis	ICD-9-CM
823.10	Open fracture of upper end of tibia	Diagnosis	ICD-9-CM
823.11	Open fracture of upper end of fibula	Diagnosis	ICD-9-CM
823.12	Open fracture of upper end of fibula with tibia	Diagnosis	ICD-9-CM
823.2	Closed fracture of shaft of tibia and fibula	Diagnosis	ICD-9-CM
823.20	Closed fracture of shaft of tibia	Diagnosis	ICD-9-CM
823.21	Closed fracture of shaft of fibula	Diagnosis	ICD-9-CM
823.22	Closed fracture of shaft of fibula with tibia	Diagnosis	ICD-9-CM
823.3	Open fracture of shaft of tibia and fibula	Diagnosis	ICD-9-CM
823.30	Open fracture of shaft of tibia	Diagnosis	ICD-9-CM
823.31	Open fracture of shaft of fibula	Diagnosis	ICD-9-CM
823.32	Open fracture of shaft of fibula with tibia	Diagnosis	ICD-9-CM
823.4	Torus fracture of tibia and fibula	Diagnosis	ICD-9-CM
823.40	Torus fracture of tibia alone	Diagnosis	ICD-9-CM
823.41	Torus fracture of fibula alone	Diagnosis	ICD-9-CM
823.42	Torus fracture of fibula with tibia	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
823.8	Closed fracture of unspecified part of tibia and fibula	Diagnosis	ICD-9-CM
823.80	Closed fracture of unspecified part of tibia	Diagnosis	ICD-9-CM
823.81	Closed fracture of unspecified part of fibula	Diagnosis	ICD-9-CM
823.82	Closed fracture of unspecified part of fibula with tibia	Diagnosis	ICD-9-CM
823.9	Open fracture of unspecified part of tibia and fibula	Diagnosis	ICD-9-CM
823.90	Open fracture of unspecified part of tibia	Diagnosis	ICD-9-CM
823.91	Open fracture of unspecified part of fibula	Diagnosis	ICD-9-CM
823.92	Open fracture of unspecified part of fibula with tibia	Diagnosis	ICD-9-CM
824.0	Closed fracture of medial malleolus	Diagnosis	ICD-9-CM
824.1	Open fracture of medial malleolus	Diagnosis	ICD-9-CM
824.2	Closed fracture of lateral malleolus	Diagnosis	ICD-9-CM
824.3	Open fracture of lateral malleolus	Diagnosis	ICD-9-CM
824.4	Closed bimalleolar fracture	Diagnosis	ICD-9-CM
824.5	Open bimalleolar fracture	Diagnosis	ICD-9-CM
824.6	Closed trimalleolar fracture	Diagnosis	ICD-9-CM
824.7	Open trimalleolar fracture	Diagnosis	ICD-9-CM
824.8	Unspecified closed fracture of ankle	Diagnosis	ICD-9-CM
824.9	Unspecified open fracture of ankle	Diagnosis	ICD-9-CM
825.0	Closed fracture of calcaneus	Diagnosis	ICD-9-CM
825.1	Open fracture of calcaneus	Diagnosis	ICD-9-CM
825.2	Closed fracture of other tarsal and metatarsal bones	Diagnosis	ICD-9-CM
825.20	Closed fracture of unspecified bone(s) of foot (except toes)	Diagnosis	ICD-9-CM
825.21	Closed fracture of astragalus	Diagnosis	ICD-9-CM
825.22	Closed fracture of navicular (scaphoid) bone of foot	Diagnosis	ICD-9-CM
825.23	Closed fracture of cuboid bone	Diagnosis	ICD-9-CM
825.24	Closed fracture of cuneiform bone of foot	Diagnosis	ICD-9-CM
825.25	Closed fracture of metatarsal bone(s)	Diagnosis	ICD-9-CM
825.29	Other closed fracture of tarsal and metatarsal bones	Diagnosis	ICD-9-CM
825.3	Open fracture of other tarsal and metatarsal bones	Diagnosis	ICD-9-CM
825.30	Open fracture of unspecified bone(s) of foot (except toes)	Diagnosis	ICD-9-CM
825.31	Open fracture of astragalus	Diagnosis	ICD-9-CM
825.32	Open fracture of navicular (scaphoid) bone of foot	Diagnosis	ICD-9-CM
825.33	Open fracture of cuboid bone	Diagnosis	ICD-9-CM
825.34	Open fracture of cuneiform bone of foot,	Diagnosis	ICD-9-CM
825.35	Open fracture of metatarsal bone(s)	Diagnosis	ICD-9-CM
825.39	Other open fractures of tarsal and metatarsal bones	Diagnosis	ICD-9-CM
826.0	Closed fracture of one or more phalanges of foot	Diagnosis	ICD-9-CM
826.1	Open fracture of one or more phalanges of foot	Diagnosis	ICD-9-CM
827.0	Other, multiple and ill-defined closed fractures of lower limb	Diagnosis	ICD-9-CM
827.1	Other, multiple and ill-defined open fractures of lower limb	Diagnosis	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	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
828.1	Multiple fractures involving both lower limbs, lower with upper limb, and lower limb(s) with rib(s) and sternum, open	Diagnosis	ICD-9-CM
829.0	Closed fracture of unspecified bone	Diagnosis	ICD-9-CM
829.1	Open fracture of unspecified bone	Diagnosis	ICD-9-CM
830.0	Closed dislocation of jaw	Diagnosis	ICD-9-CM
830.1	Open dislocation of jaw	Diagnosis	ICD-9-CM
831.0	Closed dislocation of shoulder, unspecified	Diagnosis	ICD-9-CM
831.00	Closed dislocation of shoulder, unspecified site	Diagnosis	ICD-9-CM
831.01	Closed anterior dislocation of humerus	Diagnosis	ICD-9-CM
831.02	Closed posterior dislocation of humerus	Diagnosis	ICD-9-CM
831.03	Closed inferior dislocation of humerus	Diagnosis	ICD-9-CM
831.04	Closed dislocation of acromioclavicular (joint)	Diagnosis	ICD-9-CM
831.09	Closed dislocation of other site of shoulder	Diagnosis	ICD-9-CM
831.1	Open dislocation of shoulder	Diagnosis	ICD-9-CM
831.10	Open unspecified dislocation of shoulder	Diagnosis	ICD-9-CM
831.11	Open anterior dislocation of humerus	Diagnosis	ICD-9-CM
831.12	Open posterior dislocation of humerus	Diagnosis	ICD-9-CM
831.13	Open inferior dislocation of humerus	Diagnosis	ICD-9-CM
831.14	Open dislocation of acromioclavicular (joint)	Diagnosis	ICD-9-CM
831.19	Open dislocation of other site of shoulder	Diagnosis	ICD-9-CM
832.0	Closed dislocation of elbow	Diagnosis	ICD-9-CM
832.00	Closed unspecified dislocation of elbow	Diagnosis	ICD-9-CM
832.01	Closed anterior dislocation of elbow	Diagnosis	ICD-9-CM
832.02	Closed posterior dislocation of elbow	Diagnosis	ICD-9-CM
832.03	Closed medial dislocation of elbow	Diagnosis	ICD-9-CM
832.04	Closed lateral dislocation of elbow	Diagnosis	ICD-9-CM
832.09	Closed dislocation of other site of elbow	Diagnosis	ICD-9-CM
832.1	Open dislocation of elbow	Diagnosis	ICD-9-CM
832.10	Open unspecified dislocation of elbow	Diagnosis	ICD-9-CM
832.11	Open anterior dislocation of elbow	Diagnosis	ICD-9-CM
832.12	Open posterior dislocation of elbow	Diagnosis	ICD-9-CM
832.13	Open medial dislocation of elbow	Diagnosis	ICD-9-CM
832.14	Open lateral dislocation of elbow	Diagnosis	ICD-9-CM
832.19	Open dislocation of other site of elbow	Diagnosis	ICD-9-CM
832.2	Nursemaid's elbow	Diagnosis	ICD-9-CM
833.0	Closed dislocation of wrist	Diagnosis	ICD-9-CM
833.00	Closed dislocation of wrist, unspecified part	Diagnosis	ICD-9-CM
833.01	Closed dislocation of distal radioulnar (joint)	Diagnosis	ICD-9-CM
833.02	Closed dislocation of radiocarpal (joint)	Diagnosis	ICD-9-CM
833.03	Closed dislocation of midcarpal (joint)	Diagnosis	ICD-9-CM
833.04	Closed dislocation of carpometacarpal (joint)	Diagnosis	ICD-9-CM
833.05	Closed dislocation of proximal end of metacarpal (bone)	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
833.09	Closed dislocation of other part of wrist	Diagnosis	ICD-9-CM
833.1	Open dislocation of wrist	Diagnosis	ICD-9-CM
833.10	Open dislocation of wrist, unspecified part	Diagnosis	ICD-9-CM
833.11	Open dislocation of distal radioulnar (joint)	Diagnosis	ICD-9-CM
833.12	Open dislocation of radiocarpal (joint)	Diagnosis	ICD-9-CM
833.13	Open dislocation of midcarpal (joint)	Diagnosis	ICD-9-CM
833.14	Open dislocation of carpometacarpal (joint)	Diagnosis	ICD-9-CM
833.15	Open dislocation of proximal end of metacarpal (bone)	Diagnosis	ICD-9-CM
833.19	Open dislocation of other part of wrist	Diagnosis	ICD-9-CM
834.0	Closed dislocation of finger	Diagnosis	ICD-9-CM
834.00	Closed dislocation of finger, unspecified part	Diagnosis	ICD-9-CM
834.01	Closed dislocation of metacarpophalangeal (joint)	Diagnosis	ICD-9-CM
834.02	Closed dislocation of interphalangeal (joint), hand	Diagnosis	ICD-9-CM
834.1	Open dislocation of finger	Diagnosis	ICD-9-CM
834.10	Open dislocation of finger, unspecified part	Diagnosis	ICD-9-CM
834.11	Open dislocation of metacarpophalangeal (joint)	Diagnosis	ICD-9-CM
834.12	Open dislocation interphalangeal (joint), hand	Diagnosis	ICD-9-CM
835.0	Closed dislocation of hip	Diagnosis	ICD-9-CM
835.00	Closed dislocation of hip, unspecified site	Diagnosis	ICD-9-CM
835.01	Closed posterior dislocation of hip	Diagnosis	ICD-9-CM
835.02	Closed obturator dislocation of hip	Diagnosis	ICD-9-CM
835.03	Other closed anterior dislocation of hip	Diagnosis	ICD-9-CM
835.1	Open dislocation of hip	Diagnosis	ICD-9-CM
835.10	Open dislocation of hip, unspecified site	Diagnosis	ICD-9-CM
835.11	Open posterior dislocation of hip	Diagnosis	ICD-9-CM
835.12	Open obturator dislocation of hip	Diagnosis	ICD-9-CM
835.13	Other open anterior dislocation of hip	Diagnosis	ICD-9-CM
836.0	Tear of medial cartilage or meniscus of knee, current	Diagnosis	ICD-9-CM
836.1	Tear of lateral cartilage or meniscus of knee, current	Diagnosis	ICD-9-CM
836.2	Other tear of cartilage or meniscus of knee, current	Diagnosis	ICD-9-CM
836.3	Closed dislocation of patella	Diagnosis	ICD-9-CM
836.4	Open dislocation of patella	Diagnosis	ICD-9-CM
836.5	Other closed dislocation of knee	Diagnosis	ICD-9-CM
836.50	Closed dislocation of knee, unspecified part	Diagnosis	ICD-9-CM
836.51	Closed anterior dislocation of tibia, proximal end	Diagnosis	ICD-9-CM
836.52	Closed posterior dislocation of tibia, proximal end	Diagnosis	ICD-9-CM
836.53	Closed medial dislocation of tibia, proximal end	Diagnosis	ICD-9-CM
836.54	Closed lateral dislocation of tibia, proximal end	Diagnosis	ICD-9-CM
836.59	Other closed dislocation of knee	Diagnosis	ICD-9-CM
836.6	Other open dislocation of knee	Diagnosis	ICD-9-CM
836.60	Open dislocation of knee unspecified part	Diagnosis	ICD-9-CM
836.61	Open anterior dislocation of tibia, proximal end	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
836.62	Open posterior dislocation of tibia, proximal end	Diagnosis	ICD-9-CM
836.63	Open medial dislocation of tibia, proximal end	Diagnosis	ICD-9-CM
836.64	Open lateral dislocation of tibia, proximal end	Diagnosis	ICD-9-CM
836.69	Other open dislocation of knee	Diagnosis	ICD-9-CM
837.0	Closed dislocation of ankle	Diagnosis	ICD-9-CM
837.1	Open dislocation of ankle	Diagnosis	ICD-9-CM
838.0	Closed dislocation of foot	Diagnosis	ICD-9-CM
838.00	Closed dislocation of foot, unspecified part	Diagnosis	ICD-9-CM
838.01	Closed dislocation of tarsal (bone), joint unspecified	Diagnosis	ICD-9-CM
838.02	Closed dislocation of midtarsal (joint)	Diagnosis	ICD-9-CM
838.03	Closed dislocation of tarsometatarsal (joint)	Diagnosis	ICD-9-CM
838.04	Closed dislocation of metatarsal (bone), joint unspecified	Diagnosis	ICD-9-CM
838.05	Closed dislocation of metatarsophalangeal (joint)	Diagnosis	ICD-9-CM
838.06	Closed dislocation of interphalangeal (joint), foot	Diagnosis	ICD-9-CM
838.09	Closed dislocation of other part of foot	Diagnosis	ICD-9-CM
838.1	Open dislocation of foot	Diagnosis	ICD-9-CM
838.10	Open dislocation of foot, unspecified part	Diagnosis	ICD-9-CM
838.11	Open dislocation of tarsal (bone), joint unspecified	Diagnosis	ICD-9-CM
838.12	Open dislocation of midtarsal (joint)	Diagnosis	ICD-9-CM
838.13	Open dislocation of tarsometatarsal (joint)	Diagnosis	ICD-9-CM
838.14	Open dislocation of metatarsal (bone), joint unspecified	Diagnosis	ICD-9-CM
838.15	Open dislocation of metatarsophalangeal (joint)	Diagnosis	ICD-9-CM
838.16	Open dislocation of interphalangeal (joint), foot	Diagnosis	ICD-9-CM
838.19	Open dislocation of other part of foot	Diagnosis	ICD-9-CM
839.0	Closed dislocation, cervical vertebra	Diagnosis	ICD-9-CM
839.00	Closed dislocation, unspecified cervical vertebra	Diagnosis	ICD-9-CM
839.01	Closed dislocation, first cervical vertebra	Diagnosis	ICD-9-CM
839.02	Closed dislocation, second cervical vertebra	Diagnosis	ICD-9-CM
839.03	Closed dislocation, third cervical vertebra	Diagnosis	ICD-9-CM
839.04	Closed dislocation, fourth cervical vertebra	Diagnosis	ICD-9-CM
839.05	Closed dislocation, fifth cervical vertebra	Diagnosis	ICD-9-CM
839.06	Closed dislocation, sixth cervical vertebra	Diagnosis	ICD-9-CM
839.07	Closed dislocation, seventh cervical vertebra	Diagnosis	ICD-9-CM
839.08	Closed dislocation, multiple cervical vertebrae	Diagnosis	ICD-9-CM
839.1	Open dislocation, cervical vertebra	Diagnosis	ICD-9-CM
839.10	Open dislocation, unspecified cervical vertebra	Diagnosis	ICD-9-CM
839.11	Open dislocation, first cervical vertebra	Diagnosis	ICD-9-CM
839.12	Open dislocation, second cervical vertebra	Diagnosis	ICD-9-CM
839.13	Open dislocation, third cervical vertebra	Diagnosis	ICD-9-CM
839.14	Open dislocation, fourth cervical vertebra	Diagnosis	ICD-9-CM
839.15	Open dislocation, fifth cervical vertebra	Diagnosis	ICD-9-CM
839.16	Open dislocation, sixth cervical vertebra	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
839.17	Open dislocation, seventh cervical vertebra	Diagnosis	ICD-9-CM
839.18	Open dislocation, multiple cervical vertebrae	Diagnosis	ICD-9-CM
839.2	Closed dislocation, thoracic and lumbar vertebra	Diagnosis	ICD-9-CM
839.20	Closed dislocation, lumbar vertebra	Diagnosis	ICD-9-CM
839.21	Closed dislocation, thoracic vertebra	Diagnosis	ICD-9-CM
839.3	Open dislocation, thoracic and lumbar vertebra	Diagnosis	ICD-9-CM
839.30	Open dislocation, lumbar vertebra	Diagnosis	ICD-9-CM
839.31	Open dislocation, thoracic vertebra	Diagnosis	ICD-9-CM
839.4	Closed dislocation, other vertebra	Diagnosis	ICD-9-CM
839.40	Closed dislocation, vertebra, unspecified site	Diagnosis	ICD-9-CM
839.41	Closed dislocation, coccyx	Diagnosis	ICD-9-CM
839.42	Closed dislocation, sacrum	Diagnosis	ICD-9-CM
839.49	Closed dislocation, other vertebra	Diagnosis	ICD-9-CM
839.5	Open dislocation, other vertebra	Diagnosis	ICD-9-CM
839.50	Open dislocation, vertebra, unspecified site	Diagnosis	ICD-9-CM
839.51	Open dislocation, coccyx	Diagnosis	ICD-9-CM
839.52	Open dislocation, sacrum	Diagnosis	ICD-9-CM
839.59	Open dislocation, other vertebra	Diagnosis	ICD-9-CM
839.6	Closed dislocation, other location	Diagnosis	ICD-9-CM
839.61	Closed dislocation, sternum	Diagnosis	ICD-9-CM
839.69	Closed dislocation, other location	Diagnosis	ICD-9-CM
839.7	Open dislocation, other location	Diagnosis	ICD-9-CM
839.71	Open dislocation, sternum	Diagnosis	ICD-9-CM
839.79	Open dislocation, other location	Diagnosis	ICD-9-CM
839.8	Closed dislocation, multiple and ill-defined sites	Diagnosis	ICD-9-CM
839.9	Open dislocation, multiple and ill-defined sites	Diagnosis	ICD-9-CM
840.0	Acromioclavicular (joint) (ligament) sprain and strain	Diagnosis	ICD-9-CM
840.1	Coracoclavicular (ligament) sprain and strain	Diagnosis	ICD-9-CM
840.2	Coracohumeral (ligament) sprain and strain	Diagnosis	ICD-9-CM
840.3	Infraspinatus (muscle) (tendon) sprain and strain	Diagnosis	ICD-9-CM
840.4	Rotator cuff (capsule) sprain and strain	Diagnosis	ICD-9-CM
840.5	Subscapularis (muscle) sprain and strain	Diagnosis	ICD-9-CM
840.6	Supraspinatus (muscle) (tendon) sprain and strain	Diagnosis	ICD-9-CM
840.7	Superior glenoid labrum lesions (SLAP)	Diagnosis	ICD-9-CM
840.8	Sprain and strain of other specified sites of shoulder and upper arm	Diagnosis	ICD-9-CM
840.9	Sprain and strain of unspecified site of shoulder and upper arm	Diagnosis	ICD-9-CM
841.0	Radial collateral ligament sprain and strain	Diagnosis	ICD-9-CM
841.1	Ulnar collateral ligament sprain and strain	Diagnosis	ICD-9-CM
841.2	Radiohumeral (joint) sprain and strain	Diagnosis	ICD-9-CM
841.3	Ulnohumeral (joint) sprain and strain	Diagnosis	ICD-9-CM
841.8	Sprain and strain of other specified sites of elbow and forearm	Diagnosis	ICD-9-CM
841.9	Sprain and strain of unspecified site of elbow and forearm	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
842.0	Wrist sprain and strain	Diagnosis	ICD-9-CM
842.00	Sprain and strain of unspecified site of wrist	Diagnosis	ICD-9-CM
842.01	Sprain and strain of carpal (joint) of wrist	Diagnosis	ICD-9-CM
842.02	Sprain and strain of radiocarpal (joint) (ligament) of wrist	Diagnosis	ICD-9-CM
842.09	Other wrist sprain and strain	Diagnosis	ICD-9-CM
842.1	Hand sprain and strain	Diagnosis	ICD-9-CM
842.10	Sprain and strain of unspecified site of hand	Diagnosis	ICD-9-CM
842.11	Sprain and strain of carpometacarpal (joint) of hand	Diagnosis	ICD-9-CM
842.12	Sprain and strain of metacarpophalangeal (joint) of hand	Diagnosis	ICD-9-CM
842.13	Sprain and strain of interphalangeal (joint) of hand	Diagnosis	ICD-9-CM
842.19	Other hand sprain and strain	Diagnosis	ICD-9-CM
843.0	Iliofemoral (ligament) sprain and strain	Diagnosis	ICD-9-CM
843.1	Ischiocapsular (ligament) sprain and strain	Diagnosis	ICD-9-CM
843.8	Sprain and strain of other specified sites of hip and thigh	Diagnosis	ICD-9-CM
843.9	Sprain and strain of unspecified site of hip and thigh	Diagnosis	ICD-9-CM
844.0	Sprain and strain of lateral collateral ligament of knee	Diagnosis	ICD-9-CM
844.1	Sprain and strain of medial collateral ligament of knee	Diagnosis	ICD-9-CM
844.2	Sprain and strain of cruciate ligament of knee	Diagnosis	ICD-9-CM
844.3	Sprain and strain of tibiofibular (joint) (ligament) superior, of knee	Diagnosis	ICD-9-CM
844.8	Sprain and strain of other specified sites of knee and leg	Diagnosis	ICD-9-CM
844.9	Sprain and strain of unspecified site of knee and leg	Diagnosis	ICD-9-CM
845.0	Ankle sprain and strain	Diagnosis	ICD-9-CM
845.00	Unspecified site of ankle sprain and strain	Diagnosis	ICD-9-CM
845.01	Sprain and strain of deltoid (ligament) of ankle	Diagnosis	ICD-9-CM
845.02	Sprain and strain of calcaneofibular (ligament)	Diagnosis	ICD-9-CM
845.03	Sprain and strain of tibiofibular (ligament)	Diagnosis	ICD-9-CM
845.09	Other ankle sprain and strain	Diagnosis	ICD-9-CM
845.1	Foot sprain and strain	Diagnosis	ICD-9-CM
845.10	Sprain and strain of unspecified site of foot	Diagnosis	ICD-9-CM
845.11	Sprain and strain of tarsometatarsal (joint) (ligament)	Diagnosis	ICD-9-CM
845.12	Sprain and strain of metatarsophalangeal (joint)	Diagnosis	ICD-9-CM
845.13	Sprain and strain of interphalangeal (joint), of toe	Diagnosis	ICD-9-CM
845.19	Other foot sprain and strain	Diagnosis	ICD-9-CM
846.0	Sprain and strain of lumbosacral (joint) (ligament)	Diagnosis	ICD-9-CM
846.1	Sprain and strain of sacroiliac (ligament)	Diagnosis	ICD-9-CM
846.2	Sprain and strain of sacrospinatus (ligament)	Diagnosis	ICD-9-CM
846.3	Sprain and strain of sacrotuberous (ligament)	Diagnosis	ICD-9-CM
846.8	Other specified sites of sacroiliac region sprain and strain	Diagnosis	ICD-9-CM
846.9	Unspecified site of sacroiliac region sprain and strain	Diagnosis	ICD-9-CM
847.0	Neck sprain and strain	Diagnosis	ICD-9-CM
847.1	Thoracic sprain and strain	Diagnosis	ICD-9-CM
847.2	Lumbar sprain and strain	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
847.3	Sprain and strain of sacrum	Diagnosis	ICD-9-CM
847.4	Sprain and strain of coccyx	Diagnosis	ICD-9-CM
847.9	Sprain and strain of unspecified site of back	Diagnosis	ICD-9-CM
848.0	Sprain and strain of septal cartilage of nose	Diagnosis	ICD-9-CM
848.1	Sprain and strain of jaw	Diagnosis	ICD-9-CM
848.2	Sprain and strain of thyroid region	Diagnosis	ICD-9-CM
848.3	Sprain and strain of ribs	Diagnosis	ICD-9-CM
848.4	Sprain and strain of sternum	Diagnosis	ICD-9-CM
848.40	Sprain and strain of sternum, unspecified part	Diagnosis	ICD-9-CM
848.41	Sprain and strain of sternoclavicular (joint) (ligament)	Diagnosis	ICD-9-CM
848.42	Sprain and strain of chondrosternal (joint)	Diagnosis	ICD-9-CM
848.49	Other sprain and strains of sternum	Diagnosis	ICD-9-CM
848.5	Pelvic sprain and strains	Diagnosis	ICD-9-CM
848.8	Other specified sites of sprains and strains	Diagnosis	ICD-9-CM
848.9	Unspecified site of sprain and strain	Diagnosis	ICD-9-CM
850.0	Concussion with no loss of consciousness	Diagnosis	ICD-9-CM
850.1	Concussion with brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
850.11	Concussion, with loss of consciousness of 30 minutes or less	Diagnosis	ICD-9-CM
850.12	Concussion, with loss of consciousness 31 to 59 minutes	Diagnosis	ICD-9-CM
850.2	Concussion with moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
850.3	Concussion with prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
850.4	Concussion with prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
850.5	Concussion with loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
850.9	Unspecified concussion	Diagnosis	ICD-9-CM
851.0	Cortex (cerebral) contusion without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.00	Cortex (cerebral) contusion without mention of open intracranial wound, state of consciousness unspecified	Diagnosis	ICD-9-CM
851.01	Cortex (cerebral) contusion without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.02	Cortex (cerebral) contusion without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.03	Cortex (cerebral) contusion without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.04	Cortex (cerebral) contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.05	Cortex (cerebral) contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
851.06	Cortex (cerebral) contusion without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.09	Cortex (cerebral) contusion without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.1	Cortex (cerebral) contusion with open intracranial wound	Diagnosis	ICD-9-CM
851.10	Cortex (cerebral) contusion with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.11	Cortex (cerebral) contusion with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.12	Cortex (cerebral) contusion with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.13	Cortex (cerebral) contusion with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.14	Cortex (cerebral) contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.15	Cortex (cerebral) contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.16	Cortex (cerebral) contusion with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.19	Cortex (cerebral) contusion with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.2	Cortex (cerebral) laceration without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.20	Cortex (cerebral) laceration without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.21	Cortex (cerebral) laceration without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.22	Cortex (cerebral) laceration without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.23	Cortex (cerebral) laceration without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.24	Cortex (cerebral) laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.25	Cortex (cerebral) laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.26	Cortex (cerebral) laceration without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.29	Cortex (cerebral) laceration without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
851.3	Cortex (cerebral) laceration with open intracranial wound	Diagnosis	ICD-9-CM
851.30	Cortex (cerebral) laceration with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.31	Cortex (cerebral) laceration with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.32	Cortex (cerebral) laceration with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.33	Cortex (cerebral) laceration with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.34	Cortex (cerebral) laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.35	Cortex (cerebral) laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.36	Cortex (cerebral) laceration with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.39	Cortex (cerebral) laceration with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.4	Cerebellar or brain stem contusion without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.40	Cerebellar or brain stem contusion without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.41	Cerebellar or brain stem contusion without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.42	Cerebellar or brain stem contusion without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.43	Cerebellar or brain stem contusion without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.44	Cerebellar or brain stem contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.45	Cerebellar or brain stem contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.46	Cerebellar or brain stem contusion without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.49	Cerebellar or brain stem contusion without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.5	Cerebellar or brain stem contusion with open intracranial wound	Diagnosis	ICD-9-CM
851.50	Cerebellar or brain stem contusion with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
851.51	Cerebellar or brain stem contusion with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.52	Cerebellar or brain stem contusion with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.53	Cerebellar or brain stem contusion with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.54	Cerebellar or brain stem contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.55	Cerebellar or brain stem contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.56	Cerebellar or brain stem contusion with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.59	Cerebellar or brain stem contusion with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.6	Cerebellar or brain stem laceration without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.60	Cerebellar or brain stem laceration without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.61	Cerebellar or brain stem laceration without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.62	Cerebellar or brain stem laceration without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.63	Cerebellar or brain stem laceration without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.64	Cerebellar or brain stem laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.65	Cerebellar or brain stem laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.66	Cerebellar or brain stem laceration without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.69	Cerebellar or brain stem laceration without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.7	Cerebellar or brain stem laceration with open intracranial wound	Diagnosis	ICD-9-CM
851.70	Cerebellar or brain stem laceration with open intracranial wound, state of consciousness unspecified	Diagnosis	ICD-9-CM
851.71	Cerebellar or brain stem laceration with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
851.72	Cerebellar or brain stem laceration with open intracranial wound, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
851.73	Cerebellar or brain stem laceration with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.74	Cerebellar or brain stem laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.75	Cerebellar or brain stem laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.76	Cerebellar or brain stem laceration with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.79	Cerebellar or brain stem laceration with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.8	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.80	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.81	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.82	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.83	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.84	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to preexisting conscious level	Diagnosis	ICD-9-CM
851.85	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.86	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.89	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.9	Other and unspecified cerebral laceration and contusion, with open intracranial wound	Diagnosis	ICD-9-CM
851.90	Other and unspecified cerebral laceration and contusion, with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.91	Other and unspecified cerebral laceration and contusion, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.92	Other and unspecified cerebral laceration and contusion, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
851.93	Other and unspecified cerebral laceration and contusion, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.94	Other and unspecified cerebral laceration and contusion, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.95	Other and unspecified cerebral laceration and contusion, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.96	Other and unspecified cerebral laceration and contusion, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.99	Other and unspecified cerebral laceration and contusion, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.0	Subarachnoid hemorrhage following injury without mention of open intracranial wound	Diagnosis	ICD-9-CM
852.00	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
852.01	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.02	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.03	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
852.06	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.09	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.1	Subarachnoid hemorrhage following injury, with open intracranial wound	Diagnosis	ICD-9-CM
852.10	Subarachnoid hemorrhage following injury, with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
852.11	Subarachnoid hemorrhage following injury, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.12	Subarachnoid hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.13	Subarachnoid hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
852.14	Subarachnoid hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.15	Subarachnoid hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.16	Subarachnoid hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.19	Subarachnoid hemorrhage following injury, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.2	Subdural hemorrhage following injury without mention of open intracranial wound	Diagnosis	ICD-9-CM
852.20	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
852.21	Subdural hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.22	Subdural hemorrhage following injury, without mention of open intracranial wound, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
852.23	Subdural hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-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	Diagnosis	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	Diagnosis	ICD-9-CM
852.26	Subdural hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.29	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.3	Subdural hemorrhage following injury, with open intracranial wound	Diagnosis	ICD-9-CM
852.30	Subdural hemorrhage following injury, with open intracranial wound, state of consciousness unspecified	Diagnosis	ICD-9-CM
852.31	Subdural hemorrhage following injury, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.32	Subdural hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.33	Subdural hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
852.34	Subdural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
852.35	Subdural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.36	Subdural hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.39	Subdural hemorrhage following injury, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.4	Extradural hemorrhage following injury without mention of open intracranial wound	Diagnosis	ICD-9-CM
852.40	Extradural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
852.41	Extradural hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.42	Extradural hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.43	Extradural hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
852.46	Extradural hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.49	Extradural hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.5	Extradural hemorrhage following injury with open intracranial wound	Diagnosis	ICD-9-CM
852.50	Extradural hemorrhage following injury, with open intracranial wound, state of consciousness unspecified	Diagnosis	ICD-9-CM
852.51	Extradural hemorrhage following injury, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.52	Extradural hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.53	Extradural hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
852.54	Extradural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.55	Extradural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
852.56	Extradural hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.59	Extradural hemorrhage following injury, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
853.0	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound	Diagnosis	ICD-9-CM
853.00	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
853.01	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	Diagnosis	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	Diagnosis	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	Diagnosis	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	Diagnosis	ICD-9-CM
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	Diagnosis	ICD-9-CM
853.06	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
853.09	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
853.1	Other and unspecified intracranial hemorrhage following injury with open intracranial wound	Diagnosis	ICD-9-CM
853.10	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
853.11	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
853.12	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
853.13	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
853.14	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
853.15	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
853.16	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
853.19	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
854.0	Intracranial injury of other and unspecified nature without mention of open intracranial wound	Diagnosis	ICD-9-CM
854.00	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
854.01	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
854.02	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
854.03	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
854.04	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
854.05	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
854.06	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
854.09	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
854.1	Intracranial injury of other and unspecified nature with open intracranial wound	Diagnosis	ICD-9-CM
854.10	Intracranial injury of other and unspecified nature, with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
854.11	Intracranial injury of other and unspecified nature, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
854.12	Intracranial injury of other and unspecified nature, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
854.13	Intracranial injury of other and unspecified nature, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
854.14	Intracranial injury of other and unspecified nature, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
854.15	Intracranial injury of other and unspecified nature, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
854.16	Intracranial injury of other and unspecified nature, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
854.19	Intracranial injury of other and unspecified nature, with open intracranial wound, with unspecified concussion	Diagnosis	ICD-9-CM
860.0	Traumatic pneumothorax without mention of open wound into thorax	Diagnosis	ICD-9-CM
860.1	Traumatic pneumothorax with open wound into thorax	Diagnosis	ICD-9-CM
860.2	Traumatic hemothorax without mention of open wound into thorax	Diagnosis	ICD-9-CM
860.3	Traumatic hemothorax with open wound into thorax	Diagnosis	ICD-9-CM
860.4	Traumatic pneumohemothorax without mention of open wound into thorax	Diagnosis	ICD-9-CM
860.5	Traumatic pneumohemothorax with open wound into thorax	Diagnosis	ICD-9-CM
861.0	Heart injury, without mention of open wound into thorax	Diagnosis	ICD-9-CM
861.00	Unspecified injury to heart without mention of open wound into thorax	Diagnosis	ICD-9-CM
861.01	Heart contusion without mention of open wound into thorax	Diagnosis	ICD-9-CM
861.02	Heart laceration without penetration of heart chambers or mention of open wound into thorax	Diagnosis	ICD-9-CM
861.03	Heart laceration with penetration of heart chambers, without mention of open wound into thorax	Diagnosis	ICD-9-CM
861.1	Heart injury, with open wound into thorax	Diagnosis	ICD-9-CM
861.10	Unspecified injury to heart with open wound into thorax	Diagnosis	ICD-9-CM
861.11	Heart contusion with open wound into thorax	Diagnosis	ICD-9-CM
861.12	Heart laceration without penetration of heart chambers, with open wound into thorax	Diagnosis	ICD-9-CM
861.13	Heart laceration with penetration of heart chambers and open wound into thorax	Diagnosis	ICD-9-CM
861.2	Lung injury, without mention of open wound into thorax	Diagnosis	ICD-9-CM
861.20	Unspecified lung injury without mention of open wound into thorax	Diagnosis	ICD-9-CM
861.21	Lung contusion without mention of open wound into thorax	Diagnosis	ICD-9-CM
861.22	Lung laceration without mention of open wound into thorax	Diagnosis	ICD-9-CM
861.3	Lung injury, with open wound into thorax	Diagnosis	ICD-9-CM
861.30	Unspecified lung injury with open wound into thorax	Diagnosis	ICD-9-CM
861.31	Lung contusion with open wound into thorax	Diagnosis	ICD-9-CM
861.32	Lung laceration with open wound into thorax	Diagnosis	ICD-9-CM
862.0	Diaphragm injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
862.1	Diaphragm injury with open wound into cavity	Diagnosis	ICD-9-CM
862.2	Injury to other specified intrathoracic organs without mention of open wound into cavity	Diagnosis	ICD-9-CM
862.21	Bronchus injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
862.22	Esophagus injury without mention of open wound into cavity	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
862.29	Injury to other specified intrathoracic organs without mention of open wound into cavity	Diagnosis	ICD-9-CM
862.3	Injury to other specified intrathoracic organs with open wound into cavity	Diagnosis	ICD-9-CM
862.31	Bronchus injury with open wound into cavity	Diagnosis	ICD-9-CM
862.32	Esophagus injury with open wound into cavity	Diagnosis	ICD-9-CM
862.39	Injury to other specified intrathoracic organs with open wound into cavity	Diagnosis	ICD-9-CM
862.8	Injury to multiple and unspecified intrathoracic organs without mention of open wound into cavity	Diagnosis	ICD-9-CM
862.9	Injury to multiple and unspecified intrathoracic organs with open wound into cavity	Diagnosis	ICD-9-CM
863.0	Stomach injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.1	Stomach injury with open wound into cavity	Diagnosis	ICD-9-CM
863.2	Small intestine injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.20	Small intestine injury, unspecified site, without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.21	Duodenum injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.29	Other injury to small intestine without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.3	Small intestine injury with open wound into cavity	Diagnosis	ICD-9-CM
863.30	Small intestine injury, unspecified site, with open wound into cavity	Diagnosis	ICD-9-CM
863.31	Duodenum injury with open wound into cavity	Diagnosis	ICD-9-CM
863.39	Other injury to small intestine with open wound into cavity	Diagnosis	ICD-9-CM
863.4	Colon or rectal injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.40	Colon injury unspecified site, without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.41	Ascending (right) colon injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.42	Transverse colon injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.43	Descending (left) colon injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.44	Sigmoid colon injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.45	Rectum injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.46	Injury to multiple sites in colon and rectum without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.49	Other colon and rectum injury, without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.5	Injury to colon or rectum with open wound into cavity	Diagnosis	ICD-9-CM
863.50	Colon injury, unspecified site, with open wound into cavity	Diagnosis	ICD-9-CM
863.51	Ascending (right) colon injury with open wound into cavity	Diagnosis	ICD-9-CM
863.52	Transverse colon injury with open wound into cavity	Diagnosis	ICD-9-CM
863.53	Descending (left) colon injury with open wound into cavity	Diagnosis	ICD-9-CM
863.54	Sigmoid colon injury with open wound into cavity	Diagnosis	ICD-9-CM
863.55	Rectum injury with open wound into cavity	Diagnosis	ICD-9-CM
863.56	Injury to multiple sites in colon and rectum with open wound into cavity	Diagnosis	ICD-9-CM
863.59	Other injury to colon and rectum with open wound into cavity	Diagnosis	ICD-9-CM
863.8	Injury to other and unspecified gastrointestinal sites without mention of open wound into cavity	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
863.80	Gastrointestinal tract injury, unspecified site, without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.81	Pancreas head injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.82	Pancreas body injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.83	Pancreas tail injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.84	Pancreas injury, multiple and unspecified sites, without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.85	Appendix injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.89	Injury to other and unspecified gastrointestinal sites without mention of open wound into cavity	Diagnosis	ICD-9-CM
863.9	Injury to other and unspecified gastrointestinal sites, with open wound into cavity	Diagnosis	ICD-9-CM
863.90	Gastrointestinal tract injury, unspecified site, with open wound into cavity	Diagnosis	ICD-9-CM
863.91	Pancreas head injury with open wound into cavity	Diagnosis	ICD-9-CM
863.92	Pancreas body injury with open wound into cavity	Diagnosis	ICD-9-CM
863.93	Pancreas tail injury with open wound into cavity	Diagnosis	ICD-9-CM
863.94	Pancreas injury, multiple and unspecified sites, with open wound into cavity	Diagnosis	ICD-9-CM
863.95	Appendix injury with open wound into cavity	Diagnosis	ICD-9-CM
863.99	Injury to other and unspecified gastrointestinal sites with open wound into cavity	Diagnosis	ICD-9-CM
864.0	Liver injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
864.00	Unspecified injury to liver without mention of open wound into cavity	Diagnosis	ICD-9-CM
864.01	Liver hematoma and contusion without mention of open wound into cavity	Diagnosis	ICD-9-CM
864.02	Liver laceration, minor, without mention of open wound into cavity	Diagnosis	ICD-9-CM
864.03	Liver laceration, moderate, without mention of open wound into cavity	Diagnosis	ICD-9-CM
864.04	Liver laceration, major, without mention of open wound into cavity	Diagnosis	ICD-9-CM
864.05	Liver injury without mention of open wound into cavity, unspecified laceration	Diagnosis	ICD-9-CM
864.09	Other liver injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
864.1	Liver injury with open wound into cavity	Diagnosis	ICD-9-CM
864.10	Unspecified liver injury with open wound into cavity	Diagnosis	ICD-9-CM
864.11	Liver hematoma and contusion with open wound into cavity	Diagnosis	ICD-9-CM
864.12	Liver laceration, minor, with open wound into cavity	Diagnosis	ICD-9-CM
864.13	Liver laceration, moderate, with open wound into cavity	Diagnosis	ICD-9-CM
864.14	Liver laceration, major, with open wound into cavity	Diagnosis	ICD-9-CM
864.15	Liver injury with open wound into cavity, unspecified laceration	Diagnosis	ICD-9-CM
864.19	Other liver injury with open wound into cavity	Diagnosis	ICD-9-CM
865.0	Spleen injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
865.00	Unspecified spleen injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
865.01	Spleen hematoma, without rupture of capsule or mention of open wound into cavity	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
865.02	Capsular tears to spleen, without major disruption of parenchyma or mention of open wound into cavity	Diagnosis	ICD-9-CM
865.03	Spleen laceration extending into parenchyma without mention of open wound into cavity	Diagnosis	ICD-9-CM
865.04	Massive parenchymal disruption of spleen without mention of open wound into cavity	Diagnosis	ICD-9-CM
865.09	Other spleen injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
865.1	Spleen injury with open wound into cavity	Diagnosis	ICD-9-CM
865.10	Unspecified spleen injury with open wound into cavity	Diagnosis	ICD-9-CM
865.11	Spleen hematoma, without rupture of capsule, with open wound into cavity	Diagnosis	ICD-9-CM
865.12	Capsular tears to spleen, without major disruption of parenchyma, with open wound into cavity	Diagnosis	ICD-9-CM
865.13	Spleen laceration extending into parenchyma, with open wound into cavity	Diagnosis	ICD-9-CM
865.14	Massive parenchyma disruption of spleen with open wound into cavity	Diagnosis	ICD-9-CM
865.19	Other spleen injury with open wound into cavity	Diagnosis	ICD-9-CM
866.0	Kidney injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
866.00	Unspecified kidney injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
866.01	Kidney hematoma without rupture of capsule or mention of open wound into cavity	Diagnosis	ICD-9-CM
866.02	Kidney laceration without mention of open wound into cavity	Diagnosis	ICD-9-CM
866.03	Complete disruption of kidney parenchyma, without mention of open wound into cavity	Diagnosis	ICD-9-CM
866.1	Kidney injury with open wound into cavity	Diagnosis	ICD-9-CM
866.10	Unspecified kidney injury with open wound into cavity	Diagnosis	ICD-9-CM
866.11	Kidney hematoma, without rupture of capsule, with open wound into cavity	Diagnosis	ICD-9-CM
866.12	Kidney laceration with open wound into cavity	Diagnosis	ICD-9-CM
866.13	Complete disruption of kidney parenchyma, with open wound into cavity	Diagnosis	ICD-9-CM
867.0	Bladder and urethra injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
867.1	Bladder and urethra injury with open wound into cavity	Diagnosis	ICD-9-CM
867.2	Ureter injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
867.3	Ureter injury with open wound into cavity	Diagnosis	ICD-9-CM
867.4	Uterus injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
867.5	Uterus injury with open wound into cavity	Diagnosis	ICD-9-CM
867.6	Injury to other specified pelvic organs without mention of open wound into cavity	Diagnosis	ICD-9-CM
867.7	Injury to other specified pelvic organs with open wound into cavity	Diagnosis	ICD-9-CM
867.8	Injury to unspecified pelvic organ without mention of open wound into cavity	Diagnosis	ICD-9-CM
867.9	Injury to unspecified pelvic organ with open wound into cavity	Diagnosis	ICD-9-CM
868.0	Injury to other intra-abdominal organs without mention of open wound into cavity	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
868.00	Injury to unspecified intra-abdominal organ without mention of open wound into cavity	Diagnosis	ICD-9-CM
868.01	Adrenal gland injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
868.02	Bile duct and gallbladder injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
868.03	Peritoneum injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
868.04	Retroperitoneum injury without mention of open wound into cavity	Diagnosis	ICD-9-CM
868.09	Injury to other and multiple intra-abdominal organs without mention of open wound into cavity	Diagnosis	ICD-9-CM
868.1	Injury to other intra-abdominal organs with open wound into cavity	Diagnosis	ICD-9-CM
868.10	Injury to unspecified intra-abdominal organ, with open wound into cavity	Diagnosis	ICD-9-CM
868.11	Adrenal gland injury, with open wound into cavity	Diagnosis	ICD-9-CM
868.12	Bile duct and gallbladder injury, with open wound into cavity	Diagnosis	ICD-9-CM
868.13	Peritoneum injury with open wound into cavity	Diagnosis	ICD-9-CM
868.14	Retroperitoneum injury with open wound into cavity	Diagnosis	ICD-9-CM
868.19	Injury to other and multiple intra-abdominal organs, with open wound into cavity	Diagnosis	ICD-9-CM
869.0	Internal injury to unspecified or ill-defined organs without mention of open wound into cavity	Diagnosis	ICD-9-CM
869.1	Internal injury to unspecified or ill-defined organs with open wound into cavity	Diagnosis	ICD-9-CM
870.0	Laceration of skin of eyelid and periocular area	Diagnosis	ICD-9-CM
870.1	Laceration of eyelid, full-thickness, not involving lacrimal passages	Diagnosis	ICD-9-CM
870.2	Laceration of eyelid involving lacrimal passages	Diagnosis	ICD-9-CM
870.3	Penetrating wound of orbit, without mention of foreign body	Diagnosis	ICD-9-CM
870.4	Penetrating wound of orbit with foreign body	Diagnosis	ICD-9-CM
870.8	Other specified open wound of ocular adnexa	Diagnosis	ICD-9-CM
870.9	Unspecified open wound of ocular adnexa	Diagnosis	ICD-9-CM
871.0	Ocular laceration without prolapse of intraocular tissue	Diagnosis	ICD-9-CM
871.1	Ocular laceration with prolapse or exposure of intraocular tissue	Diagnosis	ICD-9-CM
871.2	Rupture of eye with partial loss of intraocular tissue	Diagnosis	ICD-9-CM
871.3	Avulsion of eye	Diagnosis	ICD-9-CM
871.4	Unspecified laceration of eye	Diagnosis	ICD-9-CM
871.5	Penetration of eyeball with magnetic foreign body	Diagnosis	ICD-9-CM
871.6	Penetration of eyeball with (nonmagnetic) foreign body	Diagnosis	ICD-9-CM
871.7	Unspecified ocular penetration	Diagnosis	ICD-9-CM
871.9	Unspecified open wound of eyeball	Diagnosis	ICD-9-CM
872.0	Open wound of external ear, without mention of complication	Diagnosis	ICD-9-CM
872.00	Open wound of external ear, unspecified site, without mention of complication	Diagnosis	ICD-9-CM
872.01	Open wound of auricle, without mention of complication	Diagnosis	ICD-9-CM
872.02	Open wound of auditory canal, without mention of complication	Diagnosis	ICD-9-CM
872.1	Open wound of external ear, complicated	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
872.10	Open wound of external ear, unspecified site, complicated	Diagnosis	ICD-9-CM
872.11	Open wound of auricle, complicated	Diagnosis	ICD-9-CM
872.12	Open wound of auditory canal, complicated	Diagnosis	ICD-9-CM
872.6	Open wound of other specified parts of ear, without mention of complication	Diagnosis	ICD-9-CM
872.61	Open wound of ear drum, without mention of complication	Diagnosis	ICD-9-CM
872.62	Open wound of ossicles, without mention of complication	Diagnosis	ICD-9-CM
872.63	Open wound of Eustachian tube, without mention of complication	Diagnosis	ICD-9-CM
872.64	Open wound of cochlea, without mention of complication	Diagnosis	ICD-9-CM
872.69	Open wound of other and multiple sites, without mention of complication	Diagnosis	ICD-9-CM
872.7	Open wound of other specified parts of ear, complicated	Diagnosis	ICD-9-CM
872.71	Open wound of ear drum, complicated	Diagnosis	ICD-9-CM
872.72	Open wound of ossicles, complicated	Diagnosis	ICD-9-CM
872.73	Open wound of Eustachian tube, complicated	Diagnosis	ICD-9-CM
872.74	Open wound of cochlea, complicated	Diagnosis	ICD-9-CM
872.79	Open wound of other and multiple sites, complicated	Diagnosis	ICD-9-CM
872.8	Open wound of ear, part unspecified, without mention of complication	Diagnosis	ICD-9-CM
872.9	Open wound of ear, part unspecified, complicated	Diagnosis	ICD-9-CM
873.0	Open wound of scalp, without mention of complication	Diagnosis	ICD-9-CM
873.1	Open wound of scalp, complicated	Diagnosis	ICD-9-CM
873.2	Open wound of nose, without mention of complication	Diagnosis	ICD-9-CM
873.20	Open wound of nose, unspecified site, without mention of complication	Diagnosis	ICD-9-CM
873.21	Open wound of nasal septum, without mention of complication	Diagnosis	ICD-9-CM
873.22	Open wound of nasal cavity, without mention of complication	Diagnosis	ICD-9-CM
873.23	Open wound of nasal sinus, without mention of complication	Diagnosis	ICD-9-CM
873.29	Open wound of nose, multiple sites, without mention of complication	Diagnosis	ICD-9-CM
873.3	Open wound of nose, complicated	Diagnosis	ICD-9-CM
873.30	Open wound of nose, unspecified site, complicated	Diagnosis	ICD-9-CM
873.31	Open wound of nasal septum, complicated	Diagnosis	ICD-9-CM
873.32	Open wound of nasal cavity, complicated	Diagnosis	ICD-9-CM
873.33	Open wound of nasal sinus, complicated	Diagnosis	ICD-9-CM
873.39	Open wound of nose, multiple sites, complicated	Diagnosis	ICD-9-CM
873.4	Open wound of face, without mention of complication	Diagnosis	ICD-9-CM
873.40	Open wound of face, unspecified site, without mention of complication	Diagnosis	ICD-9-CM
873.41	Open wound of cheek, without mention of complication	Diagnosis	ICD-9-CM
873.42	Open wound of forehead, without mention of complication	Diagnosis	ICD-9-CM
873.43	Open wound of lip, without mention of complication	Diagnosis	ICD-9-CM
873.44	Open wound of jaw, without mention of complication	Diagnosis	ICD-9-CM
873.49	Open wound of face, other and multiple sites, without mention of complication	Diagnosis	ICD-9-CM
873.5	Open wound of face, complicated	Diagnosis	ICD-9-CM
873.50	Open wound of face, unspecified site, complicated	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
873.51	Open wound of cheek, complicated	Diagnosis	ICD-9-CM
873.52	Open wound of forehead, complicated	Diagnosis	ICD-9-CM
873.53	Open wound of lip, complicated	Diagnosis	ICD-9-CM
873.54	Open wound of jaw, complicated	Diagnosis	ICD-9-CM
873.59	Open wound of face, other and multiple sites, complicated	Diagnosis	ICD-9-CM
873.6	Open wound of internal structures of mouth, without mention of complication	Diagnosis	ICD-9-CM
873.60	Open wound of mouth, unspecified site, without mention of complication	Diagnosis	ICD-9-CM
873.61	Open wound of buccal mucosa, without mention of complication	Diagnosis	ICD-9-CM
873.62	Open wound of gum (alveolar process), without mention of complication	Diagnosis	ICD-9-CM
873.63	Tooth (broken) (fractured) (due to trauma), without mention of complication	Diagnosis	ICD-9-CM
873.64	Open wound of tongue and floor of mouth, without mention of complication	Diagnosis	ICD-9-CM
873.65	Open wound of palate, without mention of complication	Diagnosis	ICD-9-CM
873.69	Open wound of mouth, other and multiple sites, without mention of complication	Diagnosis	ICD-9-CM
873.7	Open wound of internal structure of mouth, complicated	Diagnosis	ICD-9-CM
873.70	Open wound of mouth, unspecified site, complicated	Diagnosis	ICD-9-CM
873.71	Open wound of buccal mucosa, complicated	Diagnosis	ICD-9-CM
873.72	Open wound of gum (alveolar process), complicated	Diagnosis	ICD-9-CM
873.73	Tooth (broken) (fractured) (due to trauma), complicated	Diagnosis	ICD-9-CM
873.74	Open wound of tongue and floor of mouth, complicated	Diagnosis	ICD-9-CM
873.75	Open wound of palate, complicated	Diagnosis	ICD-9-CM
873.79	Open wound of mouth, other and multiple sites, complicated	Diagnosis	ICD-9-CM
873.8	Other and unspecified open wound of head without mention of complication	Diagnosis	ICD-9-CM
873.9	Other and unspecified open wound of head, complicated	Diagnosis	ICD-9-CM
874.0	Open wound of larynx and trachea, without mention of complication	Diagnosis	ICD-9-CM
874.00	Open wound of larynx with trachea, without mention of complication	Diagnosis	ICD-9-CM
874.01	Open wound of larynx, without mention of complication	Diagnosis	ICD-9-CM
874.02	Open wound of trachea, without mention of complication	Diagnosis	ICD-9-CM
874.1	Open wound of larynx and trachea, complicated	Diagnosis	ICD-9-CM
874.10	Open wound of larynx with trachea, complicated	Diagnosis	ICD-9-CM
874.11	Open wound of larynx, complicated	Diagnosis	ICD-9-CM
874.12	Open wound of trachea, complicated	Diagnosis	ICD-9-CM
874.2	Open wound of thyroid gland, without mention of complication	Diagnosis	ICD-9-CM
874.3	Open wound of thyroid gland, complicated	Diagnosis	ICD-9-CM
874.4	Open wound of pharynx, without mention of complication	Diagnosis	ICD-9-CM
874.5	Open wound of pharynx, complicated	Diagnosis	ICD-9-CM
874.8	Open wound of other and unspecified parts of neck, without mention of complication	Diagnosis	ICD-9-CM
874.9	Open wound of other and unspecified parts of neck, complicated	Diagnosis	ICD-9-CM
875.0	Open wound of chest (wall), without mention of complication	Diagnosis	ICD-9-CM
875.1	Open wound of chest (wall), complicated	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
876.0	Open wound of back, without mention of complication	Diagnosis	ICD-9-CM
876.1	Open wound of back, complicated	Diagnosis	ICD-9-CM
877.0	Open wound of buttock, without mention of complication	Diagnosis	ICD-9-CM
877.1	Open wound of buttock, complicated	Diagnosis	ICD-9-CM
878.0	Open wound of penis, without mention of complication	Diagnosis	ICD-9-CM
878.1	Open wound of penis, complicated	Diagnosis	ICD-9-CM
878.2	Open wound of scrotum and testes, without mention of complication	Diagnosis	ICD-9-CM
878.3	Open wound of scrotum and testes, complicated	Diagnosis	ICD-9-CM
878.4	Open wound of vulva, without mention of complication	Diagnosis	ICD-9-CM
878.5	Open wound of vulva, complicated	Diagnosis	ICD-9-CM
878.6	Open wound of vagina, without mention of complication	Diagnosis	ICD-9-CM
878.7	Open wound of vagina, complicated	Diagnosis	ICD-9-CM
878.8	Open wound of other and unspecified parts of genital organs, without mention of complication	Diagnosis	ICD-9-CM
878.9	Open wound of other and unspecified parts of genital organs, complicated	Diagnosis	ICD-9-CM
879.0	Open wound of breast, without mention of complication	Diagnosis	ICD-9-CM
879.1	Open wound of breast, complicated	Diagnosis	ICD-9-CM
879.2	Open wound of abdominal wall, anterior, without mention of complication	Diagnosis	ICD-9-CM
879.3	Open wound of abdominal wall, anterior, complicated	Diagnosis	ICD-9-CM
879.4	Open wound of abdominal wall, lateral, without mention of complication	Diagnosis	ICD-9-CM
879.5	Open wound of abdominal wall, lateral, complicated	Diagnosis	ICD-9-CM
879.6	Open wound of other and unspecified parts of trunk, without mention of complication	Diagnosis	ICD-9-CM
879.7	Open wound of other and unspecified parts of trunk, complicated	Diagnosis	ICD-9-CM
879.8	Open wound(s) (multiple) of unspecified site(s), without mention of complication	Diagnosis	ICD-9-CM
879.9	Open wound(s) (multiple) of unspecified site(s), complicated	Diagnosis	ICD-9-CM
880.0	Open wound of shoulder and upper arm, without mention of complication	Diagnosis	ICD-9-CM
880.00	Open wound of shoulder region, without mention of complication	Diagnosis	ICD-9-CM
880.01	Open wound of scapular region, without mention of complication	Diagnosis	ICD-9-CM
880.02	Open wound of axillary region, without mention of complication	Diagnosis	ICD-9-CM
880.03	Open wound of upper arm, without mention of complication	Diagnosis	ICD-9-CM
880.09	Open wound of multiple sites of shoulder and upper arm, without mention of complication	Diagnosis	ICD-9-CM
880.1	Open wound of shoulder and upper arm, complicated	Diagnosis	ICD-9-CM
880.10	Open wound of shoulder region, complicated	Diagnosis	ICD-9-CM
880.11	Open wound of scapular region, complicated	Diagnosis	ICD-9-CM
880.12	Open wound of axillary region, complicated	Diagnosis	ICD-9-CM
880.13	Open wound of upper arm, complicated	Diagnosis	ICD-9-CM
880.19	Open wound of multiple sites of shoulder and upper arm, complicated	Diagnosis	ICD-9-CM
880.2	Open wound of shoulder and upper arm, with tendon involvement	Diagnosis	ICD-9-CM
880.20	Open wound of shoulder region, with tendon involvement	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
880.21	Open wound of scapular region, with tendon involvement	Diagnosis	ICD-9-CM
880.22	Open wound of axillary region, with tendon involvement	Diagnosis	ICD-9-CM
880.23	Open wound of upper arm, with tendon involvement	Diagnosis	ICD-9-CM
880.29	Open wound of multiple sites of shoulder and upper arm, with tendon involvement	Diagnosis	ICD-9-CM
881.0	Open wound of elbow, forearm, and wrist, without mention of complication	Diagnosis	ICD-9-CM
881.00	Open wound of forearm, without mention of complication	Diagnosis	ICD-9-CM
881.01	Open wound of elbow, without mention of complication	Diagnosis	ICD-9-CM
881.02	Open wound of wrist, without mention of complication	Diagnosis	ICD-9-CM
881.1	Open wound of elbow, forearm, and wrist, complicated	Diagnosis	ICD-9-CM
881.10	Open wound of forearm, complicated	Diagnosis	ICD-9-CM
881.11	Open wound of elbow, complicated	Diagnosis	ICD-9-CM
881.12	Open wound of wrist, complicated	Diagnosis	ICD-9-CM
881.2	Open wound of elbow, forearm, and wrist, with tendon involvement	Diagnosis	ICD-9-CM
881.20	Open wound of forearm, with tendon involvement	Diagnosis	ICD-9-CM
881.21	Open wound of elbow, with tendon involvement	Diagnosis	ICD-9-CM
881.22	Open wound of wrist, with tendon involvement	Diagnosis	ICD-9-CM
882.0	Open wound of hand except finger(s) alone, without mention of complication	Diagnosis	ICD-9-CM
882.1	Open wound of hand except finger(s) alone, complicated	Diagnosis	ICD-9-CM
882.2	Open wound of hand except finger(s) alone, with tendon involvement	Diagnosis	ICD-9-CM
883.0	Open wound of finger(s), without mention of complication	Diagnosis	ICD-9-CM
883.1	Open wound of finger(s), complicated	Diagnosis	ICD-9-CM
883.2	Open wound of finger(s), with tendon involvement	Diagnosis	ICD-9-CM
884.0	Multiple and unspecified open wound of upper limb, without mention of complication	Diagnosis	ICD-9-CM
884.1	Multiple and unspecified open wound of upper limb, complicated	Diagnosis	ICD-9-CM
884.2	Multiple and unspecified open wound of upper limb, with tendon involvement	Diagnosis	ICD-9-CM
885.0	Traumatic amputation of thumb (complete) (partial), without mention of complication	Diagnosis	ICD-9-CM
885.1	Traumatic amputation of thumb (complete) (partial), complicated	Diagnosis	ICD-9-CM
886.0	Traumatic amputation of other finger(s) (complete) (partial), without mention of complication	Diagnosis	ICD-9-CM
886.1	Traumatic amputation of other finger(s) (complete) (partial), complicated	Diagnosis	ICD-9-CM
887.0	Traumatic amputation of arm and hand (complete) (partial), unilateral, below elbow, without mention of complication	Diagnosis	ICD-9-CM
887.1	Traumatic amputation of arm and hand (complete) (partial), unilateral, below elbow, complicated	Diagnosis	ICD-9-CM
887.2	Traumatic amputation of arm and hand (complete) (partial), unilateral, at or above elbow, without mention of complication	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
887.3	Traumatic amputation of arm and hand (complete) (partial), unilateral, at or above elbow, complicated	Diagnosis	ICD-9-CM
887.4	Traumatic amputation of arm and hand (complete) (partial), unilateral, level not specified, without mention of complication	Diagnosis	ICD-9-CM
887.5	Traumatic amputation of arm and hand (complete) (partial), unilateral, level not specified, complicated	Diagnosis	ICD-9-CM
887.6	Traumatic amputation of arm and hand (complete) (partial), bilateral (any level), without mention of complication	Diagnosis	ICD-9-CM
887.7	Traumatic amputation of arm and hand (complete) (partial), bilateral (any level), complicated	Diagnosis	ICD-9-CM
890.0	Open wound of hip and thigh, without mention of complication	Diagnosis	ICD-9-CM
890.1	Open wound of hip and thigh, complicated	Diagnosis	ICD-9-CM
890.2	Open wound of hip and thigh, with tendon involvement	Diagnosis	ICD-9-CM
891.0	Open wound of knee, leg (except thigh), and ankle, without mention of complication	Diagnosis	ICD-9-CM
891.1	Open wound of knee, leg (except thigh), and ankle, complicated	Diagnosis	ICD-9-CM
891.2	Open wound of knee, leg (except thigh), and ankle, with tendon involvement	Diagnosis	ICD-9-CM
892.0	Open wound of foot except toe(s) alone, without mention of complication	Diagnosis	ICD-9-CM
892.1	Open wound of foot except toe(s) alone, complicated	Diagnosis	ICD-9-CM
892.2	Open wound of foot except toe(s) alone, with tendon involvement	Diagnosis	ICD-9-CM
893.0	Open wound of toe(s), without mention of complication	Diagnosis	ICD-9-CM
893.1	Open wound of toe(s), complicated	Diagnosis	ICD-9-CM
893.2	Open wound of toe(s), with tendon involvement	Diagnosis	ICD-9-CM
894.0	Multiple and unspecified open wound of lower limb, without mention of complication	Diagnosis	ICD-9-CM
894.1	Multiple and unspecified open wound of lower limb, complicated	Diagnosis	ICD-9-CM
894.2	Multiple and unspecified open wound of lower limb, with tendon involvement	Diagnosis	ICD-9-CM
895.0	Traumatic amputation of toe(s) (complete) (partial), without mention of complication	Diagnosis	ICD-9-CM
895.1	Traumatic amputation of toe(s) (complete) (partial), complicated	Diagnosis	ICD-9-CM
896.0	Traumatic amputation of foot (complete) (partial), unilateral, without mention of complication	Diagnosis	ICD-9-CM
896.1	Traumatic amputation of foot (complete) (partial), unilateral, complicated	Diagnosis	ICD-9-CM
896.2	Traumatic amputation of foot (complete) (partial), bilateral, without mention of complication	Diagnosis	ICD-9-CM
896.3	Traumatic amputation of foot (complete) (partial), bilateral, complicated	Diagnosis	ICD-9-CM
897.0	Traumatic amputation of leg(s) (complete) (partial), unilateral, below knee, without mention of complication	Diagnosis	ICD-9-CM
897.1	Traumatic amputation of leg(s) (complete) (partial), unilateral, below knee, complicated	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
897.2	Traumatic amputation of leg(s) (complete) (partial), unilateral, at or above knee, without mention of complication	Diagnosis	ICD-9-CM
897.3	Traumatic amputation of leg(s) (complete) (partial), unilateral, at or above knee, complicated	Diagnosis	ICD-9-CM
897.4	Traumatic amputation of leg(s) (complete) (partial), unilateral, level not specified, without mention of complication	Diagnosis	ICD-9-CM
897.5	Traumatic amputation of leg(s) (complete) (partial), unilateral, level not specified, complicated	Diagnosis	ICD-9-CM
897.6	Traumatic amputation of leg(s) (complete) (partial), bilateral (any level), without mention of complication	Diagnosis	ICD-9-CM
897.7	Traumatic amputation of leg(s) (complete) (partial), bilateral (any level), complicated	Diagnosis	ICD-9-CM
900.0	Injury to carotid artery	Diagnosis	ICD-9-CM
900.00	Injury to carotid artery, unspecified	Diagnosis	ICD-9-CM
900.01	Common carotid artery injury	Diagnosis	ICD-9-CM
900.02	External carotid artery injury	Diagnosis	ICD-9-CM
900.03	Internal carotid artery injury	Diagnosis	ICD-9-CM
900.1	Internal jugular vein injury	Diagnosis	ICD-9-CM
900.8	Injury to other specified blood vessels of head and neck	Diagnosis	ICD-9-CM
900.81	External jugular vein injury	Diagnosis	ICD-9-CM
900.82	Injury to multiple blood vessels of head and neck	Diagnosis	ICD-9-CM
900.89	Injury to other specified blood vessels of head and neck	Diagnosis	ICD-9-CM
900.9	Injury to unspecified blood vessel of head and neck	Diagnosis	ICD-9-CM
901.0	Thoracic aorta injury	Diagnosis	ICD-9-CM
901.1	Innominate and subclavian artery injury	Diagnosis	ICD-9-CM
901.2	Superior vena cava injury	Diagnosis	ICD-9-CM
901.3	Innominate and subclavian vein injury	Diagnosis	ICD-9-CM
901.4	Pulmonary blood vessel injury	Diagnosis	ICD-9-CM
901.40	Injury to unspecified pulmonary vessel(s)	Diagnosis	ICD-9-CM
901.41	Pulmonary artery injury	Diagnosis	ICD-9-CM
901.42	Pulmonary vein injury	Diagnosis	ICD-9-CM
901.8	Injury to other specified blood vessels of thorax	Diagnosis	ICD-9-CM
901.81	Intercostal artery or vein injury	Diagnosis	ICD-9-CM
901.82	Internal mammary artery or vein injury	Diagnosis	ICD-9-CM
901.83	Injury to multiple blood vessels of thorax	Diagnosis	ICD-9-CM
901.89	Injury to specified blood vessels of thorax, other	Diagnosis	ICD-9-CM
901.9	Injury to unspecified blood vessel of thorax	Diagnosis	ICD-9-CM
902.0	Abdominal aorta injury	Diagnosis	ICD-9-CM
902.1	Inferior vena cava injury	Diagnosis	ICD-9-CM
902.10	Unspecified inferior vena cava injury	Diagnosis	ICD-9-CM
902.11	Hepatic vein injury	Diagnosis	ICD-9-CM
902.19	Injury to specified branches of inferior vena cava, other	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
902.2	Celiac and mesenteric artery injury	Diagnosis	ICD-9-CM
902.20	Unspecified celiac and mesenteric artery injury	Diagnosis	ICD-9-CM
902.21	Gastric artery injury	Diagnosis	ICD-9-CM
902.22	Hepatic artery injury	Diagnosis	ICD-9-CM
902.23	Splenic artery injury	Diagnosis	ICD-9-CM
902.24	Injury to specified branches of celiac axis, other	Diagnosis	ICD-9-CM
902.25	Superior mesenteric artery (trunk) injury	Diagnosis	ICD-9-CM
902.26	Injury to primary branches of superior mesenteric artery	Diagnosis	ICD-9-CM
902.27	Inferior mesenteric artery injury	Diagnosis	ICD-9-CM
902.29	Injury to celiac and mesenteric arteries, other	Diagnosis	ICD-9-CM
902.3	Portal and splenic vein injury	Diagnosis	ICD-9-CM
902.31	Injury to superior mesenteric vein and primary subdivisions	Diagnosis	ICD-9-CM
902.32	Inferior mesenteric vein injury	Diagnosis	ICD-9-CM
902.33	Portal vein injury	Diagnosis	ICD-9-CM
902.34	Splenic vein injury	Diagnosis	ICD-9-CM
902.39	Injury to portal and splenic veins, other	Diagnosis	ICD-9-CM
902.4	Renal blood vessel injury	Diagnosis	ICD-9-CM
902.40	Renal vessel(s) injury, unspecified	Diagnosis	ICD-9-CM
902.41	Renal artery injury	Diagnosis	ICD-9-CM
902.42	Renal vein injury	Diagnosis	ICD-9-CM
902.49	Renal blood vessel injury, other	Diagnosis	ICD-9-CM
902.5	Iliac blood vessel injury	Diagnosis	ICD-9-CM
902.50	Unspecified iliac vessel(s) injury	Diagnosis	ICD-9-CM
902.51	Hypogastric artery injury	Diagnosis	ICD-9-CM
902.52	Hypogastric vein injury	Diagnosis	ICD-9-CM
902.53	Iliac artery injury	Diagnosis	ICD-9-CM
902.54	Iliac vein injury	Diagnosis	ICD-9-CM
902.55	Uterine artery injury	Diagnosis	ICD-9-CM
902.56	Uterine vein injury	Diagnosis	ICD-9-CM
902.59	Injury to iliac blood vessels, other	Diagnosis	ICD-9-CM
902.8	Injury to specified blood vessels of abdomen and pelvis, other	Diagnosis	ICD-9-CM
902.81	Ovarian artery injury	Diagnosis	ICD-9-CM
902.82	Ovarian vein injury	Diagnosis	ICD-9-CM
902.87	Injury to multiple blood vessels of abdomen and pelvis	Diagnosis	ICD-9-CM
902.89	Injury to specified blood vessels of abdomen and pelvis, other	Diagnosis	ICD-9-CM
902.9	Injury to blood vessel of abdomen and pelvis, unspecified	Diagnosis	ICD-9-CM
903.0	Axillary blood vessel(s) injury	Diagnosis	ICD-9-CM
903.00	Axillary vessel(s) injury, unspecified	Diagnosis	ICD-9-CM
903.01	Axillary artery injury	Diagnosis	ICD-9-CM
903.02	Axillary vein injury	Diagnosis	ICD-9-CM
903.1	Brachial blood vessels injury	Diagnosis	ICD-9-CM
903.2	Radial blood vessels injury	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
903.3	Ulnar blood vessels injury	Diagnosis	ICD-9-CM
903.4	Palmar artery injury	Diagnosis	ICD-9-CM
903.5	Digital blood vessels injury	Diagnosis	ICD-9-CM
903.8	Injury to specified blood vessels of upper extremity, other	Diagnosis	ICD-9-CM
903.9	Injury to unspecified blood vessel of upper extremity	Diagnosis	ICD-9-CM
904.0	Common femoral artery injury	Diagnosis	ICD-9-CM
904.1	Superficial femoral artery injury	Diagnosis	ICD-9-CM
904.2	Femoral vein injury	Diagnosis	ICD-9-CM
904.3	Saphenous vein injury	Diagnosis	ICD-9-CM
904.4	Popliteal blood vessel vein	Diagnosis	ICD-9-CM
904.40	Unspecified popliteal vessel(s) injury	Diagnosis	ICD-9-CM
904.41	Popliteal artery injury	Diagnosis	ICD-9-CM
904.42	Popliteal vein injury	Diagnosis	ICD-9-CM
904.5	Tibial blood vessel(s) injury	Diagnosis	ICD-9-CM
904.50	Unspecified tibial vessel(s) injury	Diagnosis	ICD-9-CM
904.51	Anterior tibial artery injury	Diagnosis	ICD-9-CM
904.52	Anterior tibial vein injury	Diagnosis	ICD-9-CM
904.53	Posterior tibial artery injury	Diagnosis	ICD-9-CM
904.54	Posterior tibial vein injury	Diagnosis	ICD-9-CM
904.6	Deep plantar blood vessels injury	Diagnosis	ICD-9-CM
904.7	Injury to specified blood vessels of lower extremity, other	Diagnosis	ICD-9-CM
904.8	Injury to unspecified blood vessel of lower extremity	Diagnosis	ICD-9-CM
904.9	Injury to blood vessels, unspecified site	Diagnosis	ICD-9-CM
905.0	Late effect of fracture of skull and face bones	Diagnosis	ICD-9-CM
905.1	Late effect of fracture of spine and trunk without mention of spinal cord lesion	Diagnosis	ICD-9-CM
905.2	Late effect of fracture of upper extremities	Diagnosis	ICD-9-CM
905.3	Late effect of fracture of neck of femur	Diagnosis	ICD-9-CM
905.4	Late effect of fracture of lower extremities	Diagnosis	ICD-9-CM
905.5	Late effect of fracture of multiple and unspecified bones	Diagnosis	ICD-9-CM
905.6	Late effect of dislocation	Diagnosis	ICD-9-CM
905.7	Late effect of sprain and strain without mention of tendon injury	Diagnosis	ICD-9-CM
905.8	Late effect of tendon injury	Diagnosis	ICD-9-CM
905.9	Late effect of traumatic amputation	Diagnosis	ICD-9-CM
906.0	Late effect of open wound of head, neck, and trunk	Diagnosis	ICD-9-CM
906.1	Late effect of open wound of extremities without mention of tendon injury	Diagnosis	ICD-9-CM
906.2	Late effect of superficial injury	Diagnosis	ICD-9-CM
906.3	Late effect of contusion	Diagnosis	ICD-9-CM
906.4	Late effect of crushing	Diagnosis	ICD-9-CM
906.5	Late effect of burn of eye, face, head, and neck	Diagnosis	ICD-9-CM
906.6	Late effect of burn of wrist and hand	Diagnosis	ICD-9-CM
906.7	Late effect of burn of other extremities	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
906.8	Late effect of burns of other specified sites	Diagnosis	ICD-9-CM
906.9	Late effect of burn of unspecified site	Diagnosis	ICD-9-CM
907.0	Late effect of intracranial injury without mention of skull fracture	Diagnosis	ICD-9-CM
907.1	Late effect of injury to cranial nerve	Diagnosis	ICD-9-CM
907.2	Late effect of spinal cord injury	Diagnosis	ICD-9-CM
907.3	Late effect of injury to nerve root(s), spinal plexus(es), and other nerves of trunk	Diagnosis	ICD-9-CM
907.4	Late effect of injury to peripheral nerve of shoulder girdle and upper limb	Diagnosis	ICD-9-CM
907.5	Late effect of injury to peripheral nerve of pelvic girdle and lower limb	Diagnosis	ICD-9-CM
907.9	Late effect of injury to other and unspecified nerve	Diagnosis	ICD-9-CM
908.0	Late effect of internal injury to chest	Diagnosis	ICD-9-CM
908.1	Late effect of internal injury to intra-abdominal organs	Diagnosis	ICD-9-CM
908.2	Late effect of internal injury to other internal organs	Diagnosis	ICD-9-CM
908.3	Late effect of injury to blood vessel of head, neck, and extremities	Diagnosis	ICD-9-CM
908.4	Late effect of injury to blood vessel of thorax, abdomen, and pelvis	Diagnosis	ICD-9-CM
908.5	Late effect of foreign body in orifice	Diagnosis	ICD-9-CM
908.6	Late effect of certain complications of trauma	Diagnosis	ICD-9-CM
908.9	Late effect of unspecified injury	Diagnosis	ICD-9-CM
909.0	Late effect of poisoning due to drug, medicinal or biological substance	Diagnosis	ICD-9-CM
909.1	Late effect of toxic effects of nonmedical substances	Diagnosis	ICD-9-CM
909.2	Late effect of radiation	Diagnosis	ICD-9-CM
909.3	Late effect of complications of surgical and medical care	Diagnosis	ICD-9-CM
909.4	Late effect of certain other external causes	Diagnosis	ICD-9-CM
909.5	Late effect of adverse effect of drug, medical or biological substance	Diagnosis	ICD-9-CM
909.9	Late effect of other and unspecified external causes	Diagnosis	ICD-9-CM
910.0	Face, neck, and scalp, except eye, abrasion or friction burn, without mention of infection	Diagnosis	ICD-9-CM
910.1	Face, neck, and scalp except eye, abrasion or friction burn, infected	Diagnosis	ICD-9-CM
910.2	Face, neck, and scalp except eye, blister, without mention of infection	Diagnosis	ICD-9-CM
910.3	Face, neck, and scalp except eye, blister, infected	Diagnosis	ICD-9-CM
910.4	Face, neck, and scalp except eye, insect bite, nonvenomous, without mention of infection	Diagnosis	ICD-9-CM
910.5	Face, neck, and scalp except eye, insect bite, nonvenomous, infected	Diagnosis	ICD-9-CM
910.6	Face, neck, and scalp, except eye, superficial foreign body (splinter), without major open wound or mention of infection	Diagnosis	ICD-9-CM
910.7	Face, neck, and scalp except eye, superficial foreign body (splinter), without major open wound, infected	Diagnosis	ICD-9-CM
910.8	Other and unspecified superficial injury of face, neck, and scalp, without mention of infection	Diagnosis	ICD-9-CM
910.9	Other and unspecified superficial injury of face, neck, and scalp, infected	Diagnosis	ICD-9-CM
911.0	Trunk abrasion or friction burn, without mention of infection	Diagnosis	ICD-9-CM
911.1	Trunk abrasion or friction burn, infected	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
911.2	Trunk blister, without mention of infection	Diagnosis	ICD-9-CM
911.3	Trunk blister, infected	Diagnosis	ICD-9-CM
911.4	Trunk, insect bite, nonvenomous, without mention of infection	Diagnosis	ICD-9-CM
911.5	Trunk, insect bite, nonvenomous, infected	Diagnosis	ICD-9-CM
911.6	Trunk, superficial foreign body (splinter), without major open wound and without mention of infection	Diagnosis	ICD-9-CM
911.7	Trunk, superficial foreign body (splinter), without major open wound, infected	Diagnosis	ICD-9-CM
911.8	Other and unspecified superficial injury of trunk, without mention of infection	Diagnosis	ICD-9-CM
911.9	Other and unspecified superficial injury of trunk, infected	Diagnosis	ICD-9-CM
912.0	Shoulder and upper arm, abrasion or friction burn, without mention of infection	Diagnosis	ICD-9-CM
912.1	Shoulder and upper arm, abrasion or friction burn, infected	Diagnosis	ICD-9-CM
912.2	Shoulder and upper arm, blister, without mention of infection	Diagnosis	ICD-9-CM
912.3	Shoulder and upper arm, blister, infected	Diagnosis	ICD-9-CM
912.4	Shoulder and upper arm, insect bite, nonvenomous, without mention of infection	Diagnosis	ICD-9-CM
912.5	Shoulder and upper arm, insect bite, nonvenomous, infected	Diagnosis	ICD-9-CM
912.6	Shoulder and upper arm, superficial foreign body (splinter), without major open wound and without mention of infection	Diagnosis	ICD-9-CM
912.7	Shoulder and upper arm, superficial foreign body (splinter), without major open wound, infected	Diagnosis	ICD-9-CM
912.8	Other and unspecified superficial injury of shoulder and upper arm, without mention of infection	Diagnosis	ICD-9-CM
912.9	Other and unspecified superficial injury of shoulder and upper arm, infected	Diagnosis	ICD-9-CM
913.0	Elbow, forearm, and wrist, abrasion or friction burn, without mention of infection	Diagnosis	ICD-9-CM
913.1	Elbow, forearm, and wrist, abrasion or friction burn, infected	Diagnosis	ICD-9-CM
913.2	Elbow, forearm, and wrist, blister, without mention of infection	Diagnosis	ICD-9-CM
913.3	Elbow, forearm, and wrist, blister infected	Diagnosis	ICD-9-CM
913.4	Elbow, forearm, and wrist, insect bite, nonvenomous, without mention of infection	Diagnosis	ICD-9-CM
913.5	Elbow, forearm, and wrist, insect bite, nonvenomous, infected	Diagnosis	ICD-9-CM
913.6	Elbow, forearm, and wrist, superficial foreign body (splinter), without major open wound and without mention of infection	Diagnosis	ICD-9-CM
913.7	Elbow, forearm, and wrist, superficial foreign body (splinter), without major open wound, infected	Diagnosis	ICD-9-CM
913.8	Other and unspecified superficial injury of elbow, forearm, and wrist, without mention of infection	Diagnosis	ICD-9-CM
913.9	Other and unspecified superficial injury of elbow, forearm, and wrist, infected	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
914.0	Hand(s) except finger(s) alone, abrasion or friction burn, without mention of infection	Diagnosis	ICD-9-CM
914.1	Hand(s) except finger(s) alone, abrasion or friction burn, infected	Diagnosis	ICD-9-CM
914.2	Hand(s) except finger(s) alone, blister, without mention of infection	Diagnosis	ICD-9-CM
914.3	Hand(s) except finger(s) alone, blister, infected	Diagnosis	ICD-9-CM
914.4	Hand(s) except finger(s) alone, insect bite, nonvenomous, without mention of infection	Diagnosis	ICD-9-CM
914.5	Hand(s) except finger(s) alone, insect bite, nonvenomous, infected	Diagnosis	ICD-9-CM
914.6	Hand(s) except finger(s) alone, superficial foreign body (splinter), without major open wound and without mention of infection	Diagnosis	ICD-9-CM
914.7	Hand(s) except finger(s) alone, superficial foreign body (splinter) without major open wound, infected	Diagnosis	ICD-9-CM
914.8	Other and unspecified superficial injury of hand(s) except finger(s) alone, without mention of infection	Diagnosis	ICD-9-CM
914.9	Other and unspecified superficial injury of hand(s) except finger(s) alone, infected	Diagnosis	ICD-9-CM
915.0	Abrasion or friction burn of finger, without mention of infection	Diagnosis	ICD-9-CM
915.1	Finger, abrasion or friction burn, infected	Diagnosis	ICD-9-CM
915.2	Finger, blister, without mention of infection	Diagnosis	ICD-9-CM
915.3	Finger, blister, infected	Diagnosis	ICD-9-CM
915.4	Finger, insect bite, nonvenomous, without mention of infection	Diagnosis	ICD-9-CM
915.5	Finger, insect bite, nonvenomous, infected	Diagnosis	ICD-9-CM
915.6	Finger, superficial foreign body (splinter), without major open wound and without mention of infection	Diagnosis	ICD-9-CM
915.7	Finger, superficial foreign body (splinter), without major open wound, infected	Diagnosis	ICD-9-CM
915.8	Other and unspecified superficial injury of finger without mention of infection	Diagnosis	ICD-9-CM
915.9	Other and unspecified superficial injury of finger, infected	Diagnosis	ICD-9-CM
916.0	Hip, thigh, leg, and ankle, abrasion or friction burn, without mention of infection	Diagnosis	ICD-9-CM
916.1	Hip, thigh, leg, and ankle, abrasion or friction burn, infected	Diagnosis	ICD-9-CM
916.2	Hip, thigh, leg, and ankle, blister, without mention of infection	Diagnosis	ICD-9-CM
916.3	Hip, thigh, leg, and ankle, blister, infected	Diagnosis	ICD-9-CM
916.4	Hip, thigh, leg, and ankle, insect bite, nonvenomous, without mention of infection	Diagnosis	ICD-9-CM
916.5	Hip, thigh, leg, and ankle, insect bite, nonvenomous, infected	Diagnosis	ICD-9-CM
916.6	Hip, thigh, leg, and ankle, superficial foreign body (splinter), without major open wound and without mention of infection	Diagnosis	ICD-9-CM
916.7	Hip, thigh, leg, and ankle, superficial foreign body (splinter), without major open wound, infected	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
916.8	Other and unspecified superficial injury of hip, thigh, leg, and ankle, without mention of infection	Diagnosis	ICD-9-CM
916.9	Other and unspecified superficial injury of hip, thigh, leg, and ankle, infected	Diagnosis	ICD-9-CM
917.0	Abrasion or friction burn of foot and toe(s), without mention of infection	Diagnosis	ICD-9-CM
917.1	Foot and toe(s), abrasion or friction burn, infected	Diagnosis	ICD-9-CM
917.2	Foot and toe(s), blister, without mention of infection	Diagnosis	ICD-9-CM
917.3	Foot and toe(s), blister, infected	Diagnosis	ICD-9-CM
917.4	Foot and toe(s), insect bite, nonvenomous, without mention of infection	Diagnosis	ICD-9-CM
917.5	Foot and toe(s), insect bite, nonvenomous, infected	Diagnosis	ICD-9-CM
917.6	Foot and toe(s), superficial foreign body (splinter), without major open wound and without mention of infection	Diagnosis	ICD-9-CM
917.7	Foot and toe(s), superficial foreign body (splinter), without major open wound, infected	Diagnosis	ICD-9-CM
917.8	Other and unspecified superficial injury of foot and toes, without mention of infection	Diagnosis	ICD-9-CM
917.9	Other and unspecified superficial injury of foot and toes, infected	Diagnosis	ICD-9-CM
918.0	Superficial injury of eyelids and periocular area	Diagnosis	ICD-9-CM
918.1	Superficial injury of cornea	Diagnosis	ICD-9-CM
918.2	Superficial injury of conjunctiva	Diagnosis	ICD-9-CM
918.9	Other and unspecified superficial injuries of eye	Diagnosis	ICD-9-CM
919.0	Abrasion or friction burn of other, multiple, and unspecified sites, without mention of infection	Diagnosis	ICD-9-CM
919.1	Other, multiple, and unspecified sites, abrasion or friction burn, infected	Diagnosis	ICD-9-CM
919.2	Other, multiple, and unspecified sites, blister, without mention of infection	Diagnosis	ICD-9-CM
919.3	Other, multiple, and unspecified sites, blister, infected	Diagnosis	ICD-9-CM
919.4	Other, multiple, and unspecified sites, insect bite, nonvenomous, without mention of infection	Diagnosis	ICD-9-CM
919.5	Other, multiple, and unspecified sites, insect bite, nonvenomous, infected	Diagnosis	ICD-9-CM
919.6	Other, multiple, and unspecified sites, superficial foreign body (splinter), without major open wound and without mention of infection	Diagnosis	ICD-9-CM
919.7	Other, multiple, and unspecified sites, superficial foreign body (splinter), without major open wound, infected	Diagnosis	ICD-9-CM
919.8	Other and unspecified superficial injury of other, multiple, and unspecified sites, without mention of infection	Diagnosis	ICD-9-CM
919.9	Other and unspecified superficial injury of other, multiple, and unspecified sites, infected	Diagnosis	ICD-9-CM
921.0	Black eye, not otherwise specified	Diagnosis	ICD-9-CM
921.1	Contusion of eyelids and periocular area	Diagnosis	ICD-9-CM
921.2	Contusion of orbital tissues	Diagnosis	ICD-9-CM
921.3	Contusion of eyeball	Diagnosis	ICD-9-CM
921.9	Unspecified contusion of eye	Diagnosis	ICD-9-CM
922.0	Contusion of breast	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
922.1	Contusion of chest wall	Diagnosis	ICD-9-CM
922.2	Contusion of abdominal wall	Diagnosis	ICD-9-CM
922.3	Contusion of trunk	Diagnosis	ICD-9-CM
922.31	Contusion of back	Diagnosis	ICD-9-CM
922.32	Contusion of buttock	Diagnosis	ICD-9-CM
922.33	Contusion of interscapular region	Diagnosis	ICD-9-CM
922.4	Contusion of genital organs	Diagnosis	ICD-9-CM
922.8	Contusion of multiple sites of trunk	Diagnosis	ICD-9-CM
922.9	Contusion of unspecified part of trunk	Diagnosis	ICD-9-CM
923.0	Contusion of shoulder and upper arm	Diagnosis	ICD-9-CM
923.00	Contusion of shoulder region	Diagnosis	ICD-9-CM
923.01	Contusion of scapular region	Diagnosis	ICD-9-CM
923.02	Contusion of axillary region	Diagnosis	ICD-9-CM
923.03	Contusion of upper arm	Diagnosis	ICD-9-CM
923.09	Contusion of multiple sites of shoulder and upper arm	Diagnosis	ICD-9-CM
923.1	Contusion of elbow and forearm	Diagnosis	ICD-9-CM
923.10	Contusion of forearm	Diagnosis	ICD-9-CM
923.11	Contusion of elbow	Diagnosis	ICD-9-CM
923.2	Contusion of wrist and hand(s), except finger(s) alone	Diagnosis	ICD-9-CM
923.20	Contusion of hand(s)	Diagnosis	ICD-9-CM
923.21	Contusion of wrist	Diagnosis	ICD-9-CM
923.3	Contusion of finger	Diagnosis	ICD-9-CM
923.8	Contusion of multiple sites of upper limb	Diagnosis	ICD-9-CM
923.9	Contusion of unspecified part of upper limb	Diagnosis	ICD-9-CM
924.0	Contusion of hip and thigh	Diagnosis	ICD-9-CM
924.00	Contusion of thigh	Diagnosis	ICD-9-CM
924.01	Contusion of hip	Diagnosis	ICD-9-CM
924.1	Contusion of knee and lower leg	Diagnosis	ICD-9-CM
924.10	Contusion of lower leg	Diagnosis	ICD-9-CM
924.11	Contusion of knee	Diagnosis	ICD-9-CM
924.2	Contusion of ankle and foot, excluding toe(s)	Diagnosis	ICD-9-CM
924.20	Contusion of foot	Diagnosis	ICD-9-CM
924.21	Contusion of ankle	Diagnosis	ICD-9-CM
924.3	Contusion of toe	Diagnosis	ICD-9-CM
924.4	Contusion of multiple sites of lower limb	Diagnosis	ICD-9-CM
924.5	Contusion of unspecified part of lower limb	Diagnosis	ICD-9-CM
924.8	Contusion of multiple sites, not elsewhere classified	Diagnosis	ICD-9-CM
924.9	Contusion of unspecified site	Diagnosis	ICD-9-CM
925.1	Crushing injury of face and scalp	Diagnosis	ICD-9-CM
925.2	Crushing injury of neck	Diagnosis	ICD-9-CM
926.0	Crushing injury of external genitalia	Diagnosis	ICD-9-CM
926.1	Crushing injury of other specified sites of trunk	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
926.11	Crushing injury of back	Diagnosis	ICD-9-CM
926.12	Crushing injury of buttock	Diagnosis	ICD-9-CM
926.19	Crushing injury of other specified sites of trunk	Diagnosis	ICD-9-CM
926.8	Crushing injury of multiple sites of trunk	Diagnosis	ICD-9-CM
926.9	Crushing injury of unspecified site of trunk	Diagnosis	ICD-9-CM
927.0	Crushing injury of shoulder and upper arm	Diagnosis	ICD-9-CM
927.00	Crushing injury of shoulder region	Diagnosis	ICD-9-CM
927.01	Crushing injury of scapular region	Diagnosis	ICD-9-CM
927.02	Crushing injury of axillary region	Diagnosis	ICD-9-CM
927.03	Crushing injury of upper arm	Diagnosis	ICD-9-CM
927.09	Crushing injury of multiple sites of upper arm	Diagnosis	ICD-9-CM
927.1	Crushing injury of elbow and forearm	Diagnosis	ICD-9-CM
927.10	Crushing injury of forearm	Diagnosis	ICD-9-CM
927.11	Crushing injury of elbow	Diagnosis	ICD-9-CM
927.2	Crushing injury of wrist and hand(s), except finger(s) alone	Diagnosis	ICD-9-CM
927.20	Crushing injury of hand(s)	Diagnosis	ICD-9-CM
927.21	Crushing injury of wrist	Diagnosis	ICD-9-CM
927.3	Crushing injury of finger(s)	Diagnosis	ICD-9-CM
927.8	Crushing injury of multiple sites of upper limb	Diagnosis	ICD-9-CM
927.9	Crushing injury of unspecified site of upper limb	Diagnosis	ICD-9-CM
928.0	Crushing injury of hip and thigh	Diagnosis	ICD-9-CM
928.00	Crushing injury of thigh	Diagnosis	ICD-9-CM
928.01	Crushing injury of hip	Diagnosis	ICD-9-CM
928.1	Crushing injury of knee and lower leg	Diagnosis	ICD-9-CM
928.10	Crushing injury of lower leg	Diagnosis	ICD-9-CM
928.11	Crushing injury of knee	Diagnosis	ICD-9-CM
928.2	Crushing injury of ankle and foot, excluding toe(s) alone	Diagnosis	ICD-9-CM
928.20	Crushing injury of foot	Diagnosis	ICD-9-CM
928.21	Crushing injury of ankle	Diagnosis	ICD-9-CM
928.3	Crushing injury of toe(s)	Diagnosis	ICD-9-CM
928.8	Crushing injury of multiple sites of lower limb	Diagnosis	ICD-9-CM
928.9	Crushing injury of unspecified site of lower limb	Diagnosis	ICD-9-CM
929.0	Crushing injury of multiple sites, not elsewhere classified	Diagnosis	ICD-9-CM
929.9	Crushing injury of unspecified site	Diagnosis	ICD-9-CM
930.0	Foreign body in cornea	Diagnosis	ICD-9-CM
930.1	Foreign body in conjunctival sac	Diagnosis	ICD-9-CM
930.2	Foreign body in lacrimal punctum	Diagnosis	ICD-9-CM
930.8	Foreign body in other and combined sites on external eye	Diagnosis	ICD-9-CM
930.9	Foreign body in unspecified site on external eye	Diagnosis	ICD-9-CM
933.0	Foreign body in pharynx	Diagnosis	ICD-9-CM
933.1	Foreign body in larynx	Diagnosis	ICD-9-CM
934.0	Foreign body in trachea	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
934.1	Foreign body in main bronchus	Diagnosis	ICD-9-CM
934.8	Foreign body in other specified parts of trachea, bronchus, and lung	Diagnosis	ICD-9-CM
934.9	Foreign body in respiratory tree, unspecified	Diagnosis	ICD-9-CM
935.0	Foreign body in mouth	Diagnosis	ICD-9-CM
935.1	Foreign body in esophagus	Diagnosis	ICD-9-CM
935.2	Foreign body in stomach	Diagnosis	ICD-9-CM
939.0	Foreign body in bladder and urethra	Diagnosis	ICD-9-CM
939.1	Foreign body in uterus, any part	Diagnosis	ICD-9-CM
939.2	Foreign body in vulva and vagina	Diagnosis	ICD-9-CM
939.3	Foreign body in penis	Diagnosis	ICD-9-CM
939.9	Foreign body in unspecified site in genitourinary tract	Diagnosis	ICD-9-CM
940.0	Chemical burn of eyelids and periocular area	Diagnosis	ICD-9-CM
940.1	Other burns of eyelids and periocular area	Diagnosis	ICD-9-CM
940.2	Alkaline chemical burn of cornea and conjunctival sac	Diagnosis	ICD-9-CM
940.3	Acid chemical burn of cornea and conjunctival sac	Diagnosis	ICD-9-CM
940.4	Other burn of cornea and conjunctival sac	Diagnosis	ICD-9-CM
940.5	Burn with resulting rupture and destruction of eyeball	Diagnosis	ICD-9-CM
940.9	Unspecified burn of eye and adnexa	Diagnosis	ICD-9-CM
941.0	Burn of face, head, and neck, unspecified degree	Diagnosis	ICD-9-CM
941.00	Burn of unspecified degree of unspecified site of face and head	Diagnosis	ICD-9-CM
941.01	Burn of unspecified degree of ear (any part)	Diagnosis	ICD-9-CM
941.02	Burn of unspecified degree of eye (with other parts of face, head, and neck)	Diagnosis	ICD-9-CM
941.03	Burn of unspecified degree of lip(s)	Diagnosis	ICD-9-CM
941.04	Burn of unspecified degree of chin	Diagnosis	ICD-9-CM
941.05	Burn of unspecified degree of nose (septum)	Diagnosis	ICD-9-CM
941.06	Burn of unspecified degree of scalp (any part)	Diagnosis	ICD-9-CM
941.07	Burn of unspecified degree of forehead and cheek	Diagnosis	ICD-9-CM
941.08	Burn of unspecified degree of neck	Diagnosis	ICD-9-CM
941.09	Burn of unspecified degree of multiple sites (except with eye) of face, head, and neck	Diagnosis	ICD-9-CM
941.1	Erythema due to burn (first degree) of face, head, and neck	Diagnosis	ICD-9-CM
941.10	Erythema due to burn (first degree) of unspecified site of face and head	Diagnosis	ICD-9-CM
941.11	Erythema due to burn (first degree) of ear (any part)	Diagnosis	ICD-9-CM
941.12	Erythema due to burn (first degree) of eye (with other parts face, head, and neck)	Diagnosis	ICD-9-CM
941.13	Erythema due to burn (first degree) of lip(s)	Diagnosis	ICD-9-CM
941.14	Erythema due to burn (first degree) of chin	Diagnosis	ICD-9-CM
941.15	Erythema due to burn (first degree) of nose (septum)	Diagnosis	ICD-9-CM
941.16	Erythema due to burn (first degree) of scalp (any part)	Diagnosis	ICD-9-CM
941.17	Erythema due to burn (first degree) of forehead and cheek	Diagnosis	ICD-9-CM
941.18	Erythema due to burn (first degree) of neck	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
941.19	Erythema due to burn (first degree) of multiple sites (except with eye) of face, head, and neck	Diagnosis	ICD-9-CM
941.2	Blisters with epidermal loss due to burn (second degree) of face, head, and neck	Diagnosis	ICD-9-CM
941.20	Blisters, with epidermal loss due to burn (second degree) of face and head, unspecified site	Diagnosis	ICD-9-CM
941.21	Blisters, with epidermal loss due to burn (second degree) of ear (any part)	Diagnosis	ICD-9-CM
941.22	Blisters, with epidermal loss due to burn (second degree) of eye (with other parts of face, head, and neck)	Diagnosis	ICD-9-CM
941.23	Blisters, with epidermal loss due to burn (second degree) of lip(s)	Diagnosis	ICD-9-CM
941.24	Blisters, with epidermal loss due to burn (second degree) of chin	Diagnosis	ICD-9-CM
941.25	Blisters, with epidermal loss due to burn (second degree) of nose (septum)	Diagnosis	ICD-9-CM
941.26	Blisters, with epidermal loss due to burn (second degree) of scalp (any part)	Diagnosis	ICD-9-CM
941.27	Blisters, with epidermal loss due to burn (second degree) of forehead and cheek	Diagnosis	ICD-9-CM
941.28	Blisters, with epidermal loss due to burn (second degree) of neck	Diagnosis	ICD-9-CM
941.29	Blisters, with epidermal loss due to burn (second degree) of multiple sites (except with eye) of face, head, and neck	Diagnosis	ICD-9-CM
941.3	Full-thickness skin loss due to burn (third degree NOS) of face, head, and neck	Diagnosis	ICD-9-CM
941.30	Full-thickness skin loss due to burn (third degree NOS) of unspecified site of face and head	Diagnosis	ICD-9-CM
941.31	Full-thickness skin loss due to burn (third degree NOS) of ear (any part)	Diagnosis	ICD-9-CM
941.32	Full-thickness skin loss due to burn (third degree NOS) of eye (with other parts of face, head, and neck)	Diagnosis	ICD-9-CM
941.33	Full-thickness skin loss due to burn (third degree NOS) of lip(s)	Diagnosis	ICD-9-CM
941.34	Full-thickness skin loss due to burn (third degree NOS) of chin	Diagnosis	ICD-9-CM
941.35	Full-thickness skin loss due to burn (third degree NOS) of nose (septum)	Diagnosis	ICD-9-CM
941.36	Full-thickness skin loss due to burn (third degree NOS) of scalp (any part)	Diagnosis	ICD-9-CM
941.37	Full-thickness skin loss due to burn (third degree NOS) of forehead and cheek	Diagnosis	ICD-9-CM
941.38	Full-thickness skin loss due to burn (third degree NOS) of neck	Diagnosis	ICD-9-CM
941.39	Full-thickness skin loss due to burn (third degree NOS) of multiple sites (except with eye) of face, head, and neck	Diagnosis	ICD-9-CM
941.4	Deep necrosis of underlying tissues due to burn (deep third degree) of face, head, and neck without mention of loss of a body part	Diagnosis	ICD-9-CM
941.40	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of face and head, without mention of loss of a body part	Diagnosis	ICD-9-CM
941.41	Deep necrosis of underlying tissues due to burn (deep third degree) of ear (any part), without mention of loss of a body part	Diagnosis	ICD-9-CM
941.42	Deep necrosis of underlying tissues due to burn (deep third degree) of eye (with other parts of face, head, and neck), without mention of loss of a body part	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
941.43	Deep necrosis of underlying tissues due to burn (deep third degree) of lip(s), without mention of loss of a body part	Diagnosis	ICD-9-CM
941.44	Deep necrosis of underlying tissues due to burn (deep third degree) of chin, without mention of loss of a body part	Diagnosis	ICD-9-CM
941.45	Deep necrosis of underlying tissues due to burn (deep third degree) of nose (septum), without mention of loss of a body part	Diagnosis	ICD-9-CM
941.46	Deep necrosis of underlying tissues due to burn (deep third degree) of scalp (any part), without mention of loss of a body part	Diagnosis	ICD-9-CM
941.47	Deep necrosis of underlying tissues due to burn (deep third degree) of forehead and cheek, without mention of loss of a body part	Diagnosis	ICD-9-CM
941.48	Deep necrosis of underlying tissues due to burn (deep third degree) of neck, without mention of loss of a body part	Diagnosis	ICD-9-CM
941.49	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites (except with eye) of face, head, and neck, without mention of loss of a body part	Diagnosis	ICD-9-CM
941.5	Deep necrosis of underlying tissues due to burn (deep third degree) of face, head, and neck with loss of a body part	Diagnosis	ICD-9-CM
941.50	Deep necrosis of underlying tissues due to burn (deep third degree) of face and head, unspecified site, with loss of a body part	Diagnosis	ICD-9-CM
941.51	Deep necrosis of underlying tissues due to burn (deep third degree) of ear (any part), with loss of a body part	Diagnosis	ICD-9-CM
941.52	Deep necrosis of underlying tissues due to burn (deep third degree) of eye (with other parts of face, head, and neck), with loss of a body part	Diagnosis	ICD-9-CM
941.53	Deep necrosis of underlying tissues due to burn (deep third degree) of lip(s), with loss of a body part	Diagnosis	ICD-9-CM
941.54	Deep necrosis of underlying tissues due to burn (deep third degree) of chin, with loss of a body part	Diagnosis	ICD-9-CM
941.55	Deep necrosis of underlying tissues due to burn (deep third degree) of nose (septum), with loss of a body part	Diagnosis	ICD-9-CM
941.56	Deep necrosis of underlying tissues due to burn (deep third degree) of scalp (any part), with loss of a body part	Diagnosis	ICD-9-CM
941.57	Deep necrosis of underlying tissues due to burn (deep third degree) of forehead and cheek, with loss of a body part	Diagnosis	ICD-9-CM
941.58	Deep necrosis of underlying tissues due to burn (deep third degree) of neck, with loss of a body part	Diagnosis	ICD-9-CM
941.59	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites (except eye) of face, head, and neck, with loss of a body part	Diagnosis	ICD-9-CM
942.0	Burn of trunk, unspecified degree	Diagnosis	ICD-9-CM
942.00	Burn of unspecified degree of trunk, unspecified site	Diagnosis	ICD-9-CM
942.01	Burn of trunk, unspecified degree of breast	Diagnosis	ICD-9-CM
942.02	Burn of trunk, unspecified degree of chest wall, excluding breast and nipple	Diagnosis	ICD-9-CM
942.03	Burn of trunk, unspecified degree of abdominal wall	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
942.04	Burn of trunk, unspecified degree of back (any part)	Diagnosis	ICD-9-CM
942.05	Burn of trunk, unspecified degree of genitalia	Diagnosis	ICD-9-CM
942.09	Burn of trunk, unspecified degree of other and multiple sites	Diagnosis	ICD-9-CM
942.1	Erythema due to burn (first degree) of trunk	Diagnosis	ICD-9-CM
942.10	Erythema due to burn (first degree) of unspecified site of trunk	Diagnosis	ICD-9-CM
942.11	Erythema due to burn (first degree) of breast	Diagnosis	ICD-9-CM
942.12	Erythema due to burn (first degree) of chest wall, excluding breast and nipple	Diagnosis	ICD-9-CM
942.13	Erythema due to burn (first degree) of abdominal wall	Diagnosis	ICD-9-CM
942.14	Erythema due to burn (first degree) of back (any part)	Diagnosis	ICD-9-CM
942.15	Erythema due to burn (first degree) of genitalia	Diagnosis	ICD-9-CM
942.19	Erythema due to burn (first degree) of other and multiple sites of trunk	Diagnosis	ICD-9-CM
942.2	Blisters with epidermal loss due to burn (second degree) of trunk	Diagnosis	ICD-9-CM
942.20	Blisters with epidermal loss due to burn (second degree) of unspecified site of trunk	Diagnosis	ICD-9-CM
942.21	Blisters with epidermal loss due to burn (second degree) of breast	Diagnosis	ICD-9-CM
942.22	Blisters with epidermal loss due to burn (second degree) of chest wall, excluding breast and nipple	Diagnosis	ICD-9-CM
942.23	Blisters with epidermal loss due to burn (second degree) of abdominal wall	Diagnosis	ICD-9-CM
942.24	Blisters with epidermal loss due to burn (second degree) of back (any part)	Diagnosis	ICD-9-CM
942.25	Blisters with epidermal loss due to burn (second degree) of genitalia	Diagnosis	ICD-9-CM
942.29	Blisters with epidermal loss due to burn (second degree) of other and multiple sites of trunk	Diagnosis	ICD-9-CM
942.3	Full-thickness skin loss due to burn (third degree NOS) of trunk	Diagnosis	ICD-9-CM
942.30	Full-thickness skin loss due to burn (third degree NOS) of unspecified site of trunk	Diagnosis	ICD-9-CM
942.31	Full-thickness skin loss due to burn (third degree NOS) of breast	Diagnosis	ICD-9-CM
942.32	Full-thickness skin loss due to burn (third degree NOS) of chest wall, excluding breast and nipple	Diagnosis	ICD-9-CM
942.33	Full-thickness skin loss due to burn (third degree NOS) of abdominal wall	Diagnosis	ICD-9-CM
942.34	Full-thickness skin loss due to burn (third degree NOS) of back (any part)	Diagnosis	ICD-9-CM
942.35	Full-thickness skin loss due to burn (third degree NOS) of genitalia	Diagnosis	ICD-9-CM
942.39	Full-thickness skin loss due to burn (third degree NOS) of other and multiple sites of trunk	Diagnosis	ICD-9-CM
942.4	Deep necrosis of underlying tissues due to burn (deep third degree) of trunk without mention of loss of a body part	Diagnosis	ICD-9-CM
942.40	Deep necrosis of underlying tissues due to burn (deep third degree) of trunk, unspecified site, without mention of loss of a body part	Diagnosis	ICD-9-CM
942.41	Deep necrosis of underlying tissues due to burn (deep third degree) of breast, without mention of loss of a body part	Diagnosis	ICD-9-CM
942.42	Deep necrosis of underlying tissues due to burn (deep third degree) of chest wall, excluding breast and nipple, without mention of loss of a body part	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
942.43	Deep necrosis of underlying tissues due to burn (deep third degree) of abdominal wall, without mention of loss of a body part	Diagnosis	ICD-9-CM
942.44	Deep necrosis of underlying tissues due to burn (deep third degree) of back (any part), without mention of loss of a body part	Diagnosis	ICD-9-CM
942.45	Deep necrosis of underlying tissues due to burn (deep third degree) of genitalia, without mention of loss of a body part	Diagnosis	ICD-9-CM
942.49	Deep necrosis of underlying tissues due to burn (deep third degree) of other and multiple sites of trunk, without mention of loss of a body part	Diagnosis	ICD-9-CM
942.5	Deep necrosis of underlying tissues due to burn (deep third degree) of trunk with loss of a body part	Diagnosis	ICD-9-CM
942.50	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of trunk, with loss of a body part	Diagnosis	ICD-9-CM
942.51	Deep necrosis of underlying tissues due to burn (deep third degree) of breast, with loss of a body part	Diagnosis	ICD-9-CM
942.52	Deep necrosis of underlying tissues due to burn (deep third degree) of chest wall, excluding breast and nipple, with loss of a body part	Diagnosis	ICD-9-CM
942.53	Deep necrosis of underlying tissues due to burn (deep third degree) of abdominal wall with loss of a body part	Diagnosis	ICD-9-CM
942.54	Deep necrosis of underlying tissues due to burn (deep third degree) of back (any part), with loss of a body part	Diagnosis	ICD-9-CM
942.55	Deep necrosis of underlying tissues due to burn (deep third degree) of genitalia, with loss of a body part	Diagnosis	ICD-9-CM
942.59	Deep necrosis of underlying tissues due to burn (deep third degree) of other and multiple sites of trunk, with loss of a body part	Diagnosis	ICD-9-CM
943.0	Burn of upper limb, except wrist and hand, unspecified degree	Diagnosis	ICD-9-CM
943.00	Burn of unspecified degree of unspecified site of upper limb	Diagnosis	ICD-9-CM
943.01	Burn of unspecified degree of forearm	Diagnosis	ICD-9-CM
943.02	Burn of unspecified degree of elbow	Diagnosis	ICD-9-CM
943.03	Burn of unspecified degree of upper arm	Diagnosis	ICD-9-CM
943.04	Burn of unspecified degree of axilla	Diagnosis	ICD-9-CM
943.05	Burn of unspecified degree of shoulder	Diagnosis	ICD-9-CM
943.06	Burn of unspecified degree of scapular region	Diagnosis	ICD-9-CM
943.09	Burn of unspecified degree multiple sites of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.1	Erythema due to burn (first degree) of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.10	Erythema due to burn (first degree) of unspecified site of upper limb	Diagnosis	ICD-9-CM
943.11	Erythema due to burn (first degree) of forearm	Diagnosis	ICD-9-CM
943.12	Erythema due to burn (first degree) of elbow	Diagnosis	ICD-9-CM
943.13	Erythema due to burn (first degree) of upper arm	Diagnosis	ICD-9-CM
943.14	Erythema due to burn (first degree) of axilla	Diagnosis	ICD-9-CM
943.15	Erythema due to burn (first degree) of shoulder	Diagnosis	ICD-9-CM
943.16	Erythema due to burn (first degree) of scapular region	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
943.19	Erythema due to burn (first degree) of multiple sites of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.2	Blisters with epidermal loss due to burn (second degree) of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.20	Blisters with epidermal loss due to burn (second degree) of unspecified site of upper limb	Diagnosis	ICD-9-CM
943.21	Blisters with epidermal loss due to burn (second degree) of forearm	Diagnosis	ICD-9-CM
943.22	Blisters with epidermal loss due to burn (second degree) of elbow	Diagnosis	ICD-9-CM
943.23	Blisters with epidermal loss due to burn (second degree) of upper arm	Diagnosis	ICD-9-CM
943.24	Blisters with epidermal loss due to burn (second degree) of axilla	Diagnosis	ICD-9-CM
943.25	Blisters with epidermal loss due to burn (second degree) of shoulder	Diagnosis	ICD-9-CM
943.26	Blisters with epidermal loss due to burn (second degree) of scapular region	Diagnosis	ICD-9-CM
943.29	Blisters with epidermal loss due to burn (second degree) of multiple sites of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.3	Full-thickness skin loss due to burn (third degree NOS) of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.30	Full-thickness skin loss due to burn (third degree NOS) of unspecified site of upper limb	Diagnosis	ICD-9-CM
943.31	Full-thickness skin loss due to burn (third degree NOS) of forearm	Diagnosis	ICD-9-CM
943.32	Full-thickness skin loss due to burn (third degree NOS) of elbow	Diagnosis	ICD-9-CM
943.33	Full-thickness skin loss due to burn (third degree NOS) of upper arm	Diagnosis	ICD-9-CM
943.34	Full-thickness skin loss due to burn (third degree NOS) of axilla	Diagnosis	ICD-9-CM
943.35	Full-thickness skin loss due to burn (third degree NOS) of shoulder	Diagnosis	ICD-9-CM
943.36	Full-thickness skin loss due to burn (third degree NOS) of scapular region	Diagnosis	ICD-9-CM
943.39	Full-thickness skin loss due to burn (third degree NOS) of multiple sites of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.4	Deep necrosis of underlying tissues due to burn (deep third degree) of upper limb, except wrist and hand, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.40	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of upper limb, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.41	Deep necrosis of underlying tissues due to burn (deep third degree) of forearm, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.42	Deep necrosis of underlying tissues due to burn (deep third degree) of elbow, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.43	Deep necrosis of underlying tissues due to burn (deep third degree) of upper arm, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.44	Deep necrosis of underlying tissues due to burn (deep third degree) of axilla, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.45	Deep necrosis of underlying tissues due to burn (deep third degree) of shoulder, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.46	Deep necrosis of underlying tissues due to burn (deep third degree) of scapular region, without mention of loss of a body part	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
943.49	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites of upper limb, except wrist and hand, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.5	Deep necrosis of underlying tissues due to burn (deep third degree) of upper limb, except wrist and hand, with loss of a body part	Diagnosis	ICD-9-CM
943.50	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of upper limb, with loss of a body part	Diagnosis	ICD-9-CM
943.51	Deep necrosis of underlying tissues due to burn (deep third degree) of forearm, with loss of a body part	Diagnosis	ICD-9-CM
943.52	Deep necrosis of underlying tissues due to burn (deep third degree) of elbow, with loss of a body part	Diagnosis	ICD-9-CM
943.53	Deep necrosis of underlying tissues due to burn (deep third degree) of upper arm, with loss of upper a body part	Diagnosis	ICD-9-CM
943.54	Deep necrosis of underlying tissues due to burn (deep third degree) of axilla, with loss of a body part	Diagnosis	ICD-9-CM
943.55	Deep necrosis of underlying tissues due to burn (deep third degree) of shoulder, with loss of a body part	Diagnosis	ICD-9-CM
943.56	Deep necrosis of underlying tissues due to burn (deep third degree) of scapular region, with loss of a body part	Diagnosis	ICD-9-CM
943.59	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites of upper limb, except wrist and hand, with loss of a body part	Diagnosis	ICD-9-CM
944.0	Burn of wrist(s) and hand(s), unspecified degree	Diagnosis	ICD-9-CM
944.00	Burn of unspecified degree of unspecified site of hand	Diagnosis	ICD-9-CM
944.01	Burn of unspecified degree of single digit [finger (nail)] other than thumb	Diagnosis	ICD-9-CM
944.02	Burn of unspecified degree of thumb (nail)	Diagnosis	ICD-9-CM
944.03	Burn of unspecified degree of two or more digits of hand, not including thumb	Diagnosis	ICD-9-CM
944.04	Burn of unspecified degree of two or more digits of hand, including thumb	Diagnosis	ICD-9-CM
944.05	Burn of unspecified degree of palm of hand	Diagnosis	ICD-9-CM
944.06	Burn of unspecified degree of back of hand	Diagnosis	ICD-9-CM
944.07	Burn of unspecified degree of wrist	Diagnosis	ICD-9-CM
944.08	Burn of unspecified degree of multiple sites of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
944.1	Erythema due to burn (first degree) of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
944.10	Erythema due to burn (first degree) of unspecified site of hand	Diagnosis	ICD-9-CM
944.11	Erythema due to burn (first degree) of single digit [finger (nail)] other than thumb	Diagnosis	ICD-9-CM
944.12	Erythema due to burn (first degree) of thumb (nail)	Diagnosis	ICD-9-CM
944.13	Erythema due to burn (first degree) of two or more digits of hand, not including thumb	Diagnosis	ICD-9-CM
944.14	Erythema due to burn (first degree) of two or more digits of hand including thumb	Diagnosis	ICD-9-CM
944.15	Erythema due to burn (first degree) of palm of hand	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
944.16	Erythema due to burn (first degree) of back of hand	Diagnosis	ICD-9-CM
944.17	Erythema due to burn (first degree) of wrist	Diagnosis	ICD-9-CM
944.18	Erythema due to burn (first degree) of multiple sites of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
944.2	Blisters with epidermal loss due to burn (second degree) of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
944.20	Blisters with epidermal loss due to burn (second degree) of unspecified site of hand	Diagnosis	ICD-9-CM
944.21	Blisters with epidermal loss due to burn (second degree) of single digit [finger (nail)] other than thumb	Diagnosis	ICD-9-CM
944.22	Blisters with epidermal loss due to burn of (second degree) of thumb (nail)	Diagnosis	ICD-9-CM
944.23	Blisters with epidermal loss due to burn (second degree) of two or more digits of hand, not including thumb	Diagnosis	ICD-9-CM
944.24	Blisters with epidermal loss due to burn (second degree) of two or more digits of hand including thumb	Diagnosis	ICD-9-CM
944.25	Blisters with epidermal loss due to burn (second degree) of palm of hand	Diagnosis	ICD-9-CM
944.26	Blisters with epidermal loss due to burn (second degree) of back of hand	Diagnosis	ICD-9-CM
944.27	Blisters with epidermal loss due to burn (second degree) of wrist	Diagnosis	ICD-9-CM
944.28	Blisters with epidermal loss due to burn (second degree) of multiple sites of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
944.3	Full-thickness skin loss due to burn (third degree NOS) of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
944.30	Full-thickness skin loss due to burn (third degree NOS) of unspecified site of hand	Diagnosis	ICD-9-CM
944.31	Full-thickness skin loss due to burn (third degree NOS) of single digit [finger (nail)] other than thumb	Diagnosis	ICD-9-CM
944.32	Full-thickness skin loss due to burn (third degree NOS) of thumb (nail)	Diagnosis	ICD-9-CM
944.33	Full-thickness skin loss due to burn (third degree NOS) of two or more digits of hand, not including thumb	Diagnosis	ICD-9-CM
944.34	Full-thickness skin loss due to burn (third degree NOS) of two or more digits of hand including thumb	Diagnosis	ICD-9-CM
944.35	Full-thickness skin loss due to burn (third degree NOS) of palm of hand	Diagnosis	ICD-9-CM
944.36	Full-thickness skin loss due to burn (third degree NOS) of back of hand	Diagnosis	ICD-9-CM
944.37	Full-thickness skin loss due to burn (third degree NOS) of wrist	Diagnosis	ICD-9-CM
944.38	Full-thickness skin loss due to burn (third degree NOS) of multiple sites of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
944.4	Deep necrosis of underlying tissues due to burn (deep third degree) of wrist(s) and hand(s), without mention of loss of a body part	Diagnosis	ICD-9-CM
944.40	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of hand, without mention of loss of a body part	Diagnosis	ICD-9-CM
944.41	Deep necrosis of underlying tissues due to burn (deep third degree) of single digit [finger (nail)] other than thumb, without mention of loss of a body part	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
944.42	Deep necrosis of underlying tissues due to burn (deep third degree) of thumb (nail), without mention of loss of a body part	Diagnosis	ICD-9-CM
944.43	Deep necrosis of underlying tissues due to burn (deep third degree) of two or more digits of hand, not including thumb, without mention of loss of a body part	Diagnosis	ICD-9-CM
944.44	Deep necrosis of underlying tissues due to burn (deep third degree) of two or more digits of hand including thumb, without mention of loss of a body part	Diagnosis	ICD-9-CM
944.45	Deep necrosis of underlying tissues due to burn (deep third degree) of palm of hand, without mention of loss of a body part	Diagnosis	ICD-9-CM
944.46	Deep necrosis of underlying tissues due to burn (deep third degree) of back of hand, without mention of loss of a body part	Diagnosis	ICD-9-CM
944.47	Deep necrosis of underlying tissues due to burn (deep third degree) of wrist, without mention of loss of a body part	Diagnosis	ICD-9-CM
944.48	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites of wrist(s) and hand(s), without mention of loss of a body part	Diagnosis	ICD-9-CM
944.5	Deep necrosis of underlying tissues due to burn (deep third degree) of wrist(s) and hand(s), with loss of a body part	Diagnosis	ICD-9-CM
944.50	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of hand, with loss of a body part	Diagnosis	ICD-9-CM
944.51	Deep necrosis of underlying tissues due to burn (deep third degree) of single digit (finger (nail)) other than thumb, with loss of a body part	Diagnosis	ICD-9-CM
944.52	Deep necrosis of underlying tissues due to burn (deep third degree) of thumb (nail), with loss of a body part	Diagnosis	ICD-9-CM
944.53	Deep necrosis of underlying tissues due to burn (deep third degree) of two or more digits of hand, not including thumb, with loss of a body part	Diagnosis	ICD-9-CM
944.54	Deep necrosis of underlying tissues due to burn (deep third degree) of two or more digits of hand including thumb, with loss of a body part	Diagnosis	ICD-9-CM
944.55	Deep necrosis of underlying tissues due to burn (deep third degree) of palm of hand, with loss of a body part	Diagnosis	ICD-9-CM
944.56	Deep necrosis of underlying tissues due to burn (deep third degree) of back of hand, with loss of a body part	Diagnosis	ICD-9-CM
944.57	Deep necrosis of underlying tissues due to burn (deep third degree) of wrist, with loss of a body part	Diagnosis	ICD-9-CM
944.58	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites of wrist(s) and hand(s), with loss of a body part	Diagnosis	ICD-9-CM
945.0	Burn of lower limb(s), unspecified degree	Diagnosis	ICD-9-CM
945.00	Burn of unspecified degree of unspecified site of lower limb (leg)	Diagnosis	ICD-9-CM
945.01	Burn of unspecified degree of toe(s) (nail)	Diagnosis	ICD-9-CM
945.02	Burn of unspecified degree of foot	Diagnosis	ICD-9-CM
945.03	Burn of unspecified degree of ankle	Diagnosis	ICD-9-CM
945.04	Burn of unspecified degree of lower leg	Diagnosis	ICD-9-CM
945.05	Burn of unspecified degree of knee	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
945.06	Burn of unspecified degree of thigh (any part)	Diagnosis	ICD-9-CM
945.09	Burn of unspecified degree of multiple sites of lower limb(s)	Diagnosis	ICD-9-CM
945.1	Erythema due to burn (first degree) of lower limb(s)	Diagnosis	ICD-9-CM
945.10	Erythema due to burn (first degree) of unspecified site of lower limb (leg)	Diagnosis	ICD-9-CM
945.11	Erythema due to burn (first degree) of toe(s) (nail)	Diagnosis	ICD-9-CM
945.12	Erythema due to burn (first degree) of foot	Diagnosis	ICD-9-CM
945.13	Erythema due to burn (first degree) of ankle	Diagnosis	ICD-9-CM
945.14	Erythema due to burn (first degree) of lower leg	Diagnosis	ICD-9-CM
945.15	Erythema due to burn (first degree) of knee	Diagnosis	ICD-9-CM
945.16	Erythema due to burn (first degree) of thigh (any part)	Diagnosis	ICD-9-CM
945.19	Erythema due to burn (first degree) of multiple sites of lower limb(s)	Diagnosis	ICD-9-CM
945.2	Blisters with epidermal loss due to burn (second degree) of lower limb(s)	Diagnosis	ICD-9-CM
945.20	Blisters with epidermal loss due to burn (second degree) of unspecified site of lower limb (leg)	Diagnosis	ICD-9-CM
945.21	Blisters with epidermal loss due to burn (second degree) of toe(s) (nail)	Diagnosis	ICD-9-CM
945.22	Blisters with epidermal loss due to burn (second degree) of foot	Diagnosis	ICD-9-CM
945.23	Blisters with epidermal loss due to burn (second degree) of ankle	Diagnosis	ICD-9-CM
945.24	Blisters with epidermal loss due to burn (second degree) of lower leg	Diagnosis	ICD-9-CM
945.25	Blisters with epidermal loss due to burn (second degree) of knee	Diagnosis	ICD-9-CM
945.26	Blisters with epidermal loss due to burn (second degree) of thigh (any part)	Diagnosis	ICD-9-CM
945.29	Blisters with epidermal loss due to burn (second degree) of multiple sites of lower limb(s)	Diagnosis	ICD-9-CM
945.3	Full-thickness skin loss due to burn (third degree NOS) of lower limb(s)	Diagnosis	ICD-9-CM
945.30	Full-thickness skin loss due to burn (third degree NOS) of unspecified site of lower limb	Diagnosis	ICD-9-CM
945.31	Full-thickness skin loss due to burn (third degree NOS) of toe(s) (nail)	Diagnosis	ICD-9-CM
945.32	Full-thickness skin loss due to burn (third degree NOS) of foot	Diagnosis	ICD-9-CM
945.33	Full-thickness skin loss due to burn (third degree NOS) of ankle	Diagnosis	ICD-9-CM
945.34	Full-thickness skin loss due to burn (third degree NOS) of lower leg	Diagnosis	ICD-9-CM
945.35	Full-thickness skin loss due to burn (third degree NOS) of knee	Diagnosis	ICD-9-CM
945.36	Full-thickness skin loss due to burn (third degree NOS) of thigh (any part)	Diagnosis	ICD-9-CM
945.39	Full-thickness skin loss due to burn (third degree NOS) of multiple sites of lower limb(s)	Diagnosis	ICD-9-CM
945.4	Deep necrosis of underlying tissues due to burn (deep third degree) of lower limb(s) without mention of loss of a body part	Diagnosis	ICD-9-CM
945.40	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of lower limb (leg), without mention of loss of a body part	Diagnosis	ICD-9-CM
945.41	Deep necrosis of underlying tissues due to burn (deep third degree) of toe(s) (nail), without mention of loss of a body part	Diagnosis	ICD-9-CM
945.42	Deep necrosis of underlying tissues due to burn (deep third degree) of foot, without mention of loss of a body part	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
945.43	Deep necrosis of underlying tissues due to burn (deep third degree) of ankle, without mention of loss of a body part	Diagnosis	ICD-9-CM
945.44	Deep necrosis of underlying tissues due to burn (deep third degree) of lower leg, without mention of loss of a body part	Diagnosis	ICD-9-CM
945.45	Deep necrosis of underlying tissues due to burn (deep third degree) of knee, without mention of loss of a body part	Diagnosis	ICD-9-CM
945.46	Deep necrosis of underlying tissues due to burn (deep third degree) of thigh (any part), without mention of loss of a body part	Diagnosis	ICD-9-CM
945.49	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites of lower limb(s), without mention of loss of a body part	Diagnosis	ICD-9-CM
945.5	Deep necrosis of underlying tissues due to burn (deep third degree) of lower limb(s) with loss of a body part	Diagnosis	ICD-9-CM
945.50	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site lower limb (leg), with loss of a body part	Diagnosis	ICD-9-CM
945.51	Deep necrosis of underlying tissues due to burn (deep third degree) of toe(s) (nail), with loss of a body part	Diagnosis	ICD-9-CM
945.52	Deep necrosis of underlying tissues due to burn (deep third degree) of foot, with loss of a body part	Diagnosis	ICD-9-CM
945.53	Deep necrosis of underlying tissues due to burn (deep third degree) of ankle, with loss of a body part	Diagnosis	ICD-9-CM
945.54	Deep necrosis of underlying tissues due to burn (deep third degree) of lower leg, with loss of a body part	Diagnosis	ICD-9-CM
945.55	Deep necrosis of underlying tissues due to burn (deep third degree) of knee, with loss of a body part	Diagnosis	ICD-9-CM
945.56	Deep necrosis of underlying tissues due to burn (deep third degree) of thigh (any part), with loss of a body part	Diagnosis	ICD-9-CM
945.59	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites of lower limb(s), with loss of a body part	Diagnosis	ICD-9-CM
946.0	Burns of multiple specified sites, unspecified degree	Diagnosis	ICD-9-CM
946.1	Erythema due to burn (first degree) of multiple specified sites	Diagnosis	ICD-9-CM
946.2	Blisters with epidermal loss due to burn (second degree) of multiple specified sites	Diagnosis	ICD-9-CM
946.3	Full-thickness skin loss due to burn (third degree NOS) of multiple specified sites	Diagnosis	ICD-9-CM
946.4	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple specified sites, without mention of loss of a body part	Diagnosis	ICD-9-CM
946.5	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple specified sites, with loss of a body part	Diagnosis	ICD-9-CM
947.0	Burn of mouth and pharynx	Diagnosis	ICD-9-CM
947.1	Burn of larynx, trachea, and lung	Diagnosis	ICD-9-CM
947.2	Burn of esophagus	Diagnosis	ICD-9-CM
947.3	Burn of gastrointestinal tract	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
947.4	Burn of vagina and uterus	Diagnosis	ICD-9-CM
947.8	Burn of other specified sites of internal organs	Diagnosis	ICD-9-CM
947.9	Burn of internal organs, unspecified site	Diagnosis	ICD-9-CM
948.0	Burn (any degree) involving less than 10% of body surface	Diagnosis	ICD-9-CM
948.00	Burn (any degree) involving less than 10% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.1	Burn (any degree) involving 10-19% of body surface	Diagnosis	ICD-9-CM
948.10	Burn (any degree) involving 10-19% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.11	Burn (any degree) involving 10-19% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.2	Burn (any degree) involving 20-29% of body surface	Diagnosis	ICD-9-CM
948.20	Burn (any degree) involving 20-29% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.21	Burn (any degree) involving 20-29% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.22	Burn (any degree) involving 20-29% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.3	Burn (any degree) involving 30-39% of body surface	Diagnosis	ICD-9-CM
948.30	Burn (any degree) involving 30-39% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.31	Burn (any degree) involving 30-39% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.32	Burn (any degree) involving 30-39% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.33	Burn (any degree) involving 30-39% of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.4	Burn (any degree) involving 40-49% of body surface	Diagnosis	ICD-9-CM
948.40	Burn (any degree) involving 40-49% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.41	Burn (any degree) involving 40-49% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.42	Burn (any degree) involving 40-49% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.43	Burn (any degree) involving 40-49% of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.44	Burn (any degree) involving 40-49% of body surface with third degree burn of 40-49%	Diagnosis	ICD-9-CM
948.5	Burn (any degree) involving 50-59% of body surface	Diagnosis	ICD-9-CM
948.50	Burn (any degree) involving 50-59% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
948.51	Burn (any degree) involving 50-59% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.52	Burn (any degree) involving 50-59% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.53	Burn (any degree) involving 50-59% of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.54	Burn (any degree) involving 50-59% of body surface with third degree burn of 40-49%	Diagnosis	ICD-9-CM
948.55	Burn (any degree) involving 50-59% of body surface with third degree burn of 50-59%	Diagnosis	ICD-9-CM
948.6	Burn (any degree) involving 60-69% of body surface	Diagnosis	ICD-9-CM
948.60	Burn (any degree) involving 60-69% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.61	Burn (any degree) involving 60-69% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.62	Burn (any degree) involving 60-69% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.63	Burn (any degree) involving 60-69% of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.64	Burn (any degree) involving 60-69% of body surface with third degree burn of 40-49%	Diagnosis	ICD-9-CM
948.65	Burn (any degree) involving 60-69% of body surface with third degree burn of 50-59%	Diagnosis	ICD-9-CM
948.66	Burn (any degree) involving 60-69% of body surface with third degree burn of 60-69%	Diagnosis	ICD-9-CM
948.7	Burn (any degree) involving 70-79% of body surface	Diagnosis	ICD-9-CM
948.70	Burn (any degree) involving 70-79% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.71	Burn (any degree) involving 70-79% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.72	Burn (any degree) involving 70-79% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.73	Burn (any degree) involving 70-79% of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.74	Burn (any degree) involving 70-79% of body surface with third degree burn of 40-49%	Diagnosis	ICD-9-CM
948.75	Burn (any degree) involving 70-79% of body surface with third degree burn of 50-59%	Diagnosis	ICD-9-CM
948.76	Burn (any degree) involving 70-79% of body surface with third degree burn of 60-69%	Diagnosis	ICD-9-CM
948.77	Burn (any degree) involving 70-79% of body surface with third degree burn of 70-79%	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
948.8	Burn (any degree) involving 80-89% of body surface	Diagnosis	ICD-9-CM
948.80	Burn (any degree) involving 80-89% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.81	Burn (any degree) involving 80-89% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.82	Burn (any degree) involving 80-89% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.83	Burn (any degree) involving 80-89% of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.84	Burn (any degree) involving 80-89% of body surface with third degree burn of 40-49%	Diagnosis	ICD-9-CM
948.85	Burn (any degree) involving 80-89% of body surface with third degree burn of 50-59%	Diagnosis	ICD-9-CM
948.86	Burn (any degree) involving 80-89% of body surface with third degree burn of 60-69%	Diagnosis	ICD-9-CM
948.87	Burn (any degree) involving 80-89% of body surface with third degree burn of 70-79%	Diagnosis	ICD-9-CM
948.88	Burn (any degree) involving 80-89% of body surface with third degree burn of 80-89%	Diagnosis	ICD-9-CM
948.9	Burn (any degree) involving 90% or more of body surface	Diagnosis	ICD-9-CM
948.90	Burn (any degree) involving 90% or more of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.91	Burn (any degree) involving 90% or more of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.92	Burn (any degree) involving 90% or more of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.93	Burn (any degree) involving 90% or more of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.94	Burn (any degree) involving 90% or more of body surface with third degree burn of 40-49%	Diagnosis	ICD-9-CM
948.95	Burn (any degree) involving 90% or more of body surface with third degree burn of 50-59%	Diagnosis	ICD-9-CM
948.96	Burn (any degree) involving 90% or more of body surface with third degree burn of 60-69%	Diagnosis	ICD-9-CM
948.97	Burn (any degree) involving 90% or more of body surface with third degree burn of 70-79%	Diagnosis	ICD-9-CM
948.98	Burn (any degree) involving 90% or more of body surface with third degree burn of 80-89%	Diagnosis	ICD-9-CM
948.99	Burn (any degree) involving 90% or more of body surface with third degree burn of 90% or more of body surface	Diagnosis	ICD-9-CM
949.0	Burn of unspecified site, unspecified degree	Diagnosis	ICD-9-CM
949.1	Erythema due to burn (first degree), unspecified site	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
949.2	Blisters with epidermal loss due to burn (second degree), unspecified site	Diagnosis	ICD-9-CM
949.3	Full-thickness skin loss due to burn (third degree NOS), unspecified site	Diagnosis	ICD-9-CM
949.4	Deep necrosis of underlying tissue due to burn (deep third degree), unspecified site without mention of loss of body part	Diagnosis	ICD-9-CM
949.5	Deep necrosis of underlying tissues due to burn (deep third degree, unspecified site with loss of body part	Diagnosis	ICD-9-CM
950.0	Optic nerve injury	Diagnosis	ICD-9-CM
950.1	Injury to optic chiasm	Diagnosis	ICD-9-CM
950.2	Injury to optic pathways	Diagnosis	ICD-9-CM
950.3	Injury to visual cortex	Diagnosis	ICD-9-CM
950.9	Injury to unspecified optic nerve and pathways	Diagnosis	ICD-9-CM
951.0	Injury to oculomotor nerve	Diagnosis	ICD-9-CM
951.1	Injury to trochlear nerve	Diagnosis	ICD-9-CM
951.2	Injury to trigeminal nerve	Diagnosis	ICD-9-CM
951.3	Injury to abducens nerve	Diagnosis	ICD-9-CM
951.4	Injury to facial nerve	Diagnosis	ICD-9-CM
951.5	Injury to acoustic nerve	Diagnosis	ICD-9-CM
951.6	Injury to accessory nerve	Diagnosis	ICD-9-CM
951.7	Injury to hypoglossal nerve	Diagnosis	ICD-9-CM
951.8	Injury to other specified cranial nerves	Diagnosis	ICD-9-CM
951.9	Injury to unspecified cranial nerve	Diagnosis	ICD-9-CM
952.0	Cervical spinal cord injury without evidence of spinal bone injury	Diagnosis	ICD-9-CM
952.00	C1-C4 level spinal cord injury, unspecified	Diagnosis	ICD-9-CM
952.01	C1-C4 level with complete lesion of spinal cord	Diagnosis	ICD-9-CM
952.02	C1-C4 level with anterior cord syndrome	Diagnosis	ICD-9-CM
952.03	C1-C4 level with central cord syndrome	Diagnosis	ICD-9-CM
952.04	C1-C4 level with other specified spinal cord injury	Diagnosis	ICD-9-CM
952.05	C5-C7 level spinal cord injury, unspecified	Diagnosis	ICD-9-CM
952.06	C5-C7 level with complete lesion of spinal cord	Diagnosis	ICD-9-CM
952.07	C5-C7 level with anterior cord syndrome	Diagnosis	ICD-9-CM
952.08	C5-C7 level with central cord syndrome	Diagnosis	ICD-9-CM
952.09	C5-C7 level with other specified spinal cord injury	Diagnosis	ICD-9-CM
952.1	Dorsal (thoracic) spinal cord injury without evidence of spinal bone injury	Diagnosis	ICD-9-CM
952.10	T1-T6 level spinal cord injury, unspecified	Diagnosis	ICD-9-CM
952.11	T1-T6 level with complete lesion of spinal cord	Diagnosis	ICD-9-CM
952.12	T1-T6 level with anterior cord syndrome	Diagnosis	ICD-9-CM
952.13	T1-T6 level with central cord syndrome	Diagnosis	ICD-9-CM
952.14	T1-T6 level with other specified spinal cord injury	Diagnosis	ICD-9-CM
952.15	T7-T12 level spinal cord injury, unspecified	Diagnosis	ICD-9-CM
952.16	T7-T12 level with complete lesion of spinal cord	Diagnosis	ICD-9-CM
952.17	T7-T12 level with anterior cord syndrome	Diagnosis	ICD-9-CM
952.18	T7-T12 level with central cord syndrome	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
952.19	T7-T12 level with other specified spinal cord injury	Diagnosis	ICD-9-CM
952.2	Lumbar spinal cord injury without spinal bone injury	Diagnosis	ICD-9-CM
952.3	Sacral spinal cord injury without spinal bone injury	Diagnosis	ICD-9-CM
952.4	Cauda equina spinal cord injury without spinal bone injury	Diagnosis	ICD-9-CM
952.8	Multiple sites of spinal cord injury without spinal bone injury	Diagnosis	ICD-9-CM
952.9	Unspecified site of spinal cord injury without spinal bone injury	Diagnosis	ICD-9-CM
953.0	Injury to cervical nerve root	Diagnosis	ICD-9-CM
953.1	Injury to dorsal nerve root	Diagnosis	ICD-9-CM
953.2	Injury to lumbar nerve root	Diagnosis	ICD-9-CM
953.3	Injury to sacral nerve root	Diagnosis	ICD-9-CM
953.4	Injury to brachial plexus	Diagnosis	ICD-9-CM
953.5	Injury to lumbosacral plexus	Diagnosis	ICD-9-CM
953.8	Injury to multiple sites of nerve roots and spinal plexus	Diagnosis	ICD-9-CM
953.9	Injury to unspecified site of nerve roots and spinal plexus	Diagnosis	ICD-9-CM
954.0	Injury to cervical sympathetic nerve, excluding shoulder and pelvic girdles	Diagnosis	ICD-9-CM
954.1	Injury to other sympathetic nerve, excluding shoulder and pelvic girdles	Diagnosis	ICD-9-CM
954.8	Injury to other specified nerve(s) of trunk, excluding shoulder and pelvic girdles	Diagnosis	ICD-9-CM
954.9	Injury to unspecified nerve of trunk, excluding shoulder and pelvic girdles	Diagnosis	ICD-9-CM
955.0	Injury to axillary nerve	Diagnosis	ICD-9-CM
955.1	Injury to median nerve	Diagnosis	ICD-9-CM
955.2	Injury to ulnar nerve	Diagnosis	ICD-9-CM
955.3	Injury to radial nerve	Diagnosis	ICD-9-CM
955.4	Injury to musculocutaneous nerve	Diagnosis	ICD-9-CM
955.5	Injury to cutaneous sensory nerve, upper limb	Diagnosis	ICD-9-CM
955.6	Injury to digital nerve, upper limb	Diagnosis	ICD-9-CM
955.7	Injury to other specified nerve(s) of shoulder girdle and upper limb	Diagnosis	ICD-9-CM
955.8	Injury to multiple nerves of shoulder girdle and upper limb	Diagnosis	ICD-9-CM
955.9	Injury to unspecified nerve of shoulder girdle and upper limb	Diagnosis	ICD-9-CM
956.0	Injury to sciatic nerve	Diagnosis	ICD-9-CM
956.1	Injury to femoral nerve	Diagnosis	ICD-9-CM
956.2	Injury to posterior tibial nerve	Diagnosis	ICD-9-CM
956.3	Injury to peroneal nerve	Diagnosis	ICD-9-CM
956.4	Injury to cutaneous sensory nerve, lower limb	Diagnosis	ICD-9-CM
956.5	Injury to other specified nerve(s) of pelvic girdle and lower limb	Diagnosis	ICD-9-CM
956.8	Injury to multiple nerves of pelvic girdle and lower limb	Diagnosis	ICD-9-CM
956.9	Injury to unspecified nerve of pelvic girdle and lower limb	Diagnosis	ICD-9-CM
957.0	Injury to superficial nerves of head and neck	Diagnosis	ICD-9-CM
957.1	Injury to other specified nerve(s)	Diagnosis	ICD-9-CM
957.8	Injury to multiple nerves in several parts	Diagnosis	ICD-9-CM
957.9	Injury to nerves, unspecified site	Diagnosis	ICD-9-CM
958.0	Air embolism as an early complication of trauma	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
958.1	Fat embolism as an early complication of trauma	Diagnosis	ICD-9-CM
958.2	Secondary and recurrent hemorrhage as an early complication of trauma	Diagnosis	ICD-9-CM
958.3	Posttraumatic wound infection not elsewhere classified	Diagnosis	ICD-9-CM
958.4	Traumatic shock	Diagnosis	ICD-9-CM
958.5	Traumatic anuria	Diagnosis	ICD-9-CM
958.6	Volkman's ischemic contracture	Diagnosis	ICD-9-CM
958.7	Traumatic subcutaneous emphysema	Diagnosis	ICD-9-CM
958.8	Other early complications of trauma	Diagnosis	ICD-9-CM
958.9	Traumatic compartment syndrome	Diagnosis	ICD-9-CM
958.90	Compartment syndrome, unspecified	Diagnosis	ICD-9-CM
958.91	Traumatic compartment syndrome of upper extremity	Diagnosis	ICD-9-CM
958.92	Traumatic compartment syndrome of lower extremity	Diagnosis	ICD-9-CM
958.93	Traumatic compartment syndrome of abdomen	Diagnosis	ICD-9-CM
958.99	Traumatic compartment syndrome of other sites	Diagnosis	ICD-9-CM
959.0	Injury, other and unspecified, head, face, and neck	Diagnosis	ICD-9-CM
959.01	Head injury, unspecified	Diagnosis	ICD-9-CM
959.09	Injury of face and neck, other and unspecified	Diagnosis	ICD-9-CM
959.1	Injury, other and unspecified, trunk	Diagnosis	ICD-9-CM
959.11	Other injury of chest wall	Diagnosis	ICD-9-CM
959.12	Other injury of abdomen	Diagnosis	ICD-9-CM
959.13	Fracture of corpus cavernosum penis	Diagnosis	ICD-9-CM
959.14	Other injury of external genitals	Diagnosis	ICD-9-CM
959.19	Other injury of other sites of trunk	Diagnosis	ICD-9-CM
959.2	Injury, other and unspecified, shoulder and upper arm	Diagnosis	ICD-9-CM
959.3	Injury, other and unspecified, elbow, forearm, and wrist	Diagnosis	ICD-9-CM
959.4	Injury, other and unspecified, hand, except finger	Diagnosis	ICD-9-CM
959.5	Injury, other and unspecified, finger	Diagnosis	ICD-9-CM
959.6	Injury, other and unspecified, hip and thigh	Diagnosis	ICD-9-CM
959.7	Injury, other and unspecified, knee, leg, ankle, and foot	Diagnosis	ICD-9-CM
959.8	Injury, other and unspecified, other specified sites, including multiple	Diagnosis	ICD-9-CM
959.9	Injury, other and unspecified, unspecified site	Diagnosis	ICD-9-CM
Lung cancer			
162.0	Malignant neoplasm of trachea	Diagnosis	ICD-9-CM
162.2	Malignant neoplasm of main bronchus	Diagnosis	ICD-9-CM
162.3	Malignant neoplasm of upper lobe, bronchus, or lung	Diagnosis	ICD-9-CM
162.4	Malignant neoplasm of middle lobe, bronchus, or lung	Diagnosis	ICD-9-CM
162.5	Malignant neoplasm of lower lobe, bronchus, or lung	Diagnosis	ICD-9-CM
162.8	Malignant neoplasm of other parts of bronchus or lung	Diagnosis	ICD-9-CM
162.9	Malignant neoplasm of bronchus and lung, unspecified site	Diagnosis	ICD-9-CM
231.2	Carcinoma in situ of bronchus and lung	Diagnosis	ICD-9-CM
Myocardial infarction			
410	Acute myocardial infarction	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
410.0	Acute myocardial infarction of anterolateral wall	Diagnosis	ICD-9-CM
410.00	Acute myocardial infarction of anterolateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.01	Acute myocardial infarction of anterolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.02	Acute myocardial infarction of anterolateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.1	Acute myocardial infarction of other anterior wall	Diagnosis	ICD-9-CM
410.10	Acute myocardial infarction of other anterior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.11	Acute myocardial infarction of other anterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.12	Acute myocardial infarction of other anterior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.2	Acute myocardial infarction of inferolateral wall	Diagnosis	ICD-9-CM
410.20	Acute myocardial infarction of inferolateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.21	Acute myocardial infarction of inferolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.22	Acute myocardial infarction of inferolateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.3	Acute myocardial infarction of inferoposterior wall	Diagnosis	ICD-9-CM
410.30	Acute myocardial infarction of inferoposterior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.31	Acute myocardial infarction of inferoposterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.32	Acute myocardial infarction of inferoposterior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.4	Acute myocardial infarction of other inferior wall	Diagnosis	ICD-9-CM
410.40	Acute myocardial infarction of other inferior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.41	Acute myocardial infarction of other inferior wall, initial episode of care	Diagnosis	ICD-9-CM
410.42	Acute myocardial infarction of other inferior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.5	Acute myocardial infarction of other lateral wall	Diagnosis	ICD-9-CM
410.50	Acute myocardial infarction of other lateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.51	Acute myocardial infarction of other lateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.52	Acute myocardial infarction of other lateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.6	Acute myocardial infarction, true posterior wall infarction	Diagnosis	ICD-9-CM
410.60	Acute myocardial infarction, true posterior wall infarction, episode of care unspecified	Diagnosis	ICD-9-CM
410.61	Acute myocardial infarction, true posterior wall infarction, initial episode of care	Diagnosis	ICD-9-CM
410.62	Acute myocardial infarction, true posterior wall infarction, subsequent episode of care	Diagnosis	ICD-9-CM
410.7	Acute myocardial infarction, subendocardial infarction	Diagnosis	ICD-9-CM
410.70	Acute myocardial infarction, subendocardial infarction, episode of care unspecified	Diagnosis	ICD-9-CM
410.71	Acute myocardial infarction, subendocardial infarction, initial episode of care	Diagnosis	ICD-9-CM
410.72	Acute myocardial infarction, subendocardial infarction, subsequent episode of care	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
410.8	Acute myocardial infarction of other specified sites	Diagnosis	ICD-9-CM
410.80	Acute myocardial infarction of other specified sites, episode of care unspecified	Diagnosis	ICD-9-CM
410.81	Acute myocardial infarction of other specified sites, initial episode of care	Diagnosis	ICD-9-CM
410.82	Acute myocardial infarction of other specified sites, subsequent episode of care	Diagnosis	ICD-9-CM
410.9	Acute myocardial infarction, unspecified site	Diagnosis	ICD-9-CM
410.90	Acute myocardial infarction, unspecified site, episode of care unspecified	Diagnosis	ICD-9-CM
410.91	Acute myocardial infarction, unspecified site, initial episode of care	Diagnosis	ICD-9-CM
410.92	Acute myocardial infarction, unspecified site, subsequent episode of care	Diagnosis	ICD-9-CM
412	Old myocardial infarction	Diagnosis	ICD-9-CM
Nonrheumatic valve			
424	Other diseases of endocardium	Diagnosis	ICD-9-CM
424.0	Mitral valve disorders	Diagnosis	ICD-9-CM
424.1	Aortic valve disorders	Diagnosis	ICD-9-CM
424.2	Tricuspid valve disorders, specified as nonrheumatic	Diagnosis	ICD-9-CM
424.3	Pulmonary valve disorders	Diagnosis	ICD-9-CM
424.9	Endocarditis, valve unspecified	Diagnosis	ICD-9-CM
424.90	Endocarditis, valve unspecified, unspecified cause	Diagnosis	ICD-9-CM
424.91	Endocarditis in diseases classified elsewhere	Diagnosis	ICD-9-CM
424.99	Other endocarditis, valve unspecified	Diagnosis	ICD-9-CM
Obsessive-compulsive disorder			
300.3	Obsessive-compulsive disorders	Diagnosis	ICD-9-CM
Osteoarthritis			
715.0	Osteoarthrosis, generalized	Diagnosis	ICD-9-CM
715.00	Generalized osteoarthrosis, unspecified site	Diagnosis	ICD-9-CM
715.04	Generalized osteoarthrosis, involving hand	Diagnosis	ICD-9-CM
715.09	Generalized osteoarthrosis, involving multiple sites	Diagnosis	ICD-9-CM
715.1	Osteoarthrosis, localized, primary	Diagnosis	ICD-9-CM
715.10	Primary localized osteoarthrosis, unspecified site	Diagnosis	ICD-9-CM
715.11	Primary localized osteoarthrosis, shoulder region	Diagnosis	ICD-9-CM
715.12	Primary localized osteoarthrosis, upper arm	Diagnosis	ICD-9-CM
715.13	Primary localized osteoarthrosis, forearm	Diagnosis	ICD-9-CM
715.14	Primary localized osteoarthrosis, hand	Diagnosis	ICD-9-CM
715.15	Primary localized osteoarthrosis, pelvic region and thigh	Diagnosis	ICD-9-CM
715.16	Primary localized osteoarthrosis, lower leg	Diagnosis	ICD-9-CM
715.17	Primary localized osteoarthrosis, ankle and foot	Diagnosis	ICD-9-CM
715.18	Primary localized osteoarthrosis, other specified sites	Diagnosis	ICD-9-CM
715.2	Osteoarthrosis, localized, secondary	Diagnosis	ICD-9-CM
715.20	Secondary localized osteoarthrosis, unspecified site	Diagnosis	ICD-9-CM
715.21	Secondary localized osteoarthrosis, shoulder region	Diagnosis	ICD-9-CM
715.22	Secondary localized osteoarthrosis, upper arm	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
715.23	Secondary localized osteoarthritis, forearm	Diagnosis	ICD-9-CM
715.24	Secondary localized osteoarthritis, involving hand	Diagnosis	ICD-9-CM
715.25	Secondary localized osteoarthritis, pelvic region and thigh	Diagnosis	ICD-9-CM
715.26	Secondary localized osteoarthritis, lower leg	Diagnosis	ICD-9-CM
715.27	Secondary localized osteoarthritis, ankle and foot	Diagnosis	ICD-9-CM
715.28	Secondary localized osteoarthritis, other specified site	Diagnosis	ICD-9-CM
715.3	Osteoarthritis, localized, not specified whether primary or secondary	Diagnosis	ICD-9-CM
715.30	Localized osteoarthritis not specified whether primary or secondary, unspecified site	Diagnosis	ICD-9-CM
715.31	Localized osteoarthritis not specified whether primary or secondary, shoulder region	Diagnosis	ICD-9-CM
715.32	Localized osteoarthritis not specified whether primary or secondary, upper arm	Diagnosis	ICD-9-CM
715.33	Localized osteoarthritis not specified whether primary or secondary, forearm	Diagnosis	ICD-9-CM
715.34	Localized osteoarthritis not specified whether primary or secondary, hand	Diagnosis	ICD-9-CM
715.35	Localized osteoarthritis not specified whether primary or secondary, pelvic region and thigh	Diagnosis	ICD-9-CM
715.36	Localized osteoarthritis not specified whether primary or secondary, lower leg	Diagnosis	ICD-9-CM
715.37	Localized osteoarthritis not specified whether primary or secondary, ankle and foot	Diagnosis	ICD-9-CM
715.38	Localized osteoarthritis not specified whether primary or secondary, other specified sites	Diagnosis	ICD-9-CM
715.8	Osteoarthritis involving or with mention of more than one site, but not specified as generalized	Diagnosis	ICD-9-CM
715.80	Osteoarthritis involving more than one site, but not specified as generalized, unspecified site	Diagnosis	ICD-9-CM
715.89	Osteoarthritis involving multiple sites, but not specified as generalized	Diagnosis	ICD-9-CM
715.9	Osteoarthritis, unspecified whether generalized or localized	Diagnosis	ICD-9-CM
715.90	Osteoarthritis, unspecified whether generalized or localized, unspecified site	Diagnosis	ICD-9-CM
715.91	Osteoarthritis, unspecified whether generalized or localized, shoulder region	Diagnosis	ICD-9-CM
715.92	Osteoarthritis, unspecified whether generalized or localized, upper arm	Diagnosis	ICD-9-CM
715.93	Osteoarthritis, unspecified whether generalized or localized, forearm	Diagnosis	ICD-9-CM
715.94	Osteoarthritis, unspecified whether generalized or localized, hand	Diagnosis	ICD-9-CM
715.95	Osteoarthritis, unspecified whether generalized or localized, pelvic region and thigh	Diagnosis	ICD-9-CM
715.96	Osteoarthritis, unspecified whether generalized or localized, lower leg	Diagnosis	ICD-9-CM
715.97	Osteoarthritis, unspecified whether generalized or localized, ankle and foot	Diagnosis	ICD-9-CM
715.98	Osteoarthritis, unspecified whether generalized or localized, other specified sites	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
Other arrhythmia			
426.0	Atrioventricular block, complete	Diagnosis	ICD-9-CM
426.1	Atrioventricular block, other and unspecified	Diagnosis	ICD-9-CM
426.10	Unspecified atrioventricular block	Diagnosis	ICD-9-CM
426.11	First degree atrioventricular block	Diagnosis	ICD-9-CM
426.12	Mobitz (type) II atrioventricular block	Diagnosis	ICD-9-CM
426.13	Other second degree atrioventricular block	Diagnosis	ICD-9-CM
426.2	Left bundle branch hemiblock	Diagnosis	ICD-9-CM
426.3	Other left bundle branch block	Diagnosis	ICD-9-CM
426.4	Right bundle branch block	Diagnosis	ICD-9-CM
426.5	Bundle branch block, other and unspecified	Diagnosis	ICD-9-CM
426.50	Unspecified bundle branch block	Diagnosis	ICD-9-CM
426.51	Right bundle branch block and left posterior fascicular block	Diagnosis	ICD-9-CM
426.52	Right bundle branch block and left anterior fascicular block	Diagnosis	ICD-9-CM
426.53	Other bilateral bundle branch block	Diagnosis	ICD-9-CM
426.54	Trifascicular block	Diagnosis	ICD-9-CM
426.6	Other heart block	Diagnosis	ICD-9-CM
426.7	Anomalous atrioventricular excitation	Diagnosis	ICD-9-CM
426.8	Other specified conduction disorders	Diagnosis	ICD-9-CM
426.81	Lown-Ganong-Levine syndrome	Diagnosis	ICD-9-CM
426.82	Long QT syndrome	Diagnosis	ICD-9-CM
426.89	Other specified conduction disorder	Diagnosis	ICD-9-CM
426.9	Unspecified conduction disorder	Diagnosis	ICD-9-CM
427.0	Paroxysmal supraventricular tachycardia	Diagnosis	ICD-9-CM
427.2	Unspecified paroxysmal tachycardia	Diagnosis	ICD-9-CM
427.3	Atrial fibrillation and flutter	Diagnosis	ICD-9-CM
427.31	Atrial fibrillation	Diagnosis	ICD-9-CM
427.32	Atrial flutter	Diagnosis	ICD-9-CM
427.6	Premature beats	Diagnosis	ICD-9-CM
427.60	Unspecified premature beats	Diagnosis	ICD-9-CM
427.61	Supraventricular premature beats	Diagnosis	ICD-9-CM
427.8	Other specified cardiac dysrhythmias	Diagnosis	ICD-9-CM
427.81	Sinoatrial node dysfunction	Diagnosis	ICD-9-CM
427.89	Other specified cardiac dysrhythmias	Diagnosis	ICD-9-CM
427.9	Unspecified cardiac dysrhythmia	Diagnosis	ICD-9-CM
Other chronic kidney diseases			
585	Chronic kidney disease (CKD)	Diagnosis	ICD-9-CM
585.1	Chronic kidney disease, Stage I	Diagnosis	ICD-9-CM
585.2	Chronic kidney disease, Stage II (mild)	Diagnosis	ICD-9-CM
585.3	Chronic kidney disease, Stage III (moderate)	Diagnosis	ICD-9-CM
585.4	Chronic kidney disease, Stage IV (severe)	Diagnosis	ICD-9-CM
585.5	Chronic kidney disease, Stage V	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
585.6	End stage renal disease	Diagnosis	ICD-9-CM
585.9	Chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
Other congenital anomalies			
747	Other congenital anomalies of circulatory system	Diagnosis	ICD-9-CM
747.0	Patent ductus arteriosus	Diagnosis	ICD-9-CM
747.1	Coarctation of aorta	Diagnosis	ICD-9-CM
747.10	Coarctation of aorta (preductal) (postductal)	Diagnosis	ICD-9-CM
747.11	Congenital interruption of aortic arch	Diagnosis	ICD-9-CM
747.2	Other congenital anomaly of aorta	Diagnosis	ICD-9-CM
747.20	Unspecified congenital anomaly of aorta	Diagnosis	ICD-9-CM
747.21	Congenital anomaly of aortic arch	Diagnosis	ICD-9-CM
747.22	Congenital atresia and stenosis of aorta	Diagnosis	ICD-9-CM
747.29	Other congenital anomaly of aorta	Diagnosis	ICD-9-CM
747.3	Anomalies of pulmonary artery	Diagnosis	ICD-9-CM
747.31	Pulmonary artery coarctation and atresia	Diagnosis	ICD-9-CM
747.32	Pulmonary arteriovenous malformation	Diagnosis	ICD-9-CM
747.39	Other anomalies of pulmonary artery and pulmonary circulation	Diagnosis	ICD-9-CM
747.4	Congenital anomalies of great veins	Diagnosis	ICD-9-CM
747.40	Congenital anomaly of great veins unspecified	Diagnosis	ICD-9-CM
747.41	Total congenital anomalous pulmonary venous connection	Diagnosis	ICD-9-CM
747.42	Partial congenital anomalous pulmonary venous connection	Diagnosis	ICD-9-CM
747.49	Other congenital anomalies of great veins	Diagnosis	ICD-9-CM
747.5	Congenital absence or hypoplasia of umbilical artery	Diagnosis	ICD-9-CM
747.6	Other congenital anomaly of peripheral vascular system	Diagnosis	ICD-9-CM
747.60	Congenital anomaly of the peripheral vascular system, unspecified site	Diagnosis	ICD-9-CM
747.61	Congenital gastrointestinal vessel anomaly	Diagnosis	ICD-9-CM
747.62	Congenital renal vessel anomaly	Diagnosis	ICD-9-CM
747.63	Congenital upper limb vessel anomaly	Diagnosis	ICD-9-CM
747.64	Congenital lower limb vessel anomaly	Diagnosis	ICD-9-CM
747.69	Congenital anomaly of other specified site of peripheral vascular system	Diagnosis	ICD-9-CM
747.8	Other specified congenital anomalies of circulatory system	Diagnosis	ICD-9-CM
747.81	Congenital anomaly of cerebrovascular system	Diagnosis	ICD-9-CM
747.82	Congenital spinal vessel anomaly	Diagnosis	ICD-9-CM
747.83	Persistent fetal circulation	Diagnosis	ICD-9-CM
747.89	Other specified congenital anomaly of circulatory system	Diagnosis	ICD-9-CM
747.9	Unspecified congenital anomaly of circulatory system	Diagnosis	ICD-9-CM
Other heart diseases			
411.0	Postmyocardial infarction syndrome	Diagnosis	ICD-9-CM
411.1	Intermediate coronary syndrome	Diagnosis	ICD-9-CM
411.8	Other acute and subacute forms of ischemic heart disease	Diagnosis	ICD-9-CM
411.81	Acute coronary occlusion without myocardial infarction	Diagnosis	ICD-9-CM
411.89	Other acute and subacute form of ischemic heart disease	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
413.0	Angina decubitus	Diagnosis	ICD-9-CM
413.1	Prinzmetal angina	Diagnosis	ICD-9-CM
413.9	Other and unspecified angina pectoris	Diagnosis	ICD-9-CM
414.0	Coronary atherosclerosis	Diagnosis	ICD-9-CM
414.00	Coronary atherosclerosis of unspecified type of vessel, native or graft	Diagnosis	ICD-9-CM
414.01	Coronary atherosclerosis of native coronary artery	Diagnosis	ICD-9-CM
414.02	Coronary atherosclerosis of autologous vein bypass graft	Diagnosis	ICD-9-CM
414.03	Coronary atherosclerosis of nonautologous biological bypass graft	Diagnosis	ICD-9-CM
414.04	Coronary atherosclerosis of artery bypass graft	Diagnosis	ICD-9-CM
414.05	Coronary atherosclerosis of unspecified type of bypass graft	Diagnosis	ICD-9-CM
414.06	Coronary atherosclerosis, of native coronary artery of transplanted heart	Diagnosis	ICD-9-CM
414.07	Coronary atherosclerosis, of bypass graft (artery) (vein) of transplanted heart	Diagnosis	ICD-9-CM
414.1	Aneurysm and dissection of heart	Diagnosis	ICD-9-CM
414.10	Aneurysm of heart	Diagnosis	ICD-9-CM
414.11	Aneurysm of coronary vessels	Diagnosis	ICD-9-CM
414.12	Dissection of coronary artery	Diagnosis	ICD-9-CM
414.19	Other aneurysm of heart	Diagnosis	ICD-9-CM
414.2	Chronic total occlusion of coronary artery	Diagnosis	ICD-9-CM
414.3	Coronary atherosclerosis due to lipid rich plaque	Diagnosis	ICD-9-CM
414.4	Coronary atherosclerosis due to calcified coronary lesion	Diagnosis	ICD-9-CM
414.8	Other specified forms of chronic ischemic heart disease	Diagnosis	ICD-9-CM
414.9	Unspecified chronic ischemic heart disease	Diagnosis	ICD-9-CM
Other malignant neoplasm			
140.0	Malignant neoplasm of upper lip, vermilion border	Diagnosis	ICD-9-CM
140.1	Malignant neoplasm of lower lip, vermilion border	Diagnosis	ICD-9-CM
140.3	Malignant neoplasm of upper lip, inner aspect	Diagnosis	ICD-9-CM
140.4	Malignant neoplasm of lower lip, inner aspect	Diagnosis	ICD-9-CM
140.5	Malignant neoplasm of lip, inner aspect, unspecified as to upper or lower	Diagnosis	ICD-9-CM
140.6	Malignant neoplasm of commissure of lip	Diagnosis	ICD-9-CM
140.8	Malignant neoplasm of other sites of lip	Diagnosis	ICD-9-CM
140.9	Malignant neoplasm of lip, vermilion border, unspecified as to upper or lower	Diagnosis	ICD-9-CM
141.0	Malignant neoplasm of base of tongue	Diagnosis	ICD-9-CM
141.1	Malignant neoplasm of dorsal surface of tongue	Diagnosis	ICD-9-CM
141.2	Malignant neoplasm of tip and lateral border of tongue	Diagnosis	ICD-9-CM
141.3	Malignant neoplasm of ventral surface of tongue	Diagnosis	ICD-9-CM
141.4	Malignant neoplasm of anterior two-thirds of tongue, part unspecified	Diagnosis	ICD-9-CM
141.5	Malignant neoplasm of junctional zone of tongue	Diagnosis	ICD-9-CM
141.6	Malignant neoplasm of lingual tonsil	Diagnosis	ICD-9-CM
141.8	Malignant neoplasm of other sites of tongue	Diagnosis	ICD-9-CM
141.9	Malignant neoplasm of tongue, unspecified site	Diagnosis	ICD-9-CM
142.0	Malignant neoplasm of parotid gland	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
142.1	Malignant neoplasm of submandibular gland	Diagnosis	ICD-9-CM
142.2	Malignant neoplasm of sublingual gland	Diagnosis	ICD-9-CM
142.8	Malignant neoplasm of other major salivary glands	Diagnosis	ICD-9-CM
142.9	Malignant neoplasm of salivary gland, unspecified	Diagnosis	ICD-9-CM
143.0	Malignant neoplasm of upper gum	Diagnosis	ICD-9-CM
143.1	Malignant neoplasm of lower gum	Diagnosis	ICD-9-CM
143.8	Malignant neoplasm of other sites of gum	Diagnosis	ICD-9-CM
143.9	Malignant neoplasm of gum, unspecified site	Diagnosis	ICD-9-CM
144.0	Malignant neoplasm of anterior portion of floor of mouth	Diagnosis	ICD-9-CM
144.1	Malignant neoplasm of lateral portion of floor of mouth	Diagnosis	ICD-9-CM
144.8	Malignant neoplasm of other sites of floor of mouth	Diagnosis	ICD-9-CM
144.9	Malignant neoplasm of floor of mouth, part unspecified	Diagnosis	ICD-9-CM
145.0	Malignant neoplasm of cheek mucosa	Diagnosis	ICD-9-CM
145.1	Malignant neoplasm of vestibule of mouth	Diagnosis	ICD-9-CM
145.2	Malignant neoplasm of hard palate	Diagnosis	ICD-9-CM
145.3	Malignant neoplasm of soft palate	Diagnosis	ICD-9-CM
145.4	Malignant neoplasm of uvula	Diagnosis	ICD-9-CM
145.5	Malignant neoplasm of palate, unspecified	Diagnosis	ICD-9-CM
145.6	Malignant neoplasm of retromolar area	Diagnosis	ICD-9-CM
145.8	Malignant neoplasm of other specified parts of mouth	Diagnosis	ICD-9-CM
145.9	Malignant neoplasm of mouth, unspecified site	Diagnosis	ICD-9-CM
146.0	Malignant neoplasm of tonsil	Diagnosis	ICD-9-CM
146.1	Malignant neoplasm of tonsillar fossa	Diagnosis	ICD-9-CM
146.2	Malignant neoplasm of tonsillar pillars (anterior) (posterior)	Diagnosis	ICD-9-CM
146.3	Malignant neoplasm of vallecula	Diagnosis	ICD-9-CM
146.4	Malignant neoplasm of anterior aspect of epiglottis	Diagnosis	ICD-9-CM
146.5	Malignant neoplasm of junctional region of oropharynx	Diagnosis	ICD-9-CM
146.6	Malignant neoplasm of lateral wall of oropharynx	Diagnosis	ICD-9-CM
146.7	Malignant neoplasm of posterior wall of oropharynx	Diagnosis	ICD-9-CM
146.8	Malignant neoplasm of other specified sites of oropharynx	Diagnosis	ICD-9-CM
146.9	Malignant neoplasm of oropharynx, unspecified site	Diagnosis	ICD-9-CM
147.0	Malignant neoplasm of superior wall of nasopharynx	Diagnosis	ICD-9-CM
147.1	Malignant neoplasm of posterior wall of nasopharynx	Diagnosis	ICD-9-CM
147.2	Malignant neoplasm of lateral wall of nasopharynx	Diagnosis	ICD-9-CM
147.3	Malignant neoplasm of anterior wall of nasopharynx	Diagnosis	ICD-9-CM
147.8	Malignant neoplasm of other specified sites of nasopharynx	Diagnosis	ICD-9-CM
147.9	Malignant neoplasm of nasopharynx, unspecified site	Diagnosis	ICD-9-CM
148.0	Malignant neoplasm of postcricoid region of hypopharynx	Diagnosis	ICD-9-CM
148.1	Malignant neoplasm of pyriform sinus	Diagnosis	ICD-9-CM
148.2	Malignant neoplasm of aryepiglottic fold, hypopharyngeal aspect	Diagnosis	ICD-9-CM
148.3	Malignant neoplasm of posterior hypopharyngeal wall	Diagnosis	ICD-9-CM
148.8	Malignant neoplasm of other specified sites of hypopharynx	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
148.9	Malignant neoplasm of hypopharynx, unspecified site	Diagnosis	ICD-9-CM
149.0	Malignant neoplasm of pharynx, unspecified	Diagnosis	ICD-9-CM
149.1	Malignant neoplasm of Waldeyer's ring	Diagnosis	ICD-9-CM
149.8	Malignant neoplasm of other sites within the lip and oral cavity	Diagnosis	ICD-9-CM
149.9	Malignant neoplasm of ill-defined sites of lip and oral cavity	Diagnosis	ICD-9-CM
150.0	Malignant neoplasm of cervical esophagus	Diagnosis	ICD-9-CM
150.1	Malignant neoplasm of thoracic esophagus	Diagnosis	ICD-9-CM
150.2	Malignant neoplasm of abdominal esophagus	Diagnosis	ICD-9-CM
150.3	Malignant neoplasm of upper third of esophagus	Diagnosis	ICD-9-CM
150.4	Malignant neoplasm of middle third of esophagus	Diagnosis	ICD-9-CM
150.5	Malignant neoplasm of lower third of esophagus	Diagnosis	ICD-9-CM
150.8	Malignant neoplasm of other specified part of esophagus	Diagnosis	ICD-9-CM
150.9	Malignant neoplasm of esophagus, unspecified site	Diagnosis	ICD-9-CM
151.0	Malignant neoplasm of cardia	Diagnosis	ICD-9-CM
151.1	Malignant neoplasm of pylorus	Diagnosis	ICD-9-CM
151.2	Malignant neoplasm of pyloric antrum	Diagnosis	ICD-9-CM
151.3	Malignant neoplasm of fundus of stomach	Diagnosis	ICD-9-CM
151.4	Malignant neoplasm of body of stomach	Diagnosis	ICD-9-CM
151.5	Malignant neoplasm of lesser curvature of stomach, unspecified	Diagnosis	ICD-9-CM
151.6	Malignant neoplasm of greater curvature of stomach, unspecified	Diagnosis	ICD-9-CM
151.8	Malignant neoplasm of other specified sites of stomach	Diagnosis	ICD-9-CM
151.9	Malignant neoplasm of stomach, unspecified site	Diagnosis	ICD-9-CM
152.0	Malignant neoplasm of duodenum	Diagnosis	ICD-9-CM
152.1	Malignant neoplasm of jejunum	Diagnosis	ICD-9-CM
152.2	Malignant neoplasm of ileum	Diagnosis	ICD-9-CM
152.3	Malignant neoplasm of Meckel's diverticulum	Diagnosis	ICD-9-CM
152.8	Malignant neoplasm of other specified sites of small intestine	Diagnosis	ICD-9-CM
152.9	Malignant neoplasm of small intestine, unspecified site	Diagnosis	ICD-9-CM
155.0	Malignant neoplasm of liver, primary	Diagnosis	ICD-9-CM
155.1	Malignant neoplasm of intrahepatic bile ducts	Diagnosis	ICD-9-CM
155.2	Malignant neoplasm of liver, not specified as primary or secondary	Diagnosis	ICD-9-CM
156.0	Malignant neoplasm of gallbladder	Diagnosis	ICD-9-CM
156.1	Malignant neoplasm of extrahepatic bile ducts	Diagnosis	ICD-9-CM
156.2	Malignant neoplasm of ampulla of Vater	Diagnosis	ICD-9-CM
156.8	Malignant neoplasm of other specified sites of gallbladder and extrahepatic bile ducts	Diagnosis	ICD-9-CM
156.9	Malignant neoplasm of biliary tract, part unspecified site	Diagnosis	ICD-9-CM
157.0	Malignant neoplasm of head of pancreas	Diagnosis	ICD-9-CM
157.1	Malignant neoplasm of body of pancreas	Diagnosis	ICD-9-CM
157.2	Malignant neoplasm of tail of pancreas	Diagnosis	ICD-9-CM
157.3	Malignant neoplasm of pancreatic duct	Diagnosis	ICD-9-CM
157.4	Malignant neoplasm of islets of Langerhans	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
157.8	Malignant neoplasm of other specified sites of pancreas	Diagnosis	ICD-9-CM
157.9	Malignant neoplasm of pancreas, part unspecified	Diagnosis	ICD-9-CM
158.0	Malignant neoplasm of retroperitoneum	Diagnosis	ICD-9-CM
158.8	Malignant neoplasm of specified parts of peritoneum	Diagnosis	ICD-9-CM
158.9	Malignant neoplasm of peritoneum, unspecified	Diagnosis	ICD-9-CM
159.0	Malignant neoplasm of intestinal tract, part unspecified	Diagnosis	ICD-9-CM
159.1	Malignant neoplasm of spleen, not elsewhere classified	Diagnosis	ICD-9-CM
159.8	Malignant neoplasm of other sites of digestive system and intra-abdominal organs	Diagnosis	ICD-9-CM
159.9	Malignant neoplasm of ill-defined sites of digestive organs and peritoneum	Diagnosis	ICD-9-CM
160.0	Malignant neoplasm of nasal cavities	Diagnosis	ICD-9-CM
160.1	Malignant neoplasm of auditory tube, middle ear, and mastoid air cells	Diagnosis	ICD-9-CM
160.2	Malignant neoplasm of maxillary sinus	Diagnosis	ICD-9-CM
160.3	Malignant neoplasm of ethmoidal sinus	Diagnosis	ICD-9-CM
160.4	Malignant neoplasm of frontal sinus	Diagnosis	ICD-9-CM
160.5	Malignant neoplasm of sphenoidal sinus	Diagnosis	ICD-9-CM
160.8	Malignant neoplasm of other sites of nasal cavities, middle ear, and accessory sinuses	Diagnosis	ICD-9-CM
160.9	Malignant neoplasm of site of nasal cavities, middle ear, and accessory sinus, unspecified site	Diagnosis	ICD-9-CM
161.0	Malignant neoplasm of glottis	Diagnosis	ICD-9-CM
161.1	Malignant neoplasm of supraglottis	Diagnosis	ICD-9-CM
161.2	Malignant neoplasm of subglottis	Diagnosis	ICD-9-CM
161.3	Malignant neoplasm of laryngeal cartilages	Diagnosis	ICD-9-CM
161.8	Malignant neoplasm of other specified sites of larynx	Diagnosis	ICD-9-CM
161.9	Malignant neoplasm of larynx, unspecified site	Diagnosis	ICD-9-CM
163.0	Malignant neoplasm of parietal pleura	Diagnosis	ICD-9-CM
163.1	Malignant neoplasm of visceral pleura	Diagnosis	ICD-9-CM
163.8	Malignant neoplasm of other specified sites of pleura	Diagnosis	ICD-9-CM
163.9	Malignant neoplasm of pleura, unspecified site	Diagnosis	ICD-9-CM
164.0	Malignant neoplasm of thymus	Diagnosis	ICD-9-CM
164.1	Malignant neoplasm of heart	Diagnosis	ICD-9-CM
164.2	Malignant neoplasm of anterior mediastinum	Diagnosis	ICD-9-CM
164.3	Malignant neoplasm of posterior mediastinum	Diagnosis	ICD-9-CM
164.8	Malignant neoplasm of other parts of mediastinum	Diagnosis	ICD-9-CM
164.9	Malignant neoplasm of mediastinum, part unspecified	Diagnosis	ICD-9-CM
165.0	Malignant neoplasm of upper respiratory tract, part unspecified	Diagnosis	ICD-9-CM
165.8	Malignant neoplasm of other sites within the respiratory system and intrathoracic organs	Diagnosis	ICD-9-CM
165.9	Malignant neoplasm of ill-defined sites within the respiratory system	Diagnosis	ICD-9-CM
170.0	Malignant neoplasm of bones of skull and face, except mandible	Diagnosis	ICD-9-CM
170.1	Malignant neoplasm of mandible	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
170.2	Malignant neoplasm of vertebral column, excluding sacrum and coccyx	Diagnosis	ICD-9-CM
170.3	Malignant neoplasm of ribs, sternum, and clavicle	Diagnosis	ICD-9-CM
170.4	Malignant neoplasm of scapula and long bones of upper limb	Diagnosis	ICD-9-CM
170.5	Malignant neoplasm of short bones of upper limb	Diagnosis	ICD-9-CM
170.6	Malignant neoplasm of pelvic bones, sacrum, and coccyx	Diagnosis	ICD-9-CM
170.7	Malignant neoplasm of long bones of lower limb	Diagnosis	ICD-9-CM
170.8	Malignant neoplasm of short bones of lower limb	Diagnosis	ICD-9-CM
170.9	Malignant neoplasm of bone and articular cartilage, site unspecified	Diagnosis	ICD-9-CM
171.0	Malignant neoplasm of connective and other soft tissue of head, face, and neck	Diagnosis	ICD-9-CM
171.2	Malignant neoplasm of connective and other soft tissue of upper limb, including shoulder	Diagnosis	ICD-9-CM
171.3	Malignant neoplasm of connective and other soft tissue of lower limb, including hip	Diagnosis	ICD-9-CM
171.4	Malignant neoplasm of connective and other soft tissue of thorax	Diagnosis	ICD-9-CM
171.5	Malignant neoplasm of connective and other soft tissue of abdomen	Diagnosis	ICD-9-CM
171.6	Malignant neoplasm of connective and other soft tissue of pelvis	Diagnosis	ICD-9-CM
171.7	Malignant neoplasm of connective and other soft tissue of trunk, unspecified site	Diagnosis	ICD-9-CM
171.8	Malignant neoplasm of other specified sites of connective and other soft tissue	Diagnosis	ICD-9-CM
171.9	Malignant neoplasm of connective and other soft tissue, site unspecified	Diagnosis	ICD-9-CM
172.0	Malignant melanoma of skin of lip	Diagnosis	ICD-9-CM
172.1	Malignant melanoma of skin of eyelid, including canthus	Diagnosis	ICD-9-CM
172.2	Malignant melanoma of skin of ear and external auditory canal	Diagnosis	ICD-9-CM
172.3	Malignant melanoma of skin of other and unspecified parts of face	Diagnosis	ICD-9-CM
172.4	Malignant melanoma of skin of scalp and neck	Diagnosis	ICD-9-CM
172.5	Malignant melanoma of skin of trunk, except scrotum	Diagnosis	ICD-9-CM
172.6	Malignant melanoma of skin of upper limb, including shoulder	Diagnosis	ICD-9-CM
172.7	Malignant melanoma of skin of lower limb, including hip	Diagnosis	ICD-9-CM
172.8	Malignant melanoma of other specified sites of skin	Diagnosis	ICD-9-CM
172.9	Melanoma of skin, site unspecified	Diagnosis	ICD-9-CM
173.0	Other and unspecified malignant neoplasm of skin of lip	Diagnosis	ICD-9-CM
173.00	Unspecified malignant neoplasm of skin of lip	Diagnosis	ICD-9-CM
173.01	Basal cell carcinoma of skin of lip	Diagnosis	ICD-9-CM
173.02	Squamous cell carcinoma of skin of lip	Diagnosis	ICD-9-CM
173.09	Other specified malignant neoplasm of skin of lip	Diagnosis	ICD-9-CM
173.1	Other and unspecified malignant neoplasm of eyelid, including canthus	Diagnosis	ICD-9-CM
173.10	Unspecified malignant neoplasm of eyelid, including canthus	Diagnosis	ICD-9-CM
173.11	Basal cell carcinoma of eyelid, including canthus	Diagnosis	ICD-9-CM
173.12	Squamous cell carcinoma of eyelid, including canthus	Diagnosis	ICD-9-CM
173.19	Other specified malignant neoplasm of eyelid, including canthus	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
173.2	Other and unspecified malignant neoplasm of skin of ear and external auditory canal	Diagnosis	ICD-9-CM
173.20	Unspecified malignant neoplasm of skin of ear and external auditory canal	Diagnosis	ICD-9-CM
173.21	Basal cell carcinoma of skin of ear and external auditory canal	Diagnosis	ICD-9-CM
173.22	Squamous cell carcinoma of skin of ear and external auditory canal	Diagnosis	ICD-9-CM
173.29	Other specified malignant neoplasm of skin of ear and external auditory canal	Diagnosis	ICD-9-CM
173.3	Other and unspecified malignant neoplasm of skin of other and unspecified parts of face	Diagnosis	ICD-9-CM
173.30	Unspecified malignant neoplasm of skin of other and unspecified parts of face	Diagnosis	ICD-9-CM
173.31	Basal cell carcinoma of skin of other and unspecified parts of face	Diagnosis	ICD-9-CM
173.32	Squamous cell carcinoma of skin of other and unspecified parts of face	Diagnosis	ICD-9-CM
173.39	Other specified malignant neoplasm of skin of other and unspecified parts of face	Diagnosis	ICD-9-CM
173.4	Other and unspecified malignant neoplasm of scalp and skin of neck	Diagnosis	ICD-9-CM
173.40	Unspecified malignant neoplasm of scalp and skin of neck	Diagnosis	ICD-9-CM
173.41	Basal cell carcinoma of scalp and skin of neck	Diagnosis	ICD-9-CM
173.42	Squamous cell carcinoma of scalp and skin of neck	Diagnosis	ICD-9-CM
173.49	Other specified malignant neoplasm of scalp and skin of neck	Diagnosis	ICD-9-CM
173.5	Other and unspecified malignant neoplasm of skin of trunk, except scrotum	Diagnosis	ICD-9-CM
173.50	Unspecified malignant neoplasm of skin of trunk, except scrotum	Diagnosis	ICD-9-CM
173.51	Basal cell carcinoma of skin of trunk, except scrotum	Diagnosis	ICD-9-CM
173.52	Squamous cell carcinoma of skin of trunk, except scrotum	Diagnosis	ICD-9-CM
173.59	Other specified malignant neoplasm of skin of trunk, except scrotum	Diagnosis	ICD-9-CM
173.6	Other and unspecified malignant neoplasm of skin of upper limb, including shoulder	Diagnosis	ICD-9-CM
173.60	Unspecified malignant neoplasm of skin of upper limb, including shoulder	Diagnosis	ICD-9-CM
173.61	Basal cell carcinoma of skin of upper limb, including shoulder	Diagnosis	ICD-9-CM
173.62	Squamous cell carcinoma of skin of upper limb, including shoulder	Diagnosis	ICD-9-CM
173.69	Other specified malignant neoplasm of skin of upper limb, including shoulder	Diagnosis	ICD-9-CM
173.7	Other and unspecified malignant neoplasm of skin of lower limb, including hip	Diagnosis	ICD-9-CM
173.70	Unspecified malignant neoplasm of skin of lower limb, including hip	Diagnosis	ICD-9-CM
173.71	Basal cell carcinoma of skin of lower limb, including hip	Diagnosis	ICD-9-CM
173.72	Squamous cell carcinoma of skin of lower limb, including hip	Diagnosis	ICD-9-CM
173.79	Other specified malignant neoplasm of skin of lower limb, including hip	Diagnosis	ICD-9-CM
173.8	Other and unspecified malignant neoplasm of other specified sites of skin	Diagnosis	ICD-9-CM
173.80	Unspecified malignant neoplasm of other specified sites of skin	Diagnosis	ICD-9-CM
173.81	Basal cell carcinoma of other specified sites of skin	Diagnosis	ICD-9-CM
173.82	Squamous cell carcinoma of other specified sites of skin	Diagnosis	ICD-9-CM
173.89	Other specified malignant neoplasm of other specified sites of skin	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
173.9	Other and unspecified malignant neoplasm of skin, site unspecified	Diagnosis	ICD-9-CM
173.90	Unspecified malignant neoplasm of skin, site unspecified	Diagnosis	ICD-9-CM
173.91	Basal cell carcinoma of skin, site unspecified	Diagnosis	ICD-9-CM
173.92	Squamous cell carcinoma of skin, site unspecified	Diagnosis	ICD-9-CM
173.99	Other specified malignant neoplasm of skin, site unspecified	Diagnosis	ICD-9-CM
176.0	Kaposi's sarcoma of skin	Diagnosis	ICD-9-CM
176.1	Kaposi's sarcoma of soft tissue	Diagnosis	ICD-9-CM
176.2	Kaposi's sarcoma of palate	Diagnosis	ICD-9-CM
176.3	Kaposi's sarcoma of gastrointestinal sites	Diagnosis	ICD-9-CM
176.5	Kaposi's sarcoma of lymph nodes	Diagnosis	ICD-9-CM
176.8	Kaposi's sarcoma of other specified sites	Diagnosis	ICD-9-CM
176.9	Kaposi's sarcoma of unspecified site	Diagnosis	ICD-9-CM
180.0	Malignant neoplasm of endocervix	Diagnosis	ICD-9-CM
180.1	Malignant neoplasm of exocervix	Diagnosis	ICD-9-CM
180.8	Malignant neoplasm of other specified sites of cervix	Diagnosis	ICD-9-CM
180.9	Malignant neoplasm of cervix uteri, unspecified site	Diagnosis	ICD-9-CM
182.0	Malignant neoplasm of corpus uteri, except isthmus	Diagnosis	ICD-9-CM
182.1	Malignant neoplasm of isthmus	Diagnosis	ICD-9-CM
182.8	Malignant neoplasm of other specified sites of body of uterus	Diagnosis	ICD-9-CM
183.0	Malignant neoplasm of ovary	Diagnosis	ICD-9-CM
183.2	Malignant neoplasm of fallopian tube	Diagnosis	ICD-9-CM
183.3	Malignant neoplasm of broad ligament of uterus	Diagnosis	ICD-9-CM
183.4	Malignant neoplasm of parametrium of uterus	Diagnosis	ICD-9-CM
183.5	Malignant neoplasm of round ligament of uterus	Diagnosis	ICD-9-CM
183.8	Malignant neoplasm of other specified sites of uterine adnexa	Diagnosis	ICD-9-CM
183.9	Malignant neoplasm of uterine adnexa, unspecified site	Diagnosis	ICD-9-CM
184.0	Malignant neoplasm of vagina	Diagnosis	ICD-9-CM
184.1	Malignant neoplasm of labia majora	Diagnosis	ICD-9-CM
184.2	Malignant neoplasm of labia minora	Diagnosis	ICD-9-CM
184.3	Malignant neoplasm of clitoris	Diagnosis	ICD-9-CM
184.4	Malignant neoplasm of vulva, unspecified site	Diagnosis	ICD-9-CM
184.8	Malignant neoplasm of other specified sites of female genital organs	Diagnosis	ICD-9-CM
184.9	Malignant neoplasm of female genital organ, site unspecified	Diagnosis	ICD-9-CM
186.0	Malignant neoplasm of undescended testis	Diagnosis	ICD-9-CM
186.9	Malignant neoplasm of other and unspecified testis	Diagnosis	ICD-9-CM
187.1	Malignant neoplasm of prepuce	Diagnosis	ICD-9-CM
187.2	Malignant neoplasm of glans penis	Diagnosis	ICD-9-CM
187.3	Malignant neoplasm of body of penis	Diagnosis	ICD-9-CM
187.4	Malignant neoplasm of penis, part unspecified	Diagnosis	ICD-9-CM
187.5	Malignant neoplasm of epididymis	Diagnosis	ICD-9-CM
187.6	Malignant neoplasm of spermatic cord	Diagnosis	ICD-9-CM
187.7	Malignant neoplasm of scrotum	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
187.8	Malignant neoplasm of other specified sites of male genital organs	Diagnosis	ICD-9-CM
187.9	Malignant neoplasm of male genital organ, site unspecified	Diagnosis	ICD-9-CM
188.0	Malignant neoplasm of trigone of urinary bladder	Diagnosis	ICD-9-CM
188.1	Malignant neoplasm of dome of urinary bladder	Diagnosis	ICD-9-CM
188.2	Malignant neoplasm of lateral wall of urinary bladder	Diagnosis	ICD-9-CM
188.3	Malignant neoplasm of anterior wall of urinary bladder	Diagnosis	ICD-9-CM
188.4	Malignant neoplasm of posterior wall of urinary bladder	Diagnosis	ICD-9-CM
188.5	Malignant neoplasm of bladder neck	Diagnosis	ICD-9-CM
188.6	Malignant neoplasm of ureteric orifice	Diagnosis	ICD-9-CM
188.7	Malignant neoplasm of urachus	Diagnosis	ICD-9-CM
188.8	Malignant neoplasm of other specified sites of bladder	Diagnosis	ICD-9-CM
188.9	Malignant neoplasm of bladder, part unspecified	Diagnosis	ICD-9-CM
189.0	Malignant neoplasm of kidney, except pelvis	Diagnosis	ICD-9-CM
189.1	Malignant neoplasm of renal pelvis	Diagnosis	ICD-9-CM
189.2	Malignant neoplasm of ureter	Diagnosis	ICD-9-CM
189.3	Malignant neoplasm of urethra	Diagnosis	ICD-9-CM
189.4	Malignant neoplasm of paraurethral glands	Diagnosis	ICD-9-CM
189.8	Malignant neoplasm of other specified sites of urinary organs	Diagnosis	ICD-9-CM
189.9	Malignant neoplasm of urinary organ, site unspecified	Diagnosis	ICD-9-CM
190.0	Malignant neoplasm of eyeball, except conjunctiva, cornea, retina, and choroid	Diagnosis	ICD-9-CM
190.1	Malignant neoplasm of orbit	Diagnosis	ICD-9-CM
190.2	Malignant neoplasm of lacrimal gland	Diagnosis	ICD-9-CM
190.3	Malignant neoplasm of conjunctiva	Diagnosis	ICD-9-CM
190.4	Malignant neoplasm of cornea	Diagnosis	ICD-9-CM
190.5	Malignant neoplasm of retina	Diagnosis	ICD-9-CM
190.6	Malignant neoplasm of choroid	Diagnosis	ICD-9-CM
190.7	Malignant neoplasm of lacrimal duct	Diagnosis	ICD-9-CM
190.8	Malignant neoplasm of other specified sites of eye	Diagnosis	ICD-9-CM
190.9	Malignant neoplasm of eye, part unspecified	Diagnosis	ICD-9-CM
191.0	Malignant neoplasm of cerebrum, except lobes and ventricles	Diagnosis	ICD-9-CM
191.1	Malignant neoplasm of frontal lobe of brain	Diagnosis	ICD-9-CM
191.2	Malignant neoplasm of temporal lobe of brain	Diagnosis	ICD-9-CM
191.3	Malignant neoplasm of parietal lobe of brain	Diagnosis	ICD-9-CM
191.4	Malignant neoplasm of occipital lobe of brain	Diagnosis	ICD-9-CM
191.5	Malignant neoplasm of ventricles of brain	Diagnosis	ICD-9-CM
191.6	Malignant neoplasm of cerebellum NOS	Diagnosis	ICD-9-CM
191.7	Malignant neoplasm of brain stem	Diagnosis	ICD-9-CM
191.8	Malignant neoplasm of other parts of brain	Diagnosis	ICD-9-CM
191.9	Malignant neoplasm of brain, unspecified site	Diagnosis	ICD-9-CM
192.0	Malignant neoplasm of cranial nerves	Diagnosis	ICD-9-CM
192.1	Malignant neoplasm of cerebral meninges	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
192.2	Malignant neoplasm of spinal cord	Diagnosis	ICD-9-CM
192.3	Malignant neoplasm of spinal meninges	Diagnosis	ICD-9-CM
192.8	Malignant neoplasm of other specified sites of nervous system	Diagnosis	ICD-9-CM
192.9	Malignant neoplasm of nervous system, part unspecified	Diagnosis	ICD-9-CM
194.0	Malignant neoplasm of adrenal gland	Diagnosis	ICD-9-CM
194.1	Malignant neoplasm of parathyroid gland	Diagnosis	ICD-9-CM
194.3	Malignant neoplasm of pituitary gland and craniopharyngeal duct	Diagnosis	ICD-9-CM
194.4	Malignant neoplasm of pineal gland	Diagnosis	ICD-9-CM
194.5	Malignant neoplasm of carotid body	Diagnosis	ICD-9-CM
194.6	Malignant neoplasm of aortic body and other paraganglia	Diagnosis	ICD-9-CM
194.8	Malignant neoplasm of other endocrine glands and related structures	Diagnosis	ICD-9-CM
194.9	Malignant neoplasm of endocrine gland, site unspecified	Diagnosis	ICD-9-CM
195.0	Malignant neoplasm of head, face, and neck	Diagnosis	ICD-9-CM
195.1	Malignant neoplasm of thorax	Diagnosis	ICD-9-CM
195.2	Malignant neoplasm of abdomen	Diagnosis	ICD-9-CM
195.3	Malignant neoplasm of pelvis	Diagnosis	ICD-9-CM
195.4	Malignant neoplasm of upper limb	Diagnosis	ICD-9-CM
195.5	Malignant neoplasm of lower limb	Diagnosis	ICD-9-CM
195.8	Malignant neoplasm of other specified sites	Diagnosis	ICD-9-CM
196.0	Secondary and unspecified malignant neoplasm of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
196.1	Secondary and unspecified malignant neoplasm of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
196.2	Secondary and unspecified malignant neoplasm of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
196.3	Secondary and unspecified malignant neoplasm of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
196.5	Secondary and unspecified malignant neoplasm of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
196.6	Secondary and unspecified malignant neoplasm of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
196.8	Secondary and unspecified malignant neoplasm of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
196.9	Secondary and unspecified malignant neoplasm of lymph nodes, site unspecified	Diagnosis	ICD-9-CM
197.1	Secondary malignant neoplasm of mediastinum	Diagnosis	ICD-9-CM
197.2	Secondary malignant neoplasm of pleura	Diagnosis	ICD-9-CM
197.3	Secondary malignant neoplasm of other respiratory organs	Diagnosis	ICD-9-CM
197.4	Secondary malignant neoplasm of small intestine including duodenum	Diagnosis	ICD-9-CM
197.5	Secondary malignant neoplasm of large intestine and rectum	Diagnosis	ICD-9-CM
197.6	Secondary malignant neoplasm of retroperitoneum and peritoneum	Diagnosis	ICD-9-CM
197.7	Secondary malignant neoplasm of liver	Diagnosis	ICD-9-CM
197.8	Secondary malignant neoplasm of other digestive organs and spleen	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
198.0	Secondary malignant neoplasm of kidney	Diagnosis	ICD-9-CM
198.1	Secondary malignant neoplasm of other urinary organs	Diagnosis	ICD-9-CM
198.2	Secondary malignant neoplasm of skin	Diagnosis	ICD-9-CM
198.3	Secondary malignant neoplasm of brain and spinal cord	Diagnosis	ICD-9-CM
198.4	Secondary malignant neoplasm of other parts of nervous system	Diagnosis	ICD-9-CM
198.5	Secondary malignant neoplasm of bone and bone marrow	Diagnosis	ICD-9-CM
198.6	Secondary malignant neoplasm of ovary	Diagnosis	ICD-9-CM
198.7	Secondary malignant neoplasm of adrenal gland	Diagnosis	ICD-9-CM
198.8	Secondary malignant neoplasm of other specified sites	Diagnosis	ICD-9-CM
198.82	Secondary malignant neoplasm of genital organs	Diagnosis	ICD-9-CM
198.89	Secondary malignant neoplasm of other specified sites	Diagnosis	ICD-9-CM
199.0	Disseminated malignant neoplasm	Diagnosis	ICD-9-CM
199.1	Other malignant neoplasm of unspecified site	Diagnosis	ICD-9-CM
199.2	Malignant neoplasm associated with transplanted organ	Diagnosis	ICD-9-CM
200.0	Reticulosarcoma	Diagnosis	ICD-9-CM
200.00	Reticulosarcoma, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
200.01	Reticulosarcoma of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
200.02	Reticulosarcoma of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
200.03	Reticulosarcoma of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
200.04	Reticulosarcoma of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
200.05	Reticulosarcoma of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
200.06	Reticulosarcoma of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
200.07	Reticulosarcoma of spleen	Diagnosis	ICD-9-CM
200.08	Reticulosarcoma of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
200.1	Lymphosarcoma	Diagnosis	ICD-9-CM
200.10	Lymphosarcoma, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
200.11	Lymphosarcoma of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
200.12	Lymphosarcoma of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
200.13	Lymphosarcoma of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
200.14	Lymphosarcoma of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
200.15	Lymphosarcoma of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
200.16	Lymphosarcoma of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
200.17	Lymphosarcoma of spleen	Diagnosis	ICD-9-CM
200.18	Lymphosarcoma of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
200.2	Burkitt's tumor or lymphoma	Diagnosis	ICD-9-CM
200.20	Burkitt's tumor or lymphoma, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
200.21	Burkitt's tumor or lymphoma of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
200.22	Burkitt's tumor or lymphoma of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
200.23	Burkitt's tumor or lymphoma of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
200.24	Burkitt's tumor or lymphoma of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
200.25	Burkitt's tumor or lymphoma of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
200.26	Burkitt's tumor or lymphoma of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
200.27	Burkitt's tumor or lymphoma of spleen	Diagnosis	ICD-9-CM
200.28	Burkitt's tumor or lymphoma of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
200.3	Marginal zone lymphoma	Diagnosis	ICD-9-CM
200.30	Marginal zone lymphoma, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
200.31	Marginal zone lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
200.32	Marginal zone lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-9-CM
200.33	Marginal zone lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
200.34	Marginal zone lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
200.35	Marginal zone lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
200.36	Marginal zone lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-9-CM
200.37	Marginal zone lymphoma, spleen	Diagnosis	ICD-9-CM
200.38	Marginal zone lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-9-CM
200.4	Mantle cell lymphoma	Diagnosis	ICD-9-CM
200.40	Mantle cell lymphoma, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
200.41	Mantle cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
200.42	Mantle cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-9-CM
200.43	Mantle cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
200.44	Mantle cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
200.45	Mantle cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
200.46	Mantle cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-9-CM
200.47	Mantle cell lymphoma, spleen	Diagnosis	ICD-9-CM
200.48	Mantle cell lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-9-CM
200.5	Primary central nervous system lymphoma	Diagnosis	ICD-9-CM
200.50	Primary central nervous system lymphoma, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
200.51	Primary central nervous system lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
200.52	Primary central nervous system lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-9-CM
200.53	Primary central nervous system lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
200.54	Primary central nervous system lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
200.55	Primary central nervous system lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
200.56	Primary central nervous system lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-9-CM
200.57	Primary central nervous system lymphoma, spleen	Diagnosis	ICD-9-CM
200.58	Primary central nervous system lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-9-CM
200.6	Anaplastic large cell lymphoma	Diagnosis	ICD-9-CM
200.60	Anaplastic large cell lymphoma, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
200.61	Anaplastic large cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
200.62	Anaplastic large cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-9-CM
200.63	Anaplastic large cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
200.64	Anaplastic large cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
200.65	Anaplastic large cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
200.66	Anaplastic large cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-9-CM
200.67	Anaplastic large cell lymphoma, spleen	Diagnosis	ICD-9-CM
200.68	Anaplastic large cell lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-9-CM
200.7	Large cell lymphoma	Diagnosis	ICD-9-CM
200.70	Large cell lymphoma, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
200.71	Large cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
200.72	Large cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-9-CM
200.73	Large cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
200.74	Large cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
200.75	Large cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
200.76	Large cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-9-CM
200.77	Large cell lymphoma, spleen	Diagnosis	ICD-9-CM
200.78	Large cell lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-9-CM
200.8	Other named variants of lymphosarcoma and reticulosarcoma	Diagnosis	ICD-9-CM
200.80	Other named variants, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
200.81	Other named variants of lymphosarcoma and reticulosarcoma of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
200.82	Other named variants of lymphosarcoma and reticulosarcoma of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
200.83	Other named variants of lymphosarcoma and reticulosarcoma of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
200.84	Other named variants of lymphosarcoma and reticulosarcoma of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
200.85	Other named variants of lymphosarcoma and reticulosarcoma of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
200.86	Other named variants of lymphosarcoma and reticulosarcoma of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
200.87	Other named variants of lymphosarcoma and reticulosarcoma of spleen	Diagnosis	ICD-9-CM
200.88	Other named variants of lymphosarcoma and reticulosarcoma of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
201.0	Hodgkin's paraganuloma	Diagnosis	ICD-9-CM
201.00	Hodgkin's paraganuloma, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
201.01	Hodgkin's paraganuloma of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
201.02	Hodgkin's paraganuloma of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
201.03	Hodgkin's paraganuloma of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
201.04	Hodgkin's paraganuloma of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
201.05	Hodgkin's paraganuloma of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
201.06	Hodgkin's paraganuloma of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
201.07	Hodgkin's paraganuloma of spleen	Diagnosis	ICD-9-CM
201.08	Hodgkin's paraganuloma of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
201.1	Hodgkin's granuloma	Diagnosis	ICD-9-CM
201.10	Hodgkin's granuloma, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
201.11	Hodgkin's granuloma of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
201.12	Hodgkin's granuloma of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
201.13	Hodgkin's granuloma of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
201.14	Hodgkin's granuloma of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
201.15	Hodgkin's granuloma of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
201.16	Hodgkin's granuloma of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
201.17	Hodgkin's granuloma of spleen	Diagnosis	ICD-9-CM
201.18	Hodgkin's granuloma of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
201.2	Hodgkin's sarcoma	Diagnosis	ICD-9-CM
201.20	Hodgkin's sarcoma, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
201.21	Hodgkin's sarcoma of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
201.22	Hodgkin's sarcoma of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
201.23	Hodgkin's sarcoma of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
201.24	Hodgkin's sarcoma of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
201.25	Hodgkin's sarcoma of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
201.26	Hodgkin's sarcoma of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
201.27	Hodgkin's sarcoma of spleen	Diagnosis	ICD-9-CM
201.28	Hodgkin's sarcoma of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
201.4	Hodgkin's disease, lymphocytic-histiocytic predominance	Diagnosis	ICD-9-CM
201.40	Hodgkin's disease, lymphocytic-histiocytic predominance, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
201.41	Hodgkin's disease, lymphocytic-histiocytic predominance of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
201.42	Hodgkin's disease, lymphocytic-histiocytic predominance of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
201.43	Hodgkin's disease, lymphocytic-histiocytic predominance of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
201.44	Hodgkin's disease, lymphocytic-histiocytic predominance of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
201.45	Hodgkin's disease, lymphocytic-histiocytic predominance of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
201.46	Hodgkin's disease, lymphocytic-histiocytic predominance of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
201.47	Hodgkin's disease, lymphocytic-histiocytic predominance of spleen	Diagnosis	ICD-9-CM
201.48	Hodgkin's disease, lymphocytic-histiocytic predominance of lymph nodes of multiple sites	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
201.5	Hodgkin's disease, nodular sclerosis	Diagnosis	ICD-9-CM
201.50	Hodgkin's disease, nodular sclerosis, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
201.51	Hodgkin's disease, nodular sclerosis, of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
201.52	Hodgkin's disease, nodular sclerosis, of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
201.53	Hodgkin's disease, nodular sclerosis, of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
201.54	Hodgkin's disease, nodular sclerosis, of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
201.55	Hodgkin's disease, nodular sclerosis, of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
201.56	Hodgkin's disease, nodular sclerosis, of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
201.57	Hodgkin's disease, nodular sclerosis, of spleen	Diagnosis	ICD-9-CM
201.58	Hodgkin's disease, nodular sclerosis, of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
201.6	Hodgkin's disease, mixed cellularity	Diagnosis	ICD-9-CM
201.60	Hodgkin's disease, mixed cellularity, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
201.61	Hodgkin's disease, mixed cellularity, involving lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
201.62	Hodgkin's disease, mixed cellularity, of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
201.63	Hodgkin's disease, mixed cellularity, of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
201.64	Hodgkin's disease, mixed cellularity, of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
201.65	Hodgkin's disease, mixed cellularity, of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
201.66	Hodgkin's disease, mixed cellularity, of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
201.67	Hodgkin's disease, mixed cellularity, of spleen	Diagnosis	ICD-9-CM
201.68	Hodgkin's disease, mixed cellularity, of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
201.7	Hodgkin's disease, lymphocytic depletion	Diagnosis	ICD-9-CM
201.70	Hodgkin's disease, lymphocytic depletion, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
201.71	Hodgkin's disease, lymphocytic depletion, of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
201.72	Hodgkin's disease, lymphocytic depletion, of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
201.73	Hodgkin's disease, lymphocytic depletion, of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
201.74	Hodgkin's disease, lymphocytic depletion, of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
201.75	Hodgkin's disease, lymphocytic depletion, of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
201.76	Hodgkin's disease, lymphocytic depletion, of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
201.77	Hodgkin's disease, lymphocytic depletion, of spleen	Diagnosis	ICD-9-CM
201.78	Hodgkin's disease, lymphocytic depletion, of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
201.9	Hodgkin's disease, unspecified type	Diagnosis	ICD-9-CM
201.90	Hodgkin's disease, unspecified type, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
201.91	Hodgkin's disease, unspecified type, of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
201.92	Hodgkin's disease, unspecified type, of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
201.93	Hodgkin's disease, unspecified type, of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
201.94	Hodgkin's disease, unspecified type, of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
201.95	Hodgkin's disease, unspecified type, of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
201.96	Hodgkin's disease, unspecified type, of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
201.97	Hodgkin's disease, unspecified type, of spleen	Diagnosis	ICD-9-CM
201.98	Hodgkin's disease, unspecified type, of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
202.0	Nodular lymphoma	Diagnosis	ICD-9-CM
202.00	Nodular lymphoma, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
202.01	Nodular lymphoma of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
202.02	Nodular lymphoma of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
202.03	Nodular lymphoma of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
202.04	Nodular lymphoma of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
202.05	Nodular lymphoma of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
202.06	Nodular lymphoma of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
202.07	Nodular lymphoma of spleen	Diagnosis	ICD-9-CM
202.08	Nodular lymphoma of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
202.1	Mycosis fungoides	Diagnosis	ICD-9-CM
202.10	Mycosis fungoides, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
202.11	Mycosis fungoides of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
202.12	Mycosis fungoides of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
202.13	Mycosis fungoides of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
202.14	Mycosis fungoides of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
202.15	Mycosis fungoides of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
202.16	Mycosis fungoides of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
202.17	Mycosis fungoides of spleen	Diagnosis	ICD-9-CM
202.18	Mycosis fungoides of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
202.2	Sezary's disease	Diagnosis	ICD-9-CM
202.20	Sezary's disease, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
202.21	Sezary's disease of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
202.22	Sezary's disease of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
202.23	Sezary's disease of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
202.24	Sezary's disease of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
202.25	Sezary's disease of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
202.26	Sezary's disease of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
202.27	Sezary's disease of spleen	Diagnosis	ICD-9-CM
202.28	Sezary's disease of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
202.3	Malignant histiocytosis	Diagnosis	ICD-9-CM
202.30	Malignant histiocytosis, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
202.31	Malignant histiocytosis of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
202.32	Malignant histiocytosis of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
202.33	Malignant histiocytosis of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
202.34	Malignant histiocytosis of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
202.35	Malignant histiocytosis of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
202.36	Malignant histiocytosis of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
202.37	Malignant histiocytosis of spleen	Diagnosis	ICD-9-CM
202.38	Malignant histiocytosis of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
202.4	Leukemic reticuloendotheliosis	Diagnosis	ICD-9-CM
202.40	Leukemic reticuloendotheliosis, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
202.41	Leukemic reticuloendotheliosis of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
202.42	Leukemic reticuloendotheliosis of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
202.43	Leukemic reticuloendotheliosis of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
202.44	Leukemic reticuloendotheliosis of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
202.45	Leukemic reticuloendotheliosis of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
202.46	Leukemic reticuloendotheliosis of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
202.47	Leukemic reticuloendotheliosis of spleen	Diagnosis	ICD-9-CM
202.48	Leukemic reticuloendotheliosis of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
202.5	Letterer-Siwe disease	Diagnosis	ICD-9-CM
202.50	Letterer-Siwe disease, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
202.51	Letterer-Siwe disease of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
202.52	Letterer-Siwe disease of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
202.53	Letterer-Siwe disease of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
202.54	Letterer-Siwe disease of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
202.55	Letterer-Siwe disease of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
202.56	Letterer-Siwe disease of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
202.57	Letterer-Siwe disease of spleen	Diagnosis	ICD-9-CM
202.58	Letterer-Siwe disease of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
202.6	Malignant mast cell tumors	Diagnosis	ICD-9-CM
202.60	Malignant mast cell tumors, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
202.61	Malignant mast cell tumors of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
202.62	Malignant mast cell tumors of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
202.63	Malignant mast cell tumors of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
202.64	Malignant mast cell tumors of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
202.65	Malignant mast cell tumors of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
202.66	Malignant mast cell tumors of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
202.67	Malignant mast cell tumors of spleen	Diagnosis	ICD-9-CM
202.68	Malignant mast cell tumors of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
202.7	Peripheral T-cell lymphoma	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
202.70	Peripheral T-cell lymphoma, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
202.71	Peripheral T-cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
202.72	Peripheral T-cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-9-CM
202.73	Peripheral T-cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
202.74	Peripheral T-cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
202.75	Peripheral T-cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
202.76	Peripheral T-cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-9-CM
202.77	Peripheral T-cell lymphoma, spleen	Diagnosis	ICD-9-CM
202.78	Peripheral T-cell lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-9-CM
202.8	Other malignant lymphomas	Diagnosis	ICD-9-CM
202.80	Other malignant lymphomas, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
202.81	Other malignant lymphomas of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
202.82	Other malignant lymphomas of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
202.83	Other malignant lymphomas of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
202.84	Other malignant lymphomas of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
202.85	Other malignant lymphomas of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
202.86	Other malignant lymphomas of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
202.87	Other malignant lymphomas of spleen	Diagnosis	ICD-9-CM
202.88	Other malignant lymphomas of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
202.9	Other and unspecified malignant neoplasms of lymphoid and histiocytic tissue	Diagnosis	ICD-9-CM
202.90	Other and unspecified malignant neoplasms of lymphoid and histiocytic tissue, unspecified site, extranodal and solid organ sites	Diagnosis	ICD-9-CM
202.91	Other and unspecified malignant neoplasms of lymphoid and histiocytic tissue of lymph nodes of head, face, and neck	Diagnosis	ICD-9-CM
202.92	Other and unspecified malignant neoplasms of lymphoid and histiocytic tissue of intrathoracic lymph nodes	Diagnosis	ICD-9-CM
202.93	Other and unspecified malignant neoplasms of lymphoid and histiocytic tissue of intra-abdominal lymph nodes	Diagnosis	ICD-9-CM
202.94	Other and unspecified malignant neoplasms of lymphoid and histiocytic tissue of lymph nodes of axilla and upper limb	Diagnosis	ICD-9-CM
202.95	Other and unspecified malignant neoplasms of lymphoid and histiocytic tissue of lymph nodes of inguinal region and lower limb	Diagnosis	ICD-9-CM
202.96	Other and unspecified malignant neoplasms of lymphoid and histiocytic tissue of intrapelvic lymph nodes	Diagnosis	ICD-9-CM
202.97	Other and unspecified malignant neoplasms of lymphoid and histiocytic tissue of spleen	Diagnosis	ICD-9-CM
202.98	Other and unspecified malignant neoplasms of lymphoid and histiocytic tissue of lymph nodes of multiple sites	Diagnosis	ICD-9-CM
203.0	Multiple myeloma	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
203.00	Multiple myeloma, without mention of having achieved remission	Diagnosis	ICD-9-CM
203.01	Multiple myeloma in remission	Diagnosis	ICD-9-CM
203.02	Multiple myeloma, in relapse	Diagnosis	ICD-9-CM
203.1	Plasma cell leukemia	Diagnosis	ICD-9-CM
203.10	Plasma cell leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
203.11	Plasma cell leukemia in remission	Diagnosis	ICD-9-CM
203.12	Plasma cell leukemia, in relapse	Diagnosis	ICD-9-CM
203.8	Other immunoproliferative neoplasms	Diagnosis	ICD-9-CM
203.80	Other immunoproliferative neoplasms, without mention of having achieved remission	Diagnosis	ICD-9-CM
203.81	Other immunoproliferative neoplasms in remission	Diagnosis	ICD-9-CM
203.82	Other immunoproliferative neoplasms, in relapse	Diagnosis	ICD-9-CM
204.0	Acute lymphoid leukemia	Diagnosis	ICD-9-CM
204.00	Acute lymphoid leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
204.01	Acute lymphoid leukemia in remission	Diagnosis	ICD-9-CM
204.02	Acute lymphoid leukemia, in relapse	Diagnosis	ICD-9-CM
204.1	Chronic lymphoid leukemia	Diagnosis	ICD-9-CM
204.10	Chronic lymphoid leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
204.11	Chronic lymphoid leukemia in remission	Diagnosis	ICD-9-CM
204.12	Chronic lymphoid leukemia, in relapse	Diagnosis	ICD-9-CM
204.2	Subacute lymphoid leukemia	Diagnosis	ICD-9-CM
204.20	Subacute lymphoid leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
204.21	Subacute lymphoid leukemia in remission	Diagnosis	ICD-9-CM
204.22	Subacute lymphoid leukemia, in relapse	Diagnosis	ICD-9-CM
204.8	Other lymphoid leukemia	Diagnosis	ICD-9-CM
204.80	Other lymphoid leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
204.81	Other lymphoid leukemia in remission	Diagnosis	ICD-9-CM
204.82	Other lymphoid leukemia, in relapse	Diagnosis	ICD-9-CM
204.9	Unspecified lymphoid leukemia	Diagnosis	ICD-9-CM
204.90	Unspecified lymphoid leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
204.91	Unspecified lymphoid leukemia in remission	Diagnosis	ICD-9-CM
204.92	Unspecified lymphoid leukemia, in relapse	Diagnosis	ICD-9-CM
205.0	Acute myeloid leukemia	Diagnosis	ICD-9-CM
205.00	Acute myeloid leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
205.01	Acute myeloid leukemia in remission	Diagnosis	ICD-9-CM
205.02	Acute myeloid leukemia, in relapse	Diagnosis	ICD-9-CM
205.1	Chronic myeloid leukemia	Diagnosis	ICD-9-CM
205.10	Chronic myeloid leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
205.11	Chronic myeloid leukemia in remission	Diagnosis	ICD-9-CM
205.12	Chronic myeloid leukemia, in relapse	Diagnosis	ICD-9-CM
205.2	Subacute myeloid leukemia	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
205.20	Subacute myeloid leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
205.21	Subacute myeloid leukemia in remission	Diagnosis	ICD-9-CM
205.22	Subacute myeloid leukemia, in relapse	Diagnosis	ICD-9-CM
205.3	Myeloid sarcoma	Diagnosis	ICD-9-CM
205.30	Myeloid sarcoma, without mention of having achieved remission	Diagnosis	ICD-9-CM
205.31	Myeloid sarcoma in remission	Diagnosis	ICD-9-CM
205.32	Myeloid sarcoma, in relapse	Diagnosis	ICD-9-CM
205.8	Other myeloid leukemia	Diagnosis	ICD-9-CM
205.80	Other myeloid leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
205.81	Other myeloid leukemia in remission	Diagnosis	ICD-9-CM
205.82	Other myeloid leukemia, in relapse	Diagnosis	ICD-9-CM
205.9	Unspecified myeloid leukemia	Diagnosis	ICD-9-CM
205.90	Unspecified myeloid leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
205.91	Unspecified myeloid leukemia in remission	Diagnosis	ICD-9-CM
205.92	Unspecified myeloid leukemia, in relapse	Diagnosis	ICD-9-CM
206.0	Acute monocytic leukemia	Diagnosis	ICD-9-CM
206.00	Acute monocytic leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
206.01	Acute monocytic leukemia in remission	Diagnosis	ICD-9-CM
206.02	Acute monocytic leukemia, in relapse	Diagnosis	ICD-9-CM
206.1	Chronic monocytic leukemia	Diagnosis	ICD-9-CM
206.10	Chronic monocytic leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
206.11	Chronic monocytic leukemia in remission	Diagnosis	ICD-9-CM
206.12	Chronic monocytic leukemia, in relapse	Diagnosis	ICD-9-CM
206.2	Subacute monocytic leukemia	Diagnosis	ICD-9-CM
206.20	Subacute monocytic leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
206.21	Subacute monocytic leukemia in remission	Diagnosis	ICD-9-CM
206.22	Subacute monocytic leukemia, in relapse	Diagnosis	ICD-9-CM
206.8	Other monocytic leukemia	Diagnosis	ICD-9-CM
206.80	Other monocytic leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
206.81	Other monocytic leukemia in remission	Diagnosis	ICD-9-CM
206.82	Other monocytic leukemia, in relapse	Diagnosis	ICD-9-CM
206.9	Unspecified monocytic leukemia	Diagnosis	ICD-9-CM
206.90	Unspecified monocytic leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
206.91	Unspecified monocytic leukemia in remission	Diagnosis	ICD-9-CM
206.92	Unspecified monocytic leukemia, in relapse	Diagnosis	ICD-9-CM
207.0	Acute erythremia and erythroleukemia	Diagnosis	ICD-9-CM
207.00	Acute erythremia and erythroleukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
207.01	Acute erythremia and erythroleukemia in remission	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
207.02	Acute erythremia and erythroleukemia, in relapse	Diagnosis	ICD-9-CM
207.1	Chronic erythremia	Diagnosis	ICD-9-CM
207.10	Chronic erythremia, without mention of having achieved remission	Diagnosis	ICD-9-CM
207.11	Chronic erythremia in remission	Diagnosis	ICD-9-CM
207.12	Chronic erythremia, in relapse	Diagnosis	ICD-9-CM
207.2	Megakaryocytic leukemia	Diagnosis	ICD-9-CM
207.20	Megakaryocytic leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
207.21	Megakaryocytic leukemia in remission	Diagnosis	ICD-9-CM
207.22	Megakaryocytic leukemia, in relapse	Diagnosis	ICD-9-CM
207.8	Other specified leukemia	Diagnosis	ICD-9-CM
207.80	Other specified leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
207.81	Other specified leukemia in remission	Diagnosis	ICD-9-CM
207.82	Other specified leukemia, in relapse	Diagnosis	ICD-9-CM
208.0	Acute leukemia of unspecified cell type	Diagnosis	ICD-9-CM
208.00	Acute leukemia of unspecified cell type, without mention of having achieved remission	Diagnosis	ICD-9-CM
208.01	Acute leukemia of unspecified cell type in remission	Diagnosis	ICD-9-CM
208.02	Acute leukemia of unspecified cell type, in relapse	Diagnosis	ICD-9-CM
208.1	Chronic leukemia of unspecified cell type	Diagnosis	ICD-9-CM
208.10	Chronic leukemia of unspecified cell type, without mention of having achieved remission	Diagnosis	ICD-9-CM
208.11	Chronic leukemia of unspecified cell type in remission	Diagnosis	ICD-9-CM
208.12	Chronic leukemia of unspecified cell type, in relapse	Diagnosis	ICD-9-CM
208.2	Subacute leukemia of unspecified cell type	Diagnosis	ICD-9-CM
208.20	Subacute leukemia of unspecified cell type, without mention of having achieved remission	Diagnosis	ICD-9-CM
208.21	Subacute leukemia of unspecified cell type in remission	Diagnosis	ICD-9-CM
208.22	Subacute leukemia of unspecified cell type, in relapse	Diagnosis	ICD-9-CM
208.8	Other leukemia of unspecified cell type	Diagnosis	ICD-9-CM
208.80	Other leukemia of unspecified cell type, without mention of having achieved remission	Diagnosis	ICD-9-CM
208.81	Other leukemia of unspecified cell type in remission	Diagnosis	ICD-9-CM
208.82	Other leukemia of unspecified cell type, in relapse	Diagnosis	ICD-9-CM
208.9	Unspecified leukemia	Diagnosis	ICD-9-CM
208.90	Unspecified leukemia, without mention of having achieved remission	Diagnosis	ICD-9-CM
208.91	Unspecified leukemia in remission	Diagnosis	ICD-9-CM
208.92	Unspecified leukemia, in relapse	Diagnosis	ICD-9-CM
Other mental disorders			
300.1	Dissociative, conversion and factitious disorders	Diagnosis	ICD-9-CM
300.10	Hysteria unspecified	Diagnosis	ICD-9-CM
300.11	conversion disorder	Diagnosis	ICD-9-CM
300.12	Dissociative amnesia	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
300.13	Dissociative fugue	Diagnosis	ICD-9-CM
300.14	Dissociative identity disorder	Diagnosis	ICD-9-CM
300.15	Dissociative disorder or reaction, unspecified	Diagnosis	ICD-9-CM
300.16	Factitious disorder with predominantly psychological signs and symptoms	Diagnosis	ICD-9-CM
300.19	Other and unspecified factitious illness	Diagnosis	ICD-9-CM
300.5	Neurasthenia	Diagnosis	ICD-9-CM
300.6	Depersonalization disorder	Diagnosis	ICD-9-CM
300.7	Hypochondriasis	Diagnosis	ICD-9-CM
300.8	Somatoform disorders	Diagnosis	ICD-9-CM
300.81	Somatization disorder	Diagnosis	ICD-9-CM
300.82	Undifferentiated somatoform disorder	Diagnosis	ICD-9-CM
300.89	Other somatoform disorders	Diagnosis	ICD-9-CM
300.9	Unspecified nonpsychotic mental disorder	Diagnosis	ICD-9-CM
302	Sexual and gender identity disorders	Diagnosis	ICD-9-CM
302.0	Ego-dystonic sexual orientation	Diagnosis	ICD-9-CM
302.1	Zoophilia	Diagnosis	ICD-9-CM
302.2	Pedophilia	Diagnosis	ICD-9-CM
302.3	Transvestic fetishism	Diagnosis	ICD-9-CM
302.4	Exhibitionism	Diagnosis	ICD-9-CM
302.5	Trans-sexualism	Diagnosis	ICD-9-CM
302.50	Trans-sexualism with unspecified sexual history	Diagnosis	ICD-9-CM
302.51	Trans-sexualism with asexual history	Diagnosis	ICD-9-CM
302.52	Trans-sexualism with homosexual history	Diagnosis	ICD-9-CM
302.53	Trans-sexualism with heterosexual history	Diagnosis	ICD-9-CM
302.6	Gender identity disorder in children	Diagnosis	ICD-9-CM
302.7	Psychosexual dysfunction	Diagnosis	ICD-9-CM
302.70	Psychosexual dysfunction, unspecified	Diagnosis	ICD-9-CM
302.71	Hypoactive sexual desire disorder	Diagnosis	ICD-9-CM
302.72	Psychosexual dysfunction with inhibited sexual excitement	Diagnosis	ICD-9-CM
302.73	Female orgasmic disorder	Diagnosis	ICD-9-CM
302.74	Male orgasmic disorder	Diagnosis	ICD-9-CM
302.75	Premature ejaculation	Diagnosis	ICD-9-CM
302.76	Dyspareunia, psychogenic	Diagnosis	ICD-9-CM
302.79	Psychosexual dysfunction with other specified psychosexual dysfunctions	Diagnosis	ICD-9-CM
302.8	Other specified psychosexual disorders	Diagnosis	ICD-9-CM
302.81	Fetishism	Diagnosis	ICD-9-CM
302.82	Voyeurism	Diagnosis	ICD-9-CM
302.83	Sexual masochism	Diagnosis	ICD-9-CM
302.84	Sexual sadism	Diagnosis	ICD-9-CM
302.85	Gender identity disorder in adolescents or adults	Diagnosis	ICD-9-CM
302.89	Other specified psychosexual disorders	Diagnosis	ICD-9-CM
302.9	Unspecified psychosexual disorders	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
306	Physiological malfunction arising from mental factors	Diagnosis	ICD-9-CM
306.0	Musculoskeletal malfunction arising from mental factors	Diagnosis	ICD-9-CM
306.1	Respiratory malfunction arising from mental factors	Diagnosis	ICD-9-CM
306.2	Cardiovascular malfunction arising from mental factors	Diagnosis	ICD-9-CM
306.3	Skin disorder arising from mental factors	Diagnosis	ICD-9-CM
306.4	Gastrointestinal malfunction arising from mental factors	Diagnosis	ICD-9-CM
306.5	Genitourinary malfunction arising from mental factors	Diagnosis	ICD-9-CM
306.50	Psychogenic genitourinary malfunction, unspecified	Diagnosis	ICD-9-CM
306.51	psychogenic vaginismus	Diagnosis	ICD-9-CM
306.52	psychogenic dysmenorrhea	Diagnosis	ICD-9-CM
306.53	psychogenic dysuria	Diagnosis	ICD-9-CM
306.59	Other genitourinary malfunction arising from mental factors	Diagnosis	ICD-9-CM
306.6	Endocrine disorder arising from mental factors	Diagnosis	ICD-9-CM
306.7	Disorder of organs of special sense arising from mental factors	Diagnosis	ICD-9-CM
306.8	Other specified psychophysiological malfunction	Diagnosis	ICD-9-CM
306.9	Unspecified psychophysiological malfunction	Diagnosis	ICD-9-CM
307	Special symptoms or syndromes not elsewhere classified	Diagnosis	ICD-9-CM
307.0	Adult onset fluency disorder	Diagnosis	ICD-9-CM
307.1	Anorexia nervosa	Diagnosis	ICD-9-CM
307.2	Tics	Diagnosis	ICD-9-CM
307.20	Tic disorder, unspecified	Diagnosis	ICD-9-CM
307.21	Transient tic disorder	Diagnosis	ICD-9-CM
307.22	Chronic motor or vocal tic disorder	Diagnosis	ICD-9-CM
307.23	Tourette's disorder	Diagnosis	ICD-9-CM
307.3	Stereotypic movement disorder	Diagnosis	ICD-9-CM
307.5	Other unspecified disorder of eating	Diagnosis	ICD-9-CM
307.50	Eating disorder, unspecified	Diagnosis	ICD-9-CM
307.51	Bulimia nervosa	Diagnosis	ICD-9-CM
307.52	Pica	Diagnosis	ICD-9-CM
307.53	Rumination disorder	Diagnosis	ICD-9-CM
307.54	Psychogenic vomiting	Diagnosis	ICD-9-CM
307.59	Other disorders of eating	Diagnosis	ICD-9-CM
307.6	Enuresis	Diagnosis	ICD-9-CM
307.7	Encopresis	Diagnosis	ICD-9-CM
307.8	pain disorder related to psychological factors	Diagnosis	ICD-9-CM
307.80	psychogenic pain, site unspecified	Diagnosis	ICD-9-CM
307.81	Tension headache	Diagnosis	ICD-9-CM
307.89	Other pain disorders related to psychological factors	Diagnosis	ICD-9-CM
307.9	Other and unspecified special symptoms or syndromes, not elsewhere classified	Diagnosis	ICD-9-CM
308	Acute reaction to stress	Diagnosis	ICD-9-CM
308.0	Predominant disturbance of emotions	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
308.1	Predominant disturbance of consciousness	Diagnosis	ICD-9-CM
308.2	Predominant psychomotor disturbance	Diagnosis	ICD-9-CM
308.3	Other acute reactions to stress	Diagnosis	ICD-9-CM
308.4	Mixed disorders as reaction to stress	Diagnosis	ICD-9-CM
308.9	Unspecified acute reaction to stress	Diagnosis	ICD-9-CM
309.2	Adjustment reaction with predominant disturbance of other emotions	Diagnosis	ICD-9-CM
309.21	Separation anxiety disorder	Diagnosis	ICD-9-CM
309.22	Emancipation disorder of adolescence and early adult life	Diagnosis	ICD-9-CM
309.23	Specific academic or work inhibition	Diagnosis	ICD-9-CM
309.24	Adjustment disorder with anxiety	Diagnosis	ICD-9-CM
309.28	Adjustment disorder with mixed anxiety and depressed mo	Diagnosis	ICD-9-CM
309.29	Other adjustment reactions with predominant disturbance of other emotions	Diagnosis	ICD-9-CM
309.3	Adjustment disorder with disturbance of conduct	Diagnosis	ICD-9-CM
309.4	Adjustment disorder with mixed disturbance of emotions and conduct	Diagnosis	ICD-9-CM
309.8	Other specified adjustment reactions	Diagnosis	ICD-9-CM
309.81	Posttraumatic stress disorder	Diagnosis	ICD-9-CM
309.82	Adjustment reaction with physical symptoms	Diagnosis	ICD-9-CM
309.83	Adjustment reaction with withdrawal	Diagnosis	ICD-9-CM
309.89	Other specified adjustment reactions	Diagnosis	ICD-9-CM
309.9	Unspecified adjustment reaction	Diagnosis	ICD-9-CM
310	Specific nonpsychotic mental disorders due to brain damage	Diagnosis	ICD-9-CM
310.0	Frontal lobe syndrome	Diagnosis	ICD-9-CM
310.1	Personality change due to conditions classified elsewhere	Diagnosis	ICD-9-CM
310.2	Postconcussion syndrome	Diagnosis	ICD-9-CM
310.8	Other specified nonpsychotic mental disorders following organic brain damage	Diagnosis	ICD-9-CM
310.81	Pseudobulbar affect	Diagnosis	ICD-9-CM
310.89	Other specified nonpsychotic mental disorders following organic brain damage	Diagnosis	ICD-9-CM
310.9	Unspecified nonpsychotic mental disorder following organic brain damage	Diagnosis	ICD-9-CM
313	Disturbance of emotions specific to childhood and adolescence	Diagnosis	ICD-9-CM
313.0	Overanxious disorder specific to childhood and adolescence	Diagnosis	ICD-9-CM
313.1	Misery and unhappiness disorder specific to childhood and adolescence	Diagnosis	ICD-9-CM
313.2	Sensitivity shyness and social withdrawal disorder specific to childhood and adolescence	Diagnosis	ICD-9-CM
313.21	Shyness disorder of childhood	Diagnosis	ICD-9-CM
313.22	Introverted disorder of childhood	Diagnosis	ICD-9-CM
313.23	Slective mutism	Diagnosis	ICD-9-CM
313.3	Relationship problems specific to childhood and adolescence	Diagnosis	ICD-9-CM
313.8	Other or mixed emotional disturbances of childhood or adolescence	Diagnosis	ICD-9-CM
313.81	Oppositional defiant disorder	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
313.82	Identity disorder of childhood or adolescence	Diagnosis	ICD-9-CM
313.83	Academic underachievement disorder of childhood or adolescence	Diagnosis	ICD-9-CM
313.89	Other emotional disturbances of childhood or adolescence	Diagnosis	ICD-9-CM
313.9	Unspecified emotional disturbance of childhood or adolescence	Diagnosis	ICD-9-CM
315	Specific delays in development	Diagnosis	ICD-9-CM
315.0	Developmental reading disorder	Diagnosis	ICD-9-CM
315.00	Developmental reading disorder, unspecified	Diagnosis	ICD-9-CM
315.01	Alexia	Diagnosis	ICD-9-CM
315.02	Developmental dyslexia	Diagnosis	ICD-9-CM
315.09	Other specific developmental reading disorder	Diagnosis	ICD-9-CM
315.1	Mathematics disorder	Diagnosis	ICD-9-CM
315.2	Other specific developmental learning difficulties	Diagnosis	ICD-9-CM
315.3	Developmental speech or language disorder	Diagnosis	ICD-9-CM
315.31	Expressive language disorder	Diagnosis	ICD-9-CM
315.32	Mixed receptive-expressive language disorder	Diagnosis	ICD-9-CM
315.34	Speech and language developmental delay due to hearing loss	Diagnosis	ICD-9-CM
315.35	Childhood onset fluency disorder	Diagnosis	ICD-9-CM
315.39	Other developmental speech or language disorder	Diagnosis	ICD-9-CM
315.4	Developmental coordination disorder	Diagnosis	ICD-9-CM
315.5	Mixed development disorder	Diagnosis	ICD-9-CM
315.8	Other specified delays in development	Diagnosis	ICD-9-CM
315.9	Unspecified delay in development	Diagnosis	ICD-9-CM
316	Psychic factors associated with diseases classified elsewhere	Diagnosis	ICD-9-CM
Parkinson disease			
332.0	Paralysis agitans	Diagnosis	ICD-9-CM
332.1	Secondary Parkinsonism	Diagnosis	ICD-9-CM
333.0	Other degenerative diseases of the basal ganglia	Diagnosis	ICD-9-CM
Peptic ulcer disease and related conditions (without hemorrhage)			
531.1	Acute gastric ulcer with perforation	Diagnosis	ICD-9-CM
531.3	Acute gastric ulcer without mention of hemorrhage or perforation	Diagnosis	ICD-9-CM
531.5	Chronic or unspecified gastric ulcer with perforation	Diagnosis	ICD-9-CM
531.7	Chronic gastric ulcer without mention of hemorrhage or perforation	Diagnosis	ICD-9-CM
531.9	Gastric ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation	Diagnosis	ICD-9-CM
532.1	Acute duodenal ulcer with perforation	Diagnosis	ICD-9-CM
532.3	Acute duodenal ulcer without mention of hemorrhage or perforation	Diagnosis	ICD-9-CM
532.5	Chronic or unspecified duodenal ulcer with perforation	Diagnosis	ICD-9-CM
532.7	Chronic duodenal ulcer without mention of hemorrhage or perforation	Diagnosis	ICD-9-CM
532.9	Duodenal ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation	Diagnosis	ICD-9-CM
533.1	Acute peptic ulcer, unspecified site, with perforation	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
533.3	Acute peptic ulcer, unspecified site, without mention of hemorrhage and perforation	Diagnosis	ICD-9-CM
533.5	Chronic or unspecified peptic ulcer, unspecified site, with perforation	Diagnosis	ICD-9-CM
533.7	Chronic peptic ulcer, unspecified site, without mention of hemorrhage or perforation	Diagnosis	ICD-9-CM
533.9	Peptic ulcer, unspecified site, unspecified as acute or chronic, without mention of hemorrhage or perforation	Diagnosis	ICD-9-CM
534.1	Acute gastrojejunal ulcer with perforation	Diagnosis	ICD-9-CM
534.3	Acute gastrojejunal ulcer without mention of hemorrhage or perforation	Diagnosis	ICD-9-CM
534.5	Chronic or unspecified gastrojejunal ulcer with perforation	Diagnosis	ICD-9-CM
534.7	Chronic gastrojejunal ulcer without mention of hemorrhage or perforation	Diagnosis	ICD-9-CM
534.9	Gastrojejunal ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation	Diagnosis	ICD-9-CM
Persistent mental disorders due to conditions classified elsewhere			
294	Persistent mental disorders due to conditions classified elsewhere	Diagnosis	ICD-9-CM
294.0	Amnestic disorder in conditions classified elsewhere	Diagnosis	ICD-9-CM
294.1	Dementia in conditions classified elsewhere	Diagnosis	ICD-9-CM
294.10	Dementia in conditions classified elsewhere without behavioral disturbance	Diagnosis	ICD-9-CM
294.11	Dementia in conditions classified elsewhere with behavioral disturbance	Diagnosis	ICD-9-CM
294.2	Dementia, unspecified	Diagnosis	ICD-9-CM
294.20	Dementia, unspecified, without behavioral disturbance	Diagnosis	ICD-9-CM
294.21	Dementia, unspecified, with behavioral disturbance	Diagnosis	ICD-9-CM
294.8	Other persistent mental disorders due to conditions classified elsewhere	Diagnosis	ICD-9-CM
294.9	Unspecified persistent mental disorders due to conditions classified elsewhere	Diagnosis	ICD-9-CM
Personality disorders			
301	Personality disorders	Diagnosis	ICD-9-CM
301.0	Paranoid personality disorder	Diagnosis	ICD-9-CM
301.1	Affective personality disorder	Diagnosis	ICD-9-CM
301.10	Affective personality disorder, unspecified	Diagnosis	ICD-9-CM
301.11	Chronic hypomanic personality disorder	Diagnosis	ICD-9-CM
301.12	Chronic depressive personality disorder	Diagnosis	ICD-9-CM
301.13	Cyclothymic disorder	Diagnosis	ICD-9-CM
301.2	Schizoid personality disorder	Diagnosis	ICD-9-CM
301.20	Schizoid personality disorder, unspecified	Diagnosis	ICD-9-CM
301.21	Introverted personality	Diagnosis	ICD-9-CM
301.22	Schizotypal personality disorder	Diagnosis	ICD-9-CM
301.3	Explosive personality disorder	Diagnosis	ICD-9-CM
301.4	Obsessive-compulsive personality disorder	Diagnosis	ICD-9-CM
301.5	Histrionic personality disorder	Diagnosis	ICD-9-CM
301.50	Histrionic personality disorder, unspecified	Diagnosis	ICD-9-CM
301.51	Chronic factitious illness with physical symptoms	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
301.59	Other histrionic personality disorder	Diagnosis	ICD-9-CM
301.6	Dependent personality disorder	Diagnosis	ICD-9-CM
301.7	Antisocial personality disorder	Diagnosis	ICD-9-CM
301.8	Other personality disorders	Diagnosis	ICD-9-CM
301.81	Narcissistic personality disorder	Diagnosis	ICD-9-CM
301.82	Avoidant personality disorder	Diagnosis	ICD-9-CM
301.83	Borderline personality disorder	Diagnosis	ICD-9-CM
301.84	Passive-aggressive personality	Diagnosis	ICD-9-CM
301.89	Other personality disorders	Diagnosis	ICD-9-CM
301.9	Unspecified personality disorder	Diagnosis	ICD-9-CM
Pervasive developmental disorders			
299	Pervasive developmental disorders	Diagnosis	ICD-9-CM
299.0	Autistic disorder	Diagnosis	ICD-9-CM
299.00	Autistic disorder, current or active state	Diagnosis	ICD-9-CM
299.01	Autistic disorder, residual state	Diagnosis	ICD-9-CM
299.1	Childhood disintegrative disorder	Diagnosis	ICD-9-CM
299.10	Childhood disintegrative disorder, current or active state	Diagnosis	ICD-9-CM
299.11	Childhood disintegrative disorder, residual state	Diagnosis	ICD-9-CM
299.8	Other specified pervasive developmental disorders	Diagnosis	ICD-9-CM
299.80	Other specified pervasive developmental disorders, current or active state	Diagnosis	ICD-9-CM
299.81	Other specified pervasive developmental disorders, residual state	Diagnosis	ICD-9-CM
299.9	Unspecified pervasive developmental disorder	Diagnosis	ICD-9-CM
299.90	Unspecified pervasive developmental disorder, current or active state	Diagnosis	ICD-9-CM
299.91	Unspecified pervasive developmental disorder, residual state	Diagnosis	ICD-9-CM
Pneumonia			
480.0	Pneumonia due to adenovirus	Diagnosis	ICD-9-CM
480.1	Pneumonia due to respiratory syncytial virus	Diagnosis	ICD-9-CM
480.2	Pneumonia due to parainfluenza virus	Diagnosis	ICD-9-CM
480.3	Pneumonia due to SARS-associated coronavirus	Diagnosis	ICD-9-CM
480.8	Pneumonia due to other virus not elsewhere classified	Diagnosis	ICD-9-CM
480.9	Unspecified viral pneumonia	Diagnosis	ICD-9-CM
481	Pneumococcal pneumonia (streptococcus pneumoniae pneumonia)	Diagnosis	ICD-9-CM
482.0	Pneumonia due to Klebsiella pneumoniae	Diagnosis	ICD-9-CM
482.1	Pneumonia due to Pseudomonas	Diagnosis	ICD-9-CM
482.2	Pneumonia due to Hemophilus influenzae (H. influenzae)	Diagnosis	ICD-9-CM
482.3	Pneumonia due to Streptococcus	Diagnosis	ICD-9-CM
482.30	Pneumonia due to unspecified Streptococcus	Diagnosis	ICD-9-CM
482.31	Pneumonia due to Streptococcus, group A	Diagnosis	ICD-9-CM
482.32	Pneumonia due to Streptococcus, group B	Diagnosis	ICD-9-CM
482.39	Pneumonia due to other Streptococcus	Diagnosis	ICD-9-CM
482.4	Pneumonia due to Staphylococcus	Diagnosis	ICD-9-CM
482.40	Pneumonia due to Staphylococcus, unspecified	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
482.41	Methicillin susceptible pneumonia due to Staphylococcus aureus	Diagnosis	ICD-9-CM
482.42	Methicillin resistant pneumonia due to Staphylococcus aureus	Diagnosis	ICD-9-CM
482.49	Other Staphylococcus pneumonia	Diagnosis	ICD-9-CM
482.8	Pneumonia due to other specified bacteria	Diagnosis	ICD-9-CM
482.81	Pneumonia due to anaerobes	Diagnosis	ICD-9-CM
482.82	Pneumonia due to Escherichia coli (E. coli)	Diagnosis	ICD-9-CM
482.83	Pneumonia due to other gram-negative bacteria	Diagnosis	ICD-9-CM
482.84	Legionnaires' disease	Diagnosis	ICD-9-CM
482.89	Pneumonia due to other specified bacteria	Diagnosis	ICD-9-CM
482.9	Unspecified bacterial pneumonia	Diagnosis	ICD-9-CM
483.0	Pneumonia due to Mycoplasma pneumoniae	Diagnosis	ICD-9-CM
483.1	Pneumonia due to Chlamydia	Diagnosis	ICD-9-CM
483.8	Pneumonia due to other specified organism	Diagnosis	ICD-9-CM
484.1	Pneumonia in cytomegalic inclusion disease	Diagnosis	ICD-9-CM
484.3	Pneumonia in whooping cough	Diagnosis	ICD-9-CM
484.5	Pneumonia in anthrax	Diagnosis	ICD-9-CM
484.6	Pneumonia in aspergillosis	Diagnosis	ICD-9-CM
484.7	Pneumonia in other systemic mycoses	Diagnosis	ICD-9-CM
484.8	Pneumonia in other infectious diseases classified elsewhere	Diagnosis	ICD-9-CM
485	Bronchopneumonia, organism unspecified	Diagnosis	ICD-9-CM
309.81	Posttraumatic stress disorder	Diagnosis	ICD-9-CM
Post-traumatic stress disorder			
486	Pneumonia, organism unspecified	Diagnosis	ICD-9-CM
Premenstrual dysphoric disorder			
625.4	Premenstrual tension syndromes	Diagnosis	ICD-9-CM
Prostate cancer			
233.4	Carcinoma in situ of prostate	Diagnosis	ICD-9-CM
185	Malignant neoplasm of prostate	Diagnosis	ICD-9-CM
Psychotic conditions			
290.8	Other specified senile psychotic conditions	Diagnosis	ICD-9-CM
290.9	Unspecified senile psychotic condition	Diagnosis	ICD-9-CM
297	Delusional disorders	Diagnosis	ICD-9-CM
297.0	Paranoid state, simple	Diagnosis	ICD-9-CM
297.1	Delusional disorders	Diagnosis	ICD-9-CM
297.2	Paraphrenia	Diagnosis	ICD-9-CM
297.3	Shared psychotic disorder	Diagnosis	ICD-9-CM
297.8	Other specified paranoid states	Diagnosis	ICD-9-CM
297.9	unspecified paranoid state	Diagnosis	ICD-9-CM
298	Other nonorganic psychosis	Diagnosis	ICD-9-CM
298.0	Depressive type psychosis	Diagnosis	ICD-9-CM
298.1	Excitatory type psychosis	Diagnosis	ICD-9-CM
298.2	Reactive confusion	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
298.3	Acute paranoid reaction	Diagnosis	ICD-9-CM
298.4	Psychogenic paranoid psychosis	Diagnosis	ICD-9-CM
298.8	Other and unspecified reactive psychosis	Diagnosis	ICD-9-CM
298.9	Unspecified psychosis	Diagnosis	ICD-9-CM
Rheumatic fever			
390	Rheumatic fever without mention of heart involvement	Diagnosis	ICD-9-CM
391	Rheumatic fever with heart involvement	Diagnosis	ICD-9-CM
391.0	Acute rheumatic pericarditis	Diagnosis	ICD-9-CM
391.1	Acute rheumatic endocarditis	Diagnosis	ICD-9-CM
391.2	Acute rheumatic myocarditis	Diagnosis	ICD-9-CM
391.8	Other acute rheumatic heart disease	Diagnosis	ICD-9-CM
391.9	Unspecified acute rheumatic heart disease	Diagnosis	ICD-9-CM
392	Rheumatic chorea	Diagnosis	ICD-9-CM
392.0	Rheumatic chorea with heart involvement	Diagnosis	ICD-9-CM
392.9	Rheumatic chorea without mention of heart involvement	Diagnosis	ICD-9-CM
Rheumatic heart diseases			
393	Chronic rheumatic pericarditis	Diagnosis	ICD-9-CM
394.0	Mitral stenosis	Diagnosis	ICD-9-CM
394.1	Rheumatic mitral insufficiency	Diagnosis	ICD-9-CM
394.2	Mitral stenosis with insufficiency	Diagnosis	ICD-9-CM
394.9	Other and unspecified mitral valve diseases	Diagnosis	ICD-9-CM
395.0	Rheumatic aortic stenosis	Diagnosis	ICD-9-CM
395.1	Rheumatic aortic insufficiency	Diagnosis	ICD-9-CM
395.2	Rheumatic aortic stenosis with insufficiency	Diagnosis	ICD-9-CM
395.9	Other and unspecified rheumatic aortic diseases	Diagnosis	ICD-9-CM
396.0	Mitral valve stenosis and aortic valve stenosis	Diagnosis	ICD-9-CM
396.1	Mitral valve stenosis and aortic valve insufficiency	Diagnosis	ICD-9-CM
396.2	Mitral valve insufficiency and aortic valve stenosis	Diagnosis	ICD-9-CM
396.3	Mitral valve insufficiency and aortic valve insufficiency	Diagnosis	ICD-9-CM
396.8	Multiple involvement of mitral and aortic valves	Diagnosis	ICD-9-CM
396.9	Unspecified mitral and aortic valve diseases	Diagnosis	ICD-9-CM
397.0	Diseases of tricuspid valve	Diagnosis	ICD-9-CM
397.1	Rheumatic diseases of pulmonary valve	Diagnosis	ICD-9-CM
397.9	Rheumatic diseases of endocardium, valve unspecified	Diagnosis	ICD-9-CM
398.0	Rheumatic myocarditis	Diagnosis	ICD-9-CM
398.9	Other and unspecified rheumatic heart diseases	Diagnosis	ICD-9-CM
398.90	Unspecified rheumatic heart disease	Diagnosis	ICD-9-CM
398.99	Other and unspecified rheumatic heart diseases	Diagnosis	ICD-9-CM
Rheumatoid arthritis			
714.0	Rheumatoid arthritis	Diagnosis	ICD-9-CM
714.1	Felty's syndrome	Diagnosis	ICD-9-CM
714.2	Other rheumatoid arthritis with visceral or systemic involvement	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
714.3	Juvenile chronic polyarthritis	Diagnosis	ICD-9-CM
714.30	Polyarticular juvenile rheumatoid arthritis, chronic or unspecified	Diagnosis	ICD-9-CM
714.31	Polyarticular juvenile rheumatoid arthritis, acute	Diagnosis	ICD-9-CM
714.32	Pauciarticular juvenile rheumatoid arthritis	Diagnosis	ICD-9-CM
714.33	Monoarticular juvenile rheumatoid arthritis	Diagnosis	ICD-9-CM
714.4	Chronic postrheumatic arthropathy	Diagnosis	ICD-9-CM
714.8	Other specified inflammatory polyarthropathies	Diagnosis	ICD-9-CM
714.81	Rheumatoid lung	Diagnosis	ICD-9-CM
714.89	Other specified inflammatory polyarthropathies	Diagnosis	ICD-9-CM
714.9	Unspecified inflammatory polyarthropathy	Diagnosis	ICD-9-CM
Schizophrenia			
295	Schizophrenic disorders	Diagnosis	ICD-9-CM
295.0	Simple type schizophrenia	Diagnosis	ICD-9-CM
295.00	Simple schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.01	Simple schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.02	Simple schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.03	Simple schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.04	Simple schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.05	Simple schizophrenia, in remission	Diagnosis	ICD-9-CM
295.1	Disorganized type schizophrenia	Diagnosis	ICD-9-CM
295.10	Disorganized schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.11	Disorganized schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.12	Disorganized schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.13	Disorganized schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.14	Disorganized schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.15	Disorganized schizophrenia, in remission	Diagnosis	ICD-9-CM
295.2	Catatonic type schizophrenia	Diagnosis	ICD-9-CM
295.20	Catatonic schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.21	Catatonic schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.22	Catatonic schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.23	Catatonic schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.24	Catatonic schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.25	Catatonic schizophrenia, in remission	Diagnosis	ICD-9-CM
295.3	Paranoid type schizophrenia	Diagnosis	ICD-9-CM
295.30	Paranoid schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.31	Paranoid schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.32	Paranoid schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.33	Paranoid schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.34	Paranoid schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.35	Paranoid schizophrenia, in remission	Diagnosis	ICD-9-CM
295.4	Schizophreniform disorder	Diagnosis	ICD-9-CM
295.40	Schizophreniform disorder, unspecified	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
295.41	Schizophreniform disorder, subchronic	Diagnosis	ICD-9-CM
295.42	Schizophreniform disorder, chronic	Diagnosis	ICD-9-CM
295.43	Schizophreniform disorder, subchronic with acute exacerbation	Diagnosis	ICD-9-CM
295.44	Schizophreniform disorder, chronic with acute exacerbation	Diagnosis	ICD-9-CM
295.45	Schizophreniform disorder, in remission	Diagnosis	ICD-9-CM
295.5	Latent schizophrenia	Diagnosis	ICD-9-CM
295.50	Latent schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.51	Latent schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.52	Latent schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.53	Latent schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.54	Latent schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.55	Latent schizophrenia, in remission	Diagnosis	ICD-9-CM
295.6	Schizophrenic disorders, residual type	Diagnosis	ICD-9-CM
295.60	Schizophrenic disorders, residual type, unspecified	Diagnosis	ICD-9-CM
295.61	Schizophrenic disorders, residual type, subchronic	Diagnosis	ICD-9-CM
295.62	Schizophrenic disorders, residual type, chronic	Diagnosis	ICD-9-CM
295.63	Schizophrenic disorders, residual type, subchronic with acute exacerbation	Diagnosis	ICD-9-CM
295.64	Schizophrenic disorders, residual type, chronic with acute exacerbation	Diagnosis	ICD-9-CM
295.65	Schizophrenic disorders, residual type, in remission	Diagnosis	ICD-9-CM
295.7	Schizoaffective disorder	Diagnosis	ICD-9-CM
295.70	Schizoaffective disorder, unspecified	Diagnosis	ICD-9-CM
295.71	Schizoaffective disorder, subchronic	Diagnosis	ICD-9-CM
295.72	Schizoaffective disorder, chronic	Diagnosis	ICD-9-CM
295.73	Schizoaffective disorder, subchronic with acute exacerbation	Diagnosis	ICD-9-CM
295.74	Schizoaffective disorder, chronic with acute exacerbation	Diagnosis	ICD-9-CM
295.75	Schizoaffective disorder, in remission	Diagnosis	ICD-9-CM
295.8	Other specified types of schizophrenia	Diagnosis	ICD-9-CM
295.80	Other specified types of schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.81	Other specified types of schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.82	Other specified types of schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.83	Other specified types of schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.84	Other specified types of schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.85	Other specified types of schizophrenia, in remission	Diagnosis	ICD-9-CM
295.9	Unspecified schizophrenia	Diagnosis	ICD-9-CM
295.90	Unspecified schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.91	Unspecified schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.92	Unspecified schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.93	Unspecified schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.94	Unspecified schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.95	Unspecified schizophrenia, in remission	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
Secondary hypertension			
405	Secondary hypertension	Diagnosis	ICD-9-CM
405.0	Secondary hypertension, malignant	Diagnosis	ICD-9-CM
405.01	Secondary renovascular hypertension, malignant	Diagnosis	ICD-9-CM
405.09	Other secondary hypertension, malignant	Diagnosis	ICD-9-CM
405.1	Secondary hypertension, benign	Diagnosis	ICD-9-CM
405.11	Secondary renovascular hypertension, benign	Diagnosis	ICD-9-CM
405.19	Other secondary hypertension, benign	Diagnosis	ICD-9-CM
405.9	Unspecified secondary hypertension, unspecified	Diagnosis	ICD-9-CM
405.91	Secondary renovascular hypertension, unspecified	Diagnosis	ICD-9-CM
405.99	Other secondary hypertension, unspecified	Diagnosis	ICD-9-CM
Seizure disorder			
345	Epilepsy and recurrent seizures	Diagnosis	ICD-9-CM
345.0	Generalized nonconvulsive epilepsy	Diagnosis	ICD-9-CM
345.00	Generalized nonconvulsive epilepsy without mention of intractable epilepsy	Diagnosis	ICD-9-CM
345.01	Generalized nonconvulsive epilepsy with intractable epilepsy	Diagnosis	ICD-9-CM
345.1	Generalized convulsive epilepsy	Diagnosis	ICD-9-CM
345.10	Generalized convulsive epilepsy without mention of intractable epilepsy	Diagnosis	ICD-9-CM
345.11	Generalized convulsive epilepsy with intractable epilepsy	Diagnosis	ICD-9-CM
345.2	Epileptic petit mal status	Diagnosis	ICD-9-CM
345.3	Epileptic grand mal status	Diagnosis	ICD-9-CM
345.4	Localization-related (focal) (partial) epilepsy and epileptic syndromes with complex partial seizures	Diagnosis	ICD-9-CM
345.40	Localization-related (focal) (partial) epilepsy and epileptic syndromes with complex partial seizures, without mention of intractable epilepsy	Diagnosis	ICD-9-CM
345.41	Localization-related (focal) (partial) epilepsy and epileptic syndromes with complex partial seizures, with intractable epilepsy	Diagnosis	ICD-9-CM
345.5	Localization-related (focal) (partial) epilepsy and epileptic syndromes with simple partial seizures	Diagnosis	ICD-9-CM
345.50	Localization-related (focal) (partial) epilepsy and epileptic syndromes with simple partial seizures, without mention of intractable epilepsy	Diagnosis	ICD-9-CM
345.51	Localization-related (focal) (partial) epilepsy and epileptic syndromes with simple partial seizures, with intractable epilepsy	Diagnosis	ICD-9-CM
345.6	Infantile spasms	Diagnosis	ICD-9-CM
345.60	Infantile spasms without mention of intractable epilepsy	Diagnosis	ICD-9-CM
345.61	Infantile spasms with intractable epilepsy	Diagnosis	ICD-9-CM
345.7	Epilepsia partialis continua	Diagnosis	ICD-9-CM
345.70	Epilepsia partialis continua without mention of intractable epilepsy	Diagnosis	ICD-9-CM
345.71	Epilepsia partialis continua with intractable epilepsy	Diagnosis	ICD-9-CM
345.8	Other forms of epilepsy and recurrent seizures	Diagnosis	ICD-9-CM
345.80	Other forms of epilepsy and recurrent seizures, without mention of intractable epilepsy	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
345.81	Other forms of epilepsy and recurrent seizures, with intractable epilepsy	Diagnosis	ICD-9-CM
345.9	Unspecified epilepsy	Diagnosis	ICD-9-CM
345.90	Unspecified epilepsy without mention of intractable epilepsy	Diagnosis	ICD-9-CM
345.91	Unspecified epilepsy with intractable epilepsy	Diagnosis	ICD-9-CM
780.3	Convulsions	Diagnosis	ICD-9-CM
780.31	Febrile convulsions (simple), unspecified	Diagnosis	ICD-9-CM
780.32	Complex febrile convulsions	Diagnosis	ICD-9-CM
780.33	Post traumatic seizures	Diagnosis	ICD-9-CM
780.39	Other convulsions	Diagnosis	ICD-9-CM
Sepsis			
038.0	Streptococcal septicemia	Diagnosis	ICD-9-CM
038.1	Staphylococcal septicemia	Diagnosis	ICD-9-CM
038.10	Unspecified staphylococcal septicemia	Diagnosis	ICD-9-CM
038.11	Methicillin susceptible Staphylococcus aureus septicemia	Diagnosis	ICD-9-CM
038.12	Methicillin resistant Staphylococcus aureus septicemia	Diagnosis	ICD-9-CM
038.19	Other staphylococcal septicemia	Diagnosis	ICD-9-CM
038.2	Pneumococcal septicemia	Diagnosis	ICD-9-CM
038.3	Septicemia due to anaerobes	Diagnosis	ICD-9-CM
038.4	Septicemia due to other gram-negative organisms	Diagnosis	ICD-9-CM
038.40	Septicemia due to unspecified gram-negative organism	Diagnosis	ICD-9-CM
038.41	Septicemia due to hemophilus influenzae (H. influenzae)	Diagnosis	ICD-9-CM
038.42	Septicemia due to Escherichia coli (E. coli)	Diagnosis	ICD-9-CM
038.43	Septicemia due to pseudomonas	Diagnosis	ICD-9-CM
038.44	Septicemia due to serratia	Diagnosis	ICD-9-CM
038.49	Other septicemia due to gram-negative organism	Diagnosis	ICD-9-CM
038.8	Other specified septicemia	Diagnosis	ICD-9-CM
038.9	Unspecified septicemia	Diagnosis	ICD-9-CM
995.91	Sepsis	Diagnosis	ICD-9-CM
Sleep disorder			
307.4	Specific disorders of sleep of nonorganic origin	Diagnosis	ICD-9-CM
307.40	Nonorganic sleep disorder, unspecified	Diagnosis	ICD-9-CM
307.41	Transient disorder of initiating or maintaining sleep	Diagnosis	ICD-9-CM
307.42	Persistent disorder of initiating or maintaining sleep	Diagnosis	ICD-9-CM
307.43	Transient disorder of initiating or maintaining wakefulness	Diagnosis	ICD-9-CM
307.44	Persistent disorder of initiating or maintaining wakefulness	Diagnosis	ICD-9-CM
307.45	Circadian rhythm sleep disorder of nonorganic origin	Diagnosis	ICD-9-CM
307.46	Sleep arousal disorder	Diagnosis	ICD-9-CM
307.47	Other dysfunctions of sleep stages or arousal from sleep	Diagnosis	ICD-9-CM
307.48	Repetitive intrusions of sleep	Diagnosis	ICD-9-CM
307.49	Other specific disorders of sleep of nonorganic origin	Diagnosis	ICD-9-CM
347	Cataplexy and narcolepsy	Diagnosis	ICD-9-CM
347.0	Narcolepsy	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
347.00	Narcolepsy, without cataplexy	Diagnosis	ICD-9-CM
347.01	Narcolepsy, with cataplexy	Diagnosis	ICD-9-CM
347.1	Narcolepsy in conditions classified elsewhere	Diagnosis	ICD-9-CM
347.10	Narcolepsy in conditions classified elsewhere, without cataplexy	Diagnosis	ICD-9-CM
347.11	Narcolepsy in conditions classified elsewhere, with cataplexy	Diagnosis	ICD-9-CM
780.5	Sleep disturbances	Diagnosis	ICD-9-CM
780.50	Sleep disturbances, unspecified	Diagnosis	ICD-9-CM
780.51	Insomnia with sleep apnea, unspecified	Diagnosis	ICD-9-CM
780.52	Insomnia, unspecified	Diagnosis	ICD-9-CM
780.53	Hypersomnia, with sleep apnea, unspecified	Diagnosis	ICD-9-CM
780.54	Hypersomnia, unspecified	Diagnosis	ICD-9-CM
780.55	Disruption of 24 hour sleep wake cycle, unspecified	Diagnosis	ICD-9-CM
780.56	Dysfunctions associated with sleep stages or arousal from sleep	Diagnosis	ICD-9-CM
780.57	Unspecified sleep apnea	Diagnosis	ICD-9-CM
780.58	Sleep related movement disorder, unspecified	Diagnosis	ICD-9-CM
780.59	Other sleep disturbances	Diagnosis	ICD-9-CM
Social anxiety disorder			
300.23	Social phobia	Diagnosis	ICD-9-CM
Stroke or transient ischemic attack			
433.01	Occlusion and stenosis of basilar artery with cerebral infarction	Diagnosis	ICD-9-CM
433.11	Occlusion and stenosis of carotid artery with cerebral infarction	Diagnosis	ICD-9-CM
433.21	Occlusion and stenosis of vertebral artery with cerebral infarction	Diagnosis	ICD-9-CM
433.31	Occlusion and stenosis of multiple and bilateral precerebral arteries with cerebral infarction	Diagnosis	ICD-9-CM
433.81	Occlusion and stenosis of other specified precerebral artery with cerebral infarction	Diagnosis	ICD-9-CM
433.91	Occlusion and stenosis of unspecified precerebral artery with cerebral infarction	Diagnosis	ICD-9-CM
434.01	Cerebral thrombosis with cerebral infarction	Diagnosis	ICD-9-CM
434.11	Cerebral embolism with cerebral infarction	Diagnosis	ICD-9-CM
434.91	Unspecified cerebral artery occlusion with cerebral infarction	Diagnosis	ICD-9-CM
435.0	Basilar artery syndrome	Diagnosis	ICD-9-CM
435.1	Vertebral artery syndrome	Diagnosis	ICD-9-CM
435.2	Subclavian steal syndrome	Diagnosis	ICD-9-CM
435.3	Vertebrobasilar artery syndrome	Diagnosis	ICD-9-CM
435.8	Other specified transient cerebral ischemias	Diagnosis	ICD-9-CM
435.9	Unspecified transient cerebral ischemia	Diagnosis	ICD-9-CM
436	Acute, but ill-defined, cerebrovascular disease	Diagnosis	ICD-9-CM
437.1	Other generalized ischemic cerebrovascular disease	Diagnosis	ICD-9-CM
437.9	Unspecified cerebrovascular disease	Diagnosis	ICD-9-CM
438.0	Cognitive deficits due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.1	Speech and language deficits due to cerebrovascular disease	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
438.10	Unspecified speech and language deficit due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.11	Aphasia due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.12	Dysphasia due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.13	Late effects of cerebrovascular disease, speech and language deficits, dysarthria	Diagnosis	ICD-9-CM
438.14	Late effects of cerebrovascular disease, speech and language deficits, fluency disorder	Diagnosis	ICD-9-CM
438.19	Other speech and language deficits due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.2	Hemiplegia/hemiparesis due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.20	Hemiplegia affecting unspecified side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.21	Hemiplegia affecting dominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.22	Hemiplegia affecting nondominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.3	Monoplegia of upper limb due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.30	Monoplegia of upper limb affecting unspecified side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.31	Monoplegia of upper limb affecting dominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.32	Monoplegia of upper limb affecting nondominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.4	Monoplegia of lower limb due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.40	Monoplegia of lower limb affecting unspecified side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.41	Monoplegia of lower limb affecting dominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.42	Monoplegia of lower limb affecting nondominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.5	Other paralytic syndrome due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.50	Other paralytic syndrome affecting unspecified side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.51	Other paralytic syndrome affecting dominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.52	Other paralytic syndrome affecting nondominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.53	Other paralytic syndrome, bilateral	Diagnosis	ICD-9-CM
438.6	Alteration of sensations as late effect of cerebrovascular disease	Diagnosis	ICD-9-CM
438.7	Disturbance of vision as late effect of cerebrovascular disease	Diagnosis	ICD-9-CM
438.8	Other late effects of cerebrovascular disease due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.81	Apraxia due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.82	Dysphagia due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.83	Facial weakness as late effect of cerebrovascular disease	Diagnosis	ICD-9-CM
438.84	Ataxia as late effect of cerebrovascular disease	Diagnosis	ICD-9-CM
438.85	Vertigo as late effect of cerebrovascular disease	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
438.89	Other late effects of cerebrovascular disease	Diagnosis	ICD-9-CM
438.9	Unspecified late effects of cerebrovascular disease due to cerebrovascular disease	Diagnosis	ICD-9-CM
Substance abuse disorders			
291.0	Alcohol withdrawal delirium	Diagnosis	ICD-9-CM
291.1	Alcohol-induced persisting amnestic disorder	Diagnosis	ICD-9-CM
291.2	Alcohol-induced persisting dementia	Diagnosis	ICD-9-CM
291.3	Alcohol-induced psychotic disorder with hallucinations	Diagnosis	ICD-9-CM
291.4	Idiosyncratic alcohol intoxication	Diagnosis	ICD-9-CM
291.5	Alcohol-induced psychotic disorder with delusions	Diagnosis	ICD-9-CM
291.8	Other specified alcohol-induced mental disorders	Diagnosis	ICD-9-CM
291.81	Alcohol withdrawal	Diagnosis	ICD-9-CM
291.82	Alcohol induced sleep disorders	Diagnosis	ICD-9-CM
291.89	Other specified alcohol-induced mental disorders	Diagnosis	ICD-9-CM
291.9	Unspecified alcohol-induced mental disorders	Diagnosis	ICD-9-CM
292.0	Drug withdrawal	Diagnosis	ICD-9-CM
292.1	Drug-induced psychotic disorder	Diagnosis	ICD-9-CM
292.11	Drug-induced psychotic disorder with delusions	Diagnosis	ICD-9-CM
292.12	Drug-induced psychotic disorder with hallucinations	Diagnosis	ICD-9-CM
292.2	Pathological drug intoxication	Diagnosis	ICD-9-CM
292.8	Other specified drug-induced mental disorders	Diagnosis	ICD-9-CM
292.89	Other specified drug-induced mental disorder	Diagnosis	ICD-9-CM
292.9	Unspecified drug-induced mental disorder	Diagnosis	ICD-9-CM
303.0	Acute alcoholic intoxication	Diagnosis	ICD-9-CM
303.00	Acute alcoholic intoxication, unspecified	Diagnosis	ICD-9-CM
303.01	Acute alcoholic intoxication, continuous	Diagnosis	ICD-9-CM
303.02	Acute alcoholic intoxication, episodic	Diagnosis	ICD-9-CM
303.03	Acute alcoholic intoxication, in remission	Diagnosis	ICD-9-CM
303.9	Other and unspecified alcohol dependence	Diagnosis	ICD-9-CM
303.90	Other and unspecified alcohol dependence, unspecified	Diagnosis	ICD-9-CM
303.91	Other and unspecified alcohol dependence, continuous	Diagnosis	ICD-9-CM
303.92	Other and unspecified alcohol dependence, episodic	Diagnosis	ICD-9-CM
303.93	Other and unspecified alcohol dependence, in remission	Diagnosis	ICD-9-CM
304.0	Opioid type dependence	Diagnosis	ICD-9-CM
304.00	Opioid type dependence, unspecified	Diagnosis	ICD-9-CM
304.01	Opioid type dependence, continuous	Diagnosis	ICD-9-CM
304.02	Opioid type dependence, episodic	Diagnosis	ICD-9-CM
304.03	Opioid type dependence, in remission	Diagnosis	ICD-9-CM
304.1	Sedative, hypnotic or anxiolytic dependence	Diagnosis	ICD-9-CM
304.10	Sedative, hypnotic or anxiolytic dependence, unspecified	Diagnosis	ICD-9-CM
304.11	Sedative, hypnotic or anxiolytic dependence, continuous	Diagnosis	ICD-9-CM
304.12	Sedative, hypnotic or anxiolytic dependence, episodic	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
304.13	Sedative, hypnotic or anxiolytic dependence, in remission	Diagnosis	ICD-9-CM
304.2	Cocaine dependence	Diagnosis	ICD-9-CM
304.20	Cocaine dependence, unspecified	Diagnosis	ICD-9-CM
304.21	Cocaine dependence, continuous	Diagnosis	ICD-9-CM
304.22	Cocaine dependence, episodic	Diagnosis	ICD-9-CM
304.23	Cocaine dependence, in remission	Diagnosis	ICD-9-CM
304.3	Cannabis dependence	Diagnosis	ICD-9-CM
304.30	Cannabis dependence, unspecified	Diagnosis	ICD-9-CM
304.31	Cannabis dependence, continuous	Diagnosis	ICD-9-CM
304.32	Cannabis dependence, episodic	Diagnosis	ICD-9-CM
304.33	Cannabis dependence, in remission	Diagnosis	ICD-9-CM
304.4	Amphetamine and other psychostimulant dependence	Diagnosis	ICD-9-CM
304.40	Amphetamine and other psychostimulant dependence, unspecified	Diagnosis	ICD-9-CM
304.41	Amphetamine and other psychostimulant dependence, continuous	Diagnosis	ICD-9-CM
304.42	Amphetamine and other psychostimulant dependence, episodic	Diagnosis	ICD-9-CM
304.43	Amphetamine and other psychostimulant dependence, in remission	Diagnosis	ICD-9-CM
304.5	Hallucinogen dependence	Diagnosis	ICD-9-CM
304.50	Hallucinogen dependence, unspecified	Diagnosis	ICD-9-CM
304.51	Hallucinogen dependence, continuous	Diagnosis	ICD-9-CM
304.52	Hallucinogen dependence, episodic	Diagnosis	ICD-9-CM
304.53	Hallucinogen dependence, in remission	Diagnosis	ICD-9-CM
304.6	Other specified drug dependence	Diagnosis	ICD-9-CM
304.60	Other specified drug dependence, unspecified	Diagnosis	ICD-9-CM
304.61	Other specified drug dependence, continuous	Diagnosis	ICD-9-CM
304.62	Other specified drug dependence, episodic	Diagnosis	ICD-9-CM
304.63	Other specified drug dependence, in remission	Diagnosis	ICD-9-CM
304.7	Combinations of opioid type drug with any other drug dependence	Diagnosis	ICD-9-CM
304.70	Combinations of opioid type drug with any other drug dependence, unspecified	Diagnosis	ICD-9-CM
304.71	Combinations of opioid type drug with any other drug dependence, continuous	Diagnosis	ICD-9-CM
304.72	Combinations of opioid type drug with any other drug dependence, episodic	Diagnosis	ICD-9-CM
304.73	Combinations of opioid type drug with any other drug dependence, in remission	Diagnosis	ICD-9-CM
304.8	Combinations of drug dependence excluding opioid type drug	Diagnosis	ICD-9-CM
304.80	Combinations of drug dependence excluding opioid type drug, unspecified	Diagnosis	ICD-9-CM
304.81	Combinations of drug dependence excluding opioid type drug, continuous	Diagnosis	ICD-9-CM
304.82	Combinations of drug dependence excluding opioid type drug, episodic	Diagnosis	ICD-9-CM
304.83	Combinations of drug dependence excluding opioid type drug, in remission	Diagnosis	ICD-9-CM
304.9	Unspecified drug dependence	Diagnosis	ICD-9-CM
304.90	Unspecified drug dependence, unspecified	Diagnosis	ICD-9-CM
304.91	Unspecified drug dependence, continuous	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
304.92	Unspecified drug dependence, episodic	Diagnosis	ICD-9-CM
304.93	Unspecified drug dependence, in remission	Diagnosis	ICD-9-CM
305.0	Nondependent alcohol abuse	Diagnosis	ICD-9-CM
305.00	Nondependent alcohol abuse, unspecified	Diagnosis	ICD-9-CM
305.01	Nondependent alcohol abuse, continuous	Diagnosis	ICD-9-CM
305.02	Nondependent alcohol abuse, episodic	Diagnosis	ICD-9-CM
305.03	Nondependent alcohol abuse, in remission	Diagnosis	ICD-9-CM
305.2	Nondependent cannabis abuse	Diagnosis	ICD-9-CM
305.20	Nondependent cannabis abuse, unspecified	Diagnosis	ICD-9-CM
305.21	Nondependent cannabis abuse, continuous	Diagnosis	ICD-9-CM
305.22	Nondependent cannabis abuse, episodic	Diagnosis	ICD-9-CM
305.23	Nondependent cannabis abuse, in remission	Diagnosis	ICD-9-CM
305.3	Nondependent hallucinogen abuse	Diagnosis	ICD-9-CM
305.30	Nondependent hallucinogen abuse, unspecified	Diagnosis	ICD-9-CM
305.31	Nondependent hallucinogen abuse, continuous	Diagnosis	ICD-9-CM
305.32	Nondependent hallucinogen abuse, episodic	Diagnosis	ICD-9-CM
305.33	Nondependent hallucinogen abuse, in remission	Diagnosis	ICD-9-CM
305.4	Nondependent sedative, hypnotic or anxiolytic abuse	Diagnosis	ICD-9-CM
305.40	Nondependent sedative, hypnotic or anxiolytic abuse, unspecified	Diagnosis	ICD-9-CM
305.41	Nondependent sedative hypnotic or anxiolytic abuse, continuous	Diagnosis	ICD-9-CM
305.42	Nondependent sedative, hypnotic or anxiolytic abuse, episodic	Diagnosis	ICD-9-CM
305.43	Nondependent sedative, hypnotic or anxiolytic abuse, in remission	Diagnosis	ICD-9-CM
305.5	Nondependent opioid abuse	Diagnosis	ICD-9-CM
305.50	Nondependent opioid abuse, unspecified	Diagnosis	ICD-9-CM
305.51	Nondependent opioid abuse, continuous	Diagnosis	ICD-9-CM
305.52	Nondependent opioid abuse, episodic	Diagnosis	ICD-9-CM
305.53	Nondependent opioid abuse, in remission	Diagnosis	ICD-9-CM
305.6	Nondependent cocaine abuse	Diagnosis	ICD-9-CM
305.60	Nondependent cocaine abuse, unspecified	Diagnosis	ICD-9-CM
305.61	Nondependent cocaine abuse, continuous	Diagnosis	ICD-9-CM
305.62	Nondependent cocaine abuse, episodic	Diagnosis	ICD-9-CM
305.63	Nondependent cocaine abuse, in remission	Diagnosis	ICD-9-CM
305.7	Nondependent amphetamine or related acting sympathomimetic abuse	Diagnosis	ICD-9-CM
305.70	Nondependent amphetamine or related acting sympathomimetic abuse, unspecified	Diagnosis	ICD-9-CM
305.71	Nondependent amphetamine or related acting sympathomimetic abuse, continuous	Diagnosis	ICD-9-CM
305.72	Nondependent amphetamine or related acting sympathomimetic abuse, episodic	Diagnosis	ICD-9-CM
305.73	Nondependent amphetamine or related acting sympathomimetic abuse, in remission	Diagnosis	ICD-9-CM
305.8	Nondependent antidepressant type abuse	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
305.80	Nondependent antidepressant type abuse, unspecified	Diagnosis	ICD-9-CM
305.81	Nondependent antidepressant type abuse, continuous	Diagnosis	ICD-9-CM
305.82	Nondependent antidepressant type abuse, episodic	Diagnosis	ICD-9-CM
305.83	Nondependent antidepressant type abuse, in remission	Diagnosis	ICD-9-CM
305.9	Other, mixed, or unspecified nondependent drug abuse	Diagnosis	ICD-9-CM
305.90	Other, mixed, or unspecified nondependent drug abuse, unspecified	Diagnosis	ICD-9-CM
305.91	Other, mixed, or unspecified nondependent drug abuse, continuous	Diagnosis	ICD-9-CM
305.92	Other, mixed, or unspecified nondependent drug abuse, episodic	Diagnosis	ICD-9-CM
305.93	Other, mixed, or unspecified nondependent drug abuse, in remission	Diagnosis	ICD-9-CM
Suicidal behavior (E-codes)			
E950	Suicide and self-inflicted poisoning by solid or liquid substances	Diagnosis	ICD-9-CM
E951	Suicide and self-inflicted poisoning by gases in domestic use	Diagnosis	ICD-9-CM
E952	Suicide and self-inflicted poisoning by other gases and vapors	Diagnosis	ICD-9-CM
E953	Suicide and self-inflicted injury by hanging strangulation and suffocation	Diagnosis	ICD-9-CM
E954	Suicide and self-inflicted injury by submersion [drowning]	Diagnosis	ICD-9-CM
E955	Suicide and self-inflicted injury by firearms air guns and explosives	Diagnosis	ICD-9-CM
E956	Suicide and self-inflicted injury by cutting and piercing instrument	Diagnosis	ICD-9-CM
E957	Suicide and self-inflicted injuries by jumping from high place	Diagnosis	ICD-9-CM
E958	Suicide and self-inflicted injury by other and unspecified means	Diagnosis	ICD-9-CM
Transcranial magnetic stimulation			
90867	Therapeutic repetitive transcranial magnetic stimulation (TMS) treatment; initial, including cortical mapping, motor threshold determination, delivery and management	Procedure	CPT-4
90868	Therapeutic repetitive transcranial magnetic stimulation (TMS) treatment; subsequent delivery and management, per session	Procedure	CPT-4
90869	Therapeutic repetitive transcranial magnetic stimulation (TMS) treatment; subsequent motor threshold re-determination with delivery and management	Procedure	CPT-4
Urinary incontinence			
788.3	Urinary incontinence	Diagnosis	ICD-9-CM
788.30	Unspecified urinary incontinence	Diagnosis	ICD-9-CM
788.31	Urge incontinence	Diagnosis	ICD-9-CM
788.32	Stress incontinence, male	Diagnosis	ICD-9-CM
788.33	Mixed incontinence urge and stress (male)(female)	Diagnosis	ICD-9-CM
788.34	Incontinence without sensory awareness	Diagnosis	ICD-9-CM
788.35	Post-void dribbling	Diagnosis	ICD-9-CM
788.36	Nocturnal enuresis	Diagnosis	ICD-9-CM
788.37	Continuous leakage	Diagnosis	ICD-9-CM
788.38	Overflow incontinence	Diagnosis	ICD-9-CM
788.39	Other urinary incontinence	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
Vagus nerve stimulation			
61885	Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array	Procedure	CPT-4
61886	Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to 2 or more electrode arrays	Procedure	CPT-4
61888	Revision or removal of cranial neurostimulator pulse generator or receiver	Procedure	CPT-4
64553	Percutaneous implantation of neurostimulator electrode array; cranial nerve	Procedure	CPT-4
64568	Incision for implantation of cranial nerve (eg, vagus nerve) neurostimulator electrode array and pulse generator	Procedure	CPT-4
64569	Revision or replacement of cranial nerve (eg, vagus nerve) neurostimulator electrode array, including connection to existing pulse generator	Procedure	CPT-4
64570	Removal of cranial nerve (eg, vagus nerve) neurostimulator electrode array and pulse generator	Procedure	CPT-4
64585	Revision or removal of peripheral neurostimulator electrode array	Procedure	CPT-4
95970	Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple or complex brain, spinal cord, or peripheral (ie, cranial nerve, peripheral nerve, sacral nerve, neuromuscular) neurostimulator pulse generator/transmitter, without reprogramming	Procedure	CPT-4
95971	Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple spinal cord, or peripheral (ie, peripheral nerve, sacral nerve, neuromuscular) neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming	Procedure	CPT-4
95974	Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, with or without nerve interface testing, first hour	Procedure	CPT-4
95975	Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure)	Procedure	CPT-4
L8679	Implantable neurostimulator, pulse generator, any type	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
L8680	Implantable neurostimulator electrode, each	Procedure	HCPCS
L8681	Patient programmer (external) for use with implantable programmable neurostimulator pulse generator, replacement only	Procedure	HCPCS
L8682	Implantable neurostimulator radiofrequency receiver	Procedure	HCPCS
L8683	Radiofrequency transmitter (external) for use with implantable neurostimulator radiofrequency receiver	Procedure	HCPCS
L8685	Implantable neurostimulator pulse generator, single array, rechargeable, includes extension	Procedure	HCPCS
L8686	Implantable neurostimulator pulse generator, single array, nonrechargeable, includes extension	Procedure	HCPCS
L8687	Implantable neurostimulator pulse generator, dual array, rechargeable, includes extension	Procedure	HCPCS
L8688	Implantable neurostimulator pulse generator, dual array, nonrechargeable, includes extension	Procedure	HCPCS
L8689	External recharging system for battery (internal) for use with implantable neurostimulator, replacement only	Procedure	HCPCS
Ventricular arrhythmia			
427.1	Paroxysmal ventricular tachycardia	Diagnosis	ICD-9-CM
427.4	Ventricular fibrillation and flutter	Diagnosis	ICD-9-CM
427.41	Ventricular fibrillation	Diagnosis	ICD-9-CM
427.42	Ventricular flutter	Diagnosis	ICD-9-CM
427.5	Cardiac arrest	Diagnosis	ICD-9-CM
427.69	Other premature beats	Diagnosis	ICD-9-CM

Appendix G. List of Generic and Brand Name Medical Products Used to Define Covariates in this Request

Generic Name	Brand Name
Antipsychotics	
aripiprazole	Abilify
aripiprazole	Abilify Discmelt
aripiprazole	Abilify Maintena
aripiprazole	aripiprazole
aripiprazole lauroxil	Aristada
aripiprazole lauroxil, submicronized	Aristada Initio
asenapine maleate	Saphris
asenapine maleate	Saphris (black cherry)
brexpiprazole	Rexulti
cariprazine HCl	Vraylar
chlorpromazine HCl	chlorpromazine
clozapine	clozapine
clozapine	Clozaril
clozapine	FazaClo
clozapine	Versacloz
fluphenazine decanoate	fluphenazine decanoate
fluphenazine HCl	fluphenazine HCl
haloperidol	haloperidol
haloperidol decanoate	Haldol Decanoate
haloperidol decanoate	haloperidol decanoate
haloperidol lactate	Haldol
haloperidol lactate	haloperidol lactate
iloperidone	Fanapt
loxapine	Adasuve
loxapine succinate	loxapine succinate
loxapine succinate	Loxitane
lurasidone HCl	Latuda
molindone HCl	Moban
molindone HCl	molindone
olanzapine	olanzapine
olanzapine	Zyprexa
olanzapine	Zyprexa Zydis
olanzapine pamoate	Zyprexa Relprevv
olanzapine/fluoxetine HCl	olanzapine-fluoxetine
olanzapine/fluoxetine HCl	Symbyax
paliperidone	Invega
paliperidone	paliperidone
paliperidone palmitate	Invega Sustenna
paliperidone palmitate	Invega Trinza
perphenazine	perphenazine
perphenazine/amitriptyline HCl	Duo-Vil 2-10
perphenazine/amitriptyline HCl	Duo-Vil 2-25
perphenazine/amitriptyline HCl	perphenazine-amitriptyline

Appendix G. List of Generic and Brand Name Medical Products Used to Define Covariates in this Request

Generic Name	Brand Name
pimavanserin tartrate	Nuplazid
pimozide	Orap
pimozide	pimozide
quetiapine fumarate	quetiapine
quetiapine fumarate	Seroquel
quetiapine fumarate	Seroquel XR
risperidone	Perseris
risperidone	Risperdal
risperidone	Risperdal M-TAB
risperidone	risperidone
risperidone microspheres	Risperdal Consta
thioridazine HCl	thioridazine
thiothixene	Navane
thiothixene	thiothixene
trifluoperazine HCl	trifluoperazine
ziprasidone HCl	Geodon
ziprasidone HCl	ziprasidone HCl
ziprasidone mesylate	Geodon
Anxiolytic medication	
alprazolam	alprazolam
alprazolam	Alprazolam Intensol
alprazolam	Niravam
alprazolam	Xanax
alprazolam	Xanax XR
alprazolam/dietary supplement,misc combo no.17	Gabazolamine
amitriptyline HCl/chlordiazepoxide	amitriptyline-chlordiazepoxide
amitriptyline HCl/chlordiazepoxide	Limbitrol
amitriptyline HCl/chlordiazepoxide	Limbitrol DS
bupirone HCl	BuSpar
bupirone HCl	bupirone
bupirone HCl	Vanspar
chlordiazepoxide HCl	chlordiazepoxide HCl
chlordiazepoxide HCl	Librium
clorazepate dipotassium	clorazepate dipotassium
clorazepate dipotassium	Tranxene T-Tab
clorazepate dipotassium	Tranxene-SD
diazepam	diazepam
diazepam	Diazepam Intensol
diazepam	Valium
lorazepam	Ativan
lorazepam	lorazepam
lorazepam	Lorazepam Intensol
meprobamate	meprobamate
oxazepam	oxazepam

Appendix G. List of Generic and Brand Name Medical Products Used to Define Covariates in this Request

Generic Name	Brand Name
Hypnotics	
butabarbital sodium	Butisol
chloral hydrate	chloral hydrate
chloral hydrate	Somnote
doxepin HCl	doxepin
doxepin HCl	Prudoxin
doxepin HCl	Silenor
doxepin HCl	Sinequan
doxepin HCl	Zonalon
estazolam	estazolam
estazolam	Prosom
eszopiclone	eszopiclone
eszopiclone	Lunesta
flurazepam HCl	Dalmane
flurazepam HCl	flurazepam
mephobarbital	Mebaral
mephobarbital	mephobarbital
midazolam HCl	midazolam
midazolam HCl in 0.9 % sodium chloride	midazolam in 0.9 % sod chlorid
midazolam HCl in 0.9 % sodium chloride/PF	midazolam (PF) in 0.9 % NaCl
midazolam HCl in 5 % dextrose and water/PF	midazolam in dextrose 5 % (PF)
midazolam HCl in dextrose 5% in water	midazolam in dextrose 5 %
midazolam HCl/PF	midazolam (PF)
pentobarbital sodium	Nembutal Sodium
pentobarbital sodium	pentobarbital sodium
quazepam	Doral
quazepam	quazepam
ramelteon	Rozerem
secobarbital sodium	Seconal
secobarbital sodium	Seconal Sodium
suvorexant	Belsomra
tasimelteon	Hetlioz
temazepam	Restoril
temazepam	temazepam
temazepam/dietary supplement no.8	Strazepam
triazolam	Halcion
triazolam	triazolam
zaleplon	Sonata
zaleplon	zaleplon
zolpidem tartrate	Ambien
zolpidem tartrate	Ambien CR
zolpidem tartrate	AMBIEN PAK
zolpidem tartrate	Edluar
zolpidem tartrate	Intermezzo

Appendix G. List of Generic and Brand Name Medical Products Used to Define Covariates in this Request

Generic Name	Brand Name
zolpidem tartrate	zolpidem
zolpidem tartrate	Zolpimist
Lithium and other mood stabilizers	
carbamazepine	carbamazepine
carbamazepine	Carbatrol
carbamazepine	Epitol
carbamazepine	Equetro
carbamazepine	Tegretol
carbamazepine	Tegretol XR
clonazepam	clonazepam
clonazepam	Klonopin
divalproex sodium	Depakote
divalproex sodium	Depakote ER
divalproex sodium	Depakote Sprinkles
divalproex sodium	divalproex
lamotrigine	Lamictal
lamotrigine	Lamictal ODT
lamotrigine	Lamictal ODT Starter (Blue)
lamotrigine	Lamictal ODT Starter (Green)
lamotrigine	Lamictal ODT Starter (Orange)
lamotrigine	Lamictal Starter (Blue) Kit
lamotrigine	Lamictal Starter (Green) Kit
lamotrigine	Lamictal Starter (Orange) Kit
lamotrigine	Lamictal XR
lamotrigine	Lamictal XR Starter (Blue)
lamotrigine	Lamictal XR Starter (Green)
lamotrigine	Lamictal XR Starter (Orange)
lamotrigine	lamotrigine
lamotrigine	Subvenite
lamotrigine	Subvenite Starter (Blue) Kit
lamotrigine	Subvenite Starter (Green) Kit
lamotrigine	Subvenite Starter (Orange) Kit
lithium carbonate	lithium carbonate
lithium carbonate	Lithobid
lithium citrate	lithium citrate
oxcarbazepine	oxcarbazepine
oxcarbazepine	Oxtellar XR
oxcarbazepine	Trileptal
valproic acid	Depakene
valproic acid	Stavzor
valproic acid	valproic acid
valproic acid (as sodium salt) (valproate sodium)	Depacon
valproic acid (as sodium salt) (valproate sodium)	Depakene
valproic acid (as sodium salt) (valproate sodium)	valproate sodium

Appendix G. List of Generic and Brand Name Medical Products Used to Define Covariates in this Request

Generic Name	Brand Name
valproic acid (as sodium salt) (valproate sodium)	valproic acid (as sodium salt)
Non-sertraline antidepressants	
amitriptyline HCl	amitriptyline
amitriptyline HCl	Vanatrip
amitriptyline HCl/chlordiazepoxide	amitriptyline-chlordiazepoxide
amitriptyline HCl/chlordiazepoxide	Limbitrol
amitriptyline HCl/chlordiazepoxide	Limbitrol DS
amoxapine	amoxapine
bupropion HBr	Aplenzin
bupropion HCl	Budeprion SR
bupropion HCl	Budeprion XL
bupropion HCl	bupropion HCl
bupropion HCl	Forfivo XL
bupropion HCl	Wellbutrin
bupropion HCl	Wellbutrin SR
bupropion HCl	Wellbutrin XL
bupropion HCl/dietary supplement combination no.15	Appbutamone-D
bupropion HCl/dietary supplement combination no.16	Appbutamone
citalopram hydrobromide	Celexa
citalopram hydrobromide	citalopram
clomipramine HCl	Anafranil
clomipramine HCl	clomipramine
desipramine HCl	desipramine
desipramine HCl	Norpramin
desvenlafaxine	desvenlafaxine
desvenlafaxine	Khedezla
desvenlafaxine fumarate	desvenlafaxine fumarate
desvenlafaxine succinate	desvenlafaxine succinate
desvenlafaxine succinate	Pristiq
doxepin HCl	doxepin
doxepin HCl	Silenor
doxepin HCl	Sinequan
duloxetine HCl	Cymbalta
duloxetine HCl	duloxetine
duloxetine HCl	Irenka
escitalopram oxalate	escitalopram oxalate
escitalopram oxalate	Lexapro
fluoxetine HCl	fluoxetine
fluoxetine HCl	Prozac
fluoxetine HCl	Prozac Weekly
fluoxetine HCl	Rapiflux
fluoxetine HCl	Sarafem
fluoxetine HCl	Selfemra
fluoxetine HCl/dietary supplement no.17	Gaboxetine

Appendix G. List of Generic and Brand Name Medical Products Used to Define Covariates in this Request

Generic Name	Brand Name
fluoxetine HCl/dietary supplement no.8	Sentroxatine
fluvoxamine maleate	fluvoxamine
fluvoxamine maleate	Luvox CR
imipramine HCl	imipramine HCl
imipramine HCl	Tofranil
imipramine pamoate	imipramine pamoate
imipramine pamoate	Tofranil-PM
isocarboxazid	Marplan
levomilnacipran HCl	Fetzima
maprotiline HCl	maprotiline
mirtazapine	mirtazapine
mirtazapine	Remeron
mirtazapine	Remeron SolTab
nefazodone HCl	nefazodone
nefazodone HCl	Serzone
nortriptyline HCl	nortriptyline
nortriptyline HCl	Pamelor
olanzapine/fluoxetine HCl	olanzapine-fluoxetine
olanzapine/fluoxetine HCl	Symbyax
paroxetine HCl	paroxetine HCl
paroxetine HCl	Paxil
paroxetine HCl	Paxil CR
paroxetine mesylate	Brisdelle
paroxetine mesylate	paroxetine mesylate(menop.sym)
paroxetine mesylate	Peveva
perphenazine/amitriptyline HCl	Duo-Vil 2-10
perphenazine/amitriptyline HCl	Duo-Vil 2-25
perphenazine/amitriptyline HCl	perphenazine-amitriptyline
phenelzine sulfate	Nardil
phenelzine sulfate	phenelzine
protriptyline HCl	protriptyline
protriptyline HCl	Vivactil
selegiline	Emsam
tranylcypromine sulfate	Parnate
tranylcypromine sulfate	tranylcypromine
trazodone HCl	Desyrel
trazodone HCl	Oleptro ER
trazodone HCl	trazodone
trazodone HCl/dietary supplement no.8	Trazamine
trimipramine maleate	Surmontil
trimipramine maleate	trimipramine
venlafaxine HCl	Effexor
venlafaxine HCl	Effexor XR
venlafaxine HCl	venlafaxine

Appendix G. List of Generic and Brand Name Medical Products Used to Define Covariates in this Request

Generic Name	Brand Name
vortioxetine hydrobromide	Brintellix
vortioxetine hydrobromide	Trintellix
Non-sertraline Selective Serotonin Reuptake Inhibitor (SSRI)	
citalopram hydrobromide	Celexa
citalopram hydrobromide	citalopram
escitalopram oxalate	escitalopram oxalate
escitalopram oxalate	Lexapro
fluoxetine HCl	fluoxetine
fluoxetine HCl	Prozac
fluoxetine HCl	Prozac Weekly
fluoxetine HCl	Rapiflux
fluoxetine HCl	Sarafem
fluoxetine HCl	Selfemra
fluoxetine HCl/dietary supplement no.17	Gaboxetine
fluoxetine HCl/dietary supplement no.8	Sentroxatine
fluvoxamine maleate	fluvoxamine
fluvoxamine maleate	Luvox CR
olanzapine/fluoxetine HCl	olanzapine-fluoxetine
olanzapine/fluoxetine HCl	Symbyax
paroxetine HCl	paroxetine HCl
paroxetine HCl	Paxil
paroxetine HCl	Paxil CR
paroxetine mesylate	Pexeva
vilazodone HCl	Viibryd
vortioxetine hydrobromide	Brintellix
vortioxetine hydrobromide	Trintellix
Opioids used for medication assisted treatment	
buprenorphine	Sublocade
buprenorphine HCl	buprenorphine HCl
buprenorphine HCl	Probuphine
buprenorphine HCl	Subutex
buprenorphine HCl/naloxone HCl	buprenorphine-naloxone
buprenorphine HCl/naloxone HCl	Suboxone
buprenorphine HCl/naloxone HCl	Zubsolv
methadone HCl	Diskets
methadone HCl	Dolophine
methadone HCl	methadone
methadone HCl	Methadone Intensol
methadone HCl	Methadose
methadone hydrochloride in 0.9 % sodium chloride	methadone in 0.9 % sod. chlor
naltrexone microspheres	Vivitrol
Pain requiring opiates	
acetaminophen with codeine phosphate	acetaminophen-codeine
acetaminophen with codeine phosphate	Capital with Codeine

Appendix G. List of Generic and Brand Name Medical Products Used to Define Covariates in this Request

Generic Name	Brand Name
acetaminophen with codeine phosphate	Cocet
acetaminophen with codeine phosphate	Cocet Plus
acetaminophen with codeine phosphate	Tylenol-Codeine #3
acetaminophen with codeine phosphate	Tylenol-Codeine #4
acetaminophen with codeine phosphate	Vopac
aspirin/codeine phosphate	aspirin-codeine
aspirin/codeine phosphate	Aspirin-Codeine #3
aspirin/codeine phosphate	Aspirin-Codeine #4
buprenorphine	buprenorphine
buprenorphine	Butrans
buprenorphine HCl	Belbuca
buprenorphine HCl/naloxone HCl	Bunavail
butalbital/acetaminophen/caffeine/codeine phosphate	butalbital-acetaminop-caf-cod
butalbital/acetaminophen/caffeine/codeine phosphate	Fioricet with Codeine
butalbital/acetaminophen/caffeine/codeine phosphate	Phrenilin w/Caffeine-Codeine
carisoprodol/aspirin/codeine phosphate	Carisoprodol Compound-Codeine
carisoprodol/aspirin/codeine phosphate	carisoprodol-ASA-codeine
carisoprodol/aspirin/codeine phosphate	Soma Compound with Codeine
codeine phosphate	codeine phosphate
codeine phosphate	Codeine Phosphate Soluble
codeine phosphate/butalbital/aspirin/caffeine	Ascomp with Codeine
codeine phosphate/butalbital/aspirin/caffeine	Butalbital Compound W/Codeine
codeine phosphate/butalbital/aspirin/caffeine	Butalbital Compound-Codeine
codeine phosphate/butalbital/aspirin/caffeine	codeine-butalbital-ASA-caff
codeine phosphate/butalbital/aspirin/caffeine	Fiorinal-Codeine #3
codeine sulfate	codeine sulfate
fentanyl citrate	Abstral
fentanyl citrate	Actiq
fentanyl citrate	fentanyl citrate
fentanyl citrate	Fentora
fentanyl citrate	Lazanda
fentanyl citrate	Onsolis
fentanyl citrate in 0.9 % sodium chloride/PF	fentanyl citrate (PF)-0.9%NaCl
fentanyl citrate in dextrose 5% in water/PF	fentanyl citrate in D5W (PF)
fentanyl citrate/bupivacaine HCl in 0.9 % sodium chloride/PF	fentanyl (PF)-bupivacaine-NaCl
fentanyl citrate/droperidol	fentanyl-droperidol
fentanyl citrate/PF	fentanyl citrate (PF)
fentanyl citrate/PF	Sublimaze (PF)
fentanyl citrate/ropivacaine HCl/sodium chloride 0.9%/PF	fentanyl-ropivacaine-NaCl (PF)
hydrocodone bitartrate	Hysingla ER
hydrocodone bitartrate	Zohydro ER
hydrocodone bitartrate/acetaminophen	Anexsia
hydrocodone bitartrate/acetaminophen	Co-Gesic
hydrocodone bitartrate/acetaminophen	Dolacet

Appendix G. List of Generic and Brand Name Medical Products Used to Define Covariates in this Request

Generic Name	Brand Name
hydrocodone bitartrate/acetaminophen	Dolorex Forte
hydrocodone bitartrate/acetaminophen	Hycet
hydrocodone bitartrate/acetaminophen	Hydrocet
hydrocodone bitartrate/acetaminophen	hydrocodone-acetaminophen
hydrocodone bitartrate/acetaminophen	Hydrogesic
hydrocodone bitartrate/acetaminophen	Liquicet
hydrocodone bitartrate/acetaminophen	Lorcet (hydrocodone)
hydrocodone bitartrate/acetaminophen	Lorcet 10/650
hydrocodone bitartrate/acetaminophen	Lorcet HD
hydrocodone bitartrate/acetaminophen	Lorcet Plus
hydrocodone bitartrate/acetaminophen	Lortab
hydrocodone bitartrate/acetaminophen	Lortab 10-325
hydrocodone bitartrate/acetaminophen	Lortab 5-325
hydrocodone bitartrate/acetaminophen	Lortab 7.5-325
hydrocodone bitartrate/acetaminophen	Lortab Elixir
hydrocodone bitartrate/acetaminophen	Margesic-H
hydrocodone bitartrate/acetaminophen	Maxidone
hydrocodone bitartrate/acetaminophen	Norco
hydrocodone bitartrate/acetaminophen	Polygesic
hydrocodone bitartrate/acetaminophen	Stagesic
hydrocodone bitartrate/acetaminophen	Vanacet
hydrocodone bitartrate/acetaminophen	Verdrocet
hydrocodone bitartrate/acetaminophen	Vicodin
hydrocodone bitartrate/acetaminophen	Vicodin ES
hydrocodone bitartrate/acetaminophen	Vicodin HP
hydrocodone bitartrate/acetaminophen	Xodol 10/300
hydrocodone bitartrate/acetaminophen	Xodol 5/300
hydrocodone bitartrate/acetaminophen	Xodol 7.5/300
hydrocodone bitartrate/acetaminophen	Zamicet
hydrocodone bitartrate/acetaminophen	Zolvit
hydrocodone bitartrate/acetaminophen	Zydone
hydrocodone bitartrate/acetaminophen/dietary supplement #11	Theracodophen-325
hydrocodone bitartrate/acetaminophen/dietary supplement #12	Theracodophen-650
hydrocodone bitartrate/acetaminophen/dietary supplement #13	Theracodophen-Low-90
hydromorphone HCl	Dilaudid
hydromorphone HCl	Dilaudid-5
hydromorphone HCl	Exalgo ER
hydromorphone HCl	hydromorphone
hydromorphone HCl in 0.9 % sodium chloride	hydromorphone in 0.9 % NaCl
hydromorphone HCl in 0.9 % sodium chloride/PF	hydromorphone (PF)-0.9 % NaCl
hydromorphone HCl in dextrose 5 %-water/PF	hydromorphone in D5W (PF)
hydromorphone HCl in sterile water/PF	hydromorphone (PF) in water
hydromorphone HCl/bupivacaine HCl in 0.9% sodium chloride/PF	hydromorphone-bupiv (PF)-NaCl
hydromorphone HCl/PF	Dilaudid (PF)

Appendix G. List of Generic and Brand Name Medical Products Used to Define Covariates in this Request

Generic Name	Brand Name
hydromorphone HCl/PF	Dilaudid-HP (PF)
hydromorphone HCl/PF	hydromorphone (PF)
hydromorphone HCl/ropivacaine in 0.9 % sodium chloride/PF	hydromorph(PF)-ropiv-0.9% NaCl
ibuprofen/oxycodone HCl	Combunox
ibuprofen/oxycodone HCl	ibuprofen-oxycodone
meperidine HCl	Demerol
meperidine HCl	meperidine
meperidine HCl	Meperitab
meperidine HCl in 0.9 % sodium chloride	meperidine in 0.9 % NaCl
meperidine HCl in 0.9 % sodium chloride/PF	meperidine (PF) in 0.9 % NaCl
meperidine HCl/PF	Demerol (PF)
meperidine HCl/PF	meperidine (PF)
meperidine HCl/promethazine HCl	meperidine-promethazine
meperidine HCl/promethazine HCl	Meprozone

Appendix H. Specifications Defining Parameters for this Request

This request utilized the Cohort Identification and Descriptive Analysis (CIDA) module, version 7.3.3 to assess the risk of intentional self-harm comparing brand name sertraline to its authorized generic in the Sentinel Distributed Database (SDD).

Query Period: June 30, 2006 - September 30, 2015

Coverage Requirement: Medical and Drug Coverage

Enrollment Gap: 0 Days

Enrollment Requirement: 180 days

Age Groups: 12-17, 18-24, 25-54, 55+ years

	Risk Window: 1-14 days With socioeconomic status covariate		Risk Window: 1-365 days With socioeconomic status covariate		Risk Window: 15-365 days With socioeconomic status covariate	
	Comparison 1		Comparison 2		Comparison 3	
	Authorized generic sertraline	Brand name sertraline	Authorized generic sertraline	Brand name sertraline	Authorized generic sertraline	Brand name sertraline
Incident Exposure/Comparator	Authorized generic sertraline	Brand name sertraline	Authorized generic sertraline	Brand name sertraline	Authorized generic sertraline	Brand name sertraline
Incident w/ Respect to:	Any sertraline (including those not in exposure definitions)	Any sertraline (including those not in exposure definitions)	Any sertraline (including those not in exposure definitions)	Any sertraline (including those not in exposure definitions)	Any sertraline (including those not in exposure definitions)	Any sertraline (including those not in exposure definitions)
Incidence Assessment	Lookback period should search for evidence of days supply	Lookback period should search for evidence of days supply	Lookback period should search for evidence of days supply	Lookback period should search for evidence of days supply	Lookback period should search for evidence of days supply	Lookback period should search for evidence of days supply
Washout (days)	180	180	180	180	180	180
Cohort Definition	Cohort includes only the first valid incident treatment episode during the query period	Cohort includes only the first valid incident treatment episode during the query period	Cohort includes only the first valid incident treatment episode during the query period	Cohort includes only the first valid incident treatment episode during the query period	Cohort includes only the first valid incident treatment episode during the query period	Cohort includes only the first valid incident treatment episode during the query period
Episode Gap	15	15	15	15	15	15
Episode Extension Period	15	15	15	15	15	15
Minimum Episode Duration	1	1	1	1	1	1
Maximum Episode Duration	14	14	365	365	365	365
Minimum Days Supplied	1	1	1	1	1	1
Censor Criteria	Death, query end date, disenrollment, event, switch to brand name sertraline, dispensing for another antidepressant	Death, query end date, disenrollment, event, switch to generic name sertraline, dispensing for another antidepressant	Death, query end date, disenrollment, event, switch to brand name sertraline, dispensing for another antidepressant	Death, query end date, disenrollment, event, switch to generic name sertraline, dispensing for another antidepressant	Death, query end date, disenrollment, event, switch to brand name sertraline, dispensing for another antidepressant	Death, query end date, disenrollment, event, switch to generic name sertraline, dispensing for another antidepressant

Appendix H. Specifications Defining Parameters for this Request

	Risk Window: 1-14 days With socioeconomic status covariate		Risk Window: 1-365 days With socioeconomic status covariate		Risk Window: 15-365 days With socioeconomic status covariate	
	Comparison 1		Comparison 2		Comparison 3	
	Inclusion/Exclusion					
Pre-Existing Condition	Mood/depressive disorder	Mood/depressive disorder	Mood/depressive disorder	Mood/depressive disorder	Mood/depressive disorder	Mood/depressive disorder
Include/Exclude	Inclusion	Inclusion	Inclusion	Inclusion	Inclusion	Inclusion
Lookback Period	(-90, 0)	(-90, 0)	(-90, 0)	(-90, 0)	(-90, 0)	(-90, 0)
Pre-Existing Condition	Traumatic brain injury	Traumatic brain injury	Traumatic brain injury	Traumatic brain injury	Traumatic brain injury	Traumatic brain injury
Include/Exclude	Exclusion	Exclusion	Exclusion	Exclusion	Exclusion	Exclusion
Lookback Period	(-180, 0)	(-180, 0)	(-180, 0)	(-180, 0)	(-180, 0)	(-180, 0)
Event/Outcome	Intentional self-harm Diagnosis of depression, personality disorder, mania, adjustment reaction, or unspecified non-psychotic mental disorder in inpatient care setting and Diagnosis of poisoning, toxicity of a substance chiefly non-medical in nature, asphyxiation, or open wound to the elbow, wrist, or forearm in inpatient care setting or emergency department on the same day		Intentional self-harm Diagnosis of depression, personality disorder, mania, adjustment reaction, or unspecified non-psychotic mental disorder in inpatient care setting and Diagnosis of poisoning, toxicity of a substance chiefly non-medical in nature, asphyxiation, or open wound to the elbow, wrist, or forearm in inpatient care setting or emergency department on the same day		Intentional self-harm Diagnosis of depression, personality disorder, mania, adjustment reaction, or unspecified non-psychotic mental disorder in inpatient care setting and Diagnosis of poisoning, toxicity of a substance chiefly non-medical in nature, asphyxiation, or open wound to the elbow, wrist, or forearm in inpatient care setting or emergency department on the same day	
Washout (days)	0		0		0	
Blackout Period	1		1		14	
Propensity Score Matching	See Appendices F-G		See Appendices F-G		See Appendices F-G	
Covariates	See Appendices F-G		See Appendices F-G		See Appendices F-G	
Covariate Evaluation Window	(-180, -1)		(-180, -1)		(-180, -1)	
Matching Ratio	1:n		1:n		1:n	
Matching Caliper Settings	0.05		0.05		0.05	
Analysis Type	Conditional		Conditional		Conditional	
Variable in Cox model	None		None		None	
Subgroup Analysis	Age group		Age group		Age group	
Stratifying variable	Whole Population		Whole Population		Whole Population	
Re-matching	Whole Population		Whole Population		Whole Population	
Additional Output	Kaplan Meier curves		Kaplan Meier curves		Kaplan Meier curves	

International Classification of Diseases, Ninth Edition, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Edition, Clinical Modification (ICD-10-CM), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition (CPT-4) codes are provided by Optum360. National Drug Codes are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."