

## Disclaimer

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).

If you are using a web page screen reader and are unable to access this document, please contact the Sentinel Operations Center for assistance at [info@sentinelssystem.org](mailto:info@sentinelssystem.org).

## Overview for Request: cder\_mpl3p\_wp002

**Request ID:** cder\_mpl3p\_wp002

**Request Description:** In this request, we assessed the comparative risk of severe hyperglycemia in COVID-19 patients with type 2 diabetes treated with systemic corticosteroids and azithromycin compared to COVID-19 patients treated with azithromycin alone. This report contains the results of the second analysis or "look" of a sequential analysis. This was the final planned look because the project period ended.

**Sentinel Routine Querying Module:** Type 2 Cohort Identification and Descriptive Analysis (CIDA) and Propensity Score Analysis (PSA) modules within Query Request Package version 12.2.2, with ad hoc programming.

**Data Source:** We distributed this request to a subset of the Sentinel Distributed Database (SDD) including 5 Sentinel Data Partners on July 26, 2024. Data from fee-for-service Medicare beneficiaries with enrollment in medical and drug benefits were included. The study cohort included patients initiating corticosteroids or azithromycin between May 1, 2021 and October 1, 2023, the most recent available data at the time of distribution. Please see Appendix A for a list of dates of available data for each Data Partner.

**Study Design:** We conducted an active comparator, new user cohort study comparing COVID-19 patients with type 2 diabetes initiating treatment with systemic corticosteroids and azithromycin on the same day versus COVID-19 patients initiating azithromycin alone. Throughout this report, we refer to systemic corticosteroids as simply "corticosteroids". We compared the occurrence of severe hyperglycemia during the first qualifying exposure episode after employing propensity score matching to control for confounding.

**Cohort Eligibility Criteria:** We required eligible individuals to be continuously enrolled in health plans with medical and drug coverage for at least 183 days prior to cohort entry (i.e., the index date), which occurred at the first qualifying use of corticosteroids and azithromycin on the same day or azithromycin alone. We allowed gaps of up to 45 days while evaluating continuous enrollment in health plans. Eligible individuals had no evidence of prior treatment with either corticosteroids or azithromycin in the 183 days prior to index, had non-missing male or female sex as defined in the Sentinel Common Data Model, were age 18 or older on the index date, were diagnosed with COVID-19 in an outpatient care setting in the 14 days prior to index, had no COVID-19 diagnoses in any care setting in the 30 to 15 days prior to index, and had both a Type 2 diabetes diagnosis and evidence of antidiabetic treatment in the 183 days prior to index. Eligible individuals were further required to have no evidence of Type 1 diabetes, hyperglycemia in the inpatient hospital or emergency department settings, or an institutional stay in the 183 days prior to cohort entry. Individuals with evidence of inpatient hospitalization in the two weeks prior to their index date were also excluded. Please see Appendix C and D for a list International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis codes and for a list encounter types used to define eligibility criteria, respectively. Please see Appendix E for a list of non-proprietary and proprietary names used to define eligibility criteria. Please see Appendix F for a list of lab codes used to define eligibility in this request.

**Exposure of Interest:** The exposures of interest were defined as new use of oral or injectable corticosteroids and oral azithromycin on the same date and new use of oral azithromycin alone. We defined exposures of interest using NDCs. Please see Appendix B for a list of names of medical products used to define the exposures of interest.

### Overview for Request: cder\_mpl3p\_wp002

**Baseline Characteristics:** We measured demographic characteristics such as age, sex, race, ethnicity, and year of treatment initiation on the day of cohort entry. Additionally, we measured the following clinical characteristics during the 183 day baseline period: Adapted Diabetes Complications Severity Index (aDCSI), Claims-Based Frailty Index, number of outpatient hyperglycemia diagnoses, smoking status, obesity, nephropathy, neuropathy, retinopathy, hospitalized myocardial infarction, hospitalized stroke or transient ischemic attack, peripheral vascular disease, outpatient diabetic ketoacidosis, asthma, chronic obstructive pulmonary disease, heart failure, hypertension, cancer, chronic kidney disease, hyperlipidemia, psychosis, rheumatological and inflammatory disease, chronic liver disease, coronary artery disease, cerebrovascular disease, outpatient COVID-19 diagnosis, and a positive outpatient SARS-COV-2 PCR test result. We measured evidence of the following drug-based covariates during the baseline period: metformin, insulin, sulfonylureas, DPP-4 inhibitors, GLP-1 agonists, SGLT-2 inhibitors, thiazolidinediones, meglitinides, alpha-glucosidase inhibitors, Paxlovid, remdesivir, molnupiravir, hydroxychloroquine, ACE inhibitors, angiotensin receptor blockers, loop diuretics, other diuretics, statins, beta blockers, and calcium channel blockers. We also measured healthcare utilization as the mean count of care-setting specific encounters, overall filled prescriptions, overall unique generic drugs, and unique antidiabetic drugs. Please see Appendix K for a complete list of baseline covariates along with the care setting and time period over which they were evaluated. Please see Appendix H for a list of medical products used to define baseline characteristics. Please see Appendix I for a list of diagnosis and procedure codes used to define baseline characteristics, and please see Appendix J for a list of lab codes used to define baseline characteristics.

**Outcome of Interest:** We defined two outcomes of interest. The first was a hyperglycemia diagnosis code recorded in either an inpatient (any position) or emergency department encounter, and the second was a hyperglycemia diagnosis recorded as an inpatient encounter in the primary position. Please see Appendix G for a list of ICD-10-CM diagnosis codes used to define the outcomes in this request.

**Follow-up Time:** We followed individuals in an intention to treat fashion for up to 30 days. Follow-up began on the treatment initiation date and continued until the earliest of any of the following: 1) outcome occurrence; 2) query end date; 3) data partner end date; or 4) recorded death. Only the first valid exposure episode that occurred during the study period was included per patient.

**Propensity Score Estimation:** We used logistic regression models run at each data partner site to estimate propensity scores for each individual. These models included the covariates listed above with the exception of race, outpatient COVID-19 diagnosis, and positive COVID-19 lab test.

**Propensity Score Matching:** We matched patients initiating corticosteroids and azithromycin on the same day to patients initiating azithromycin alone at each site using their estimated propensity scores. We conducted 1:1 nearest neighbor matching without replacement using a caliper of 0.05 on the propensity score scale.

**Statistical Analysis:** Within the aggregated matched population, we estimated unconditional hazard ratios for each outcome of interest, stratified by site. To perform sequential hypothesis testing, we utilized the R package 'Sequential'. Our null hypothesis for both outcomes was that the relative risk was equal to or less than 1, and our one-sided alternative hypothesis was a relative risk above 1. The alpha level was set to 0.05, and we utilized an alpha spending function optimized to minimize the time to signal. The shape of the alpha spending function was determined by the target relative risk and statistical power. For hyperglycemia in the inpatient (any position) or emergency department care settings, we targeted a relative risk of 1.5 with 80% statistical power. For hyperglycemia in the inpatient primary position, which was expected to be much less frequent, we targeted a risk ratio of 3 with 80% statistical power. We rejected the null hypothesis of no association for the inpatient (any position) or emergency department care setting outcome on the first look; however, we included it in this second look to refine the hazard ratio estimate. Given that this was the final planned look, we elected to deviate from the optimal alpha spending plan for the inpatient primary position outcome and spend all remaining alpha.

**Please see Appendices L and M for the specifications of parameters used in this request and a design diagram.**

**Overview for Request: cder\_mpl3p\_wp002**

**Limitations:** Algorithms used to define exposures, outcomes, inclusion and exclusion criteria, and covariates are imperfect and may be misclassified. Therefore, data should be interpreted with this limitation in mind.

**Notes:** Please contact the Sentinel Operations Center ([info@sentinelssystem.org](mailto: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/SETINEL/repos/sentinel-routine-querying-tool-documentation/browse>).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**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

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

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

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

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

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

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

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

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

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

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

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

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

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

\*all terms may not be used in this report

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

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

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

**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 of Contents

<b><u>Glossary</u></b>	List of Terms to Define the Cohort Identification and Descriptive Analysis (CIDA) Found in this Report
<b><u>Glossary (PSA)</u></b>	List of Terms to Define the Propensity Score Analysis (PSA) Found in this Report
<b><u>Table 1a</u></b>	Aggregated Unadjusted Characteristics of Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023
<b><u>Table 1b</u></b>	Aggregated Adjusted Characteristics of Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.05) in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023
<b><u>Table 2</u></b>	Effect Estimates for Severe Hyperglycemia Diagnosed in Inpatient or Emergency Department (IP*/ED) Care Settings among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023, by Analysis Type
<b><u>Table 3</u></b>	Effect Estimates for Severe Hyperglycemia Diagnosed in Inpatient Primary Position (IPP) Care Setting among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023, by Analysis Type
<b><u>Table 4</u></b>	Sequential Statistics for Severe Hyperglycemia Diagnosed in Inpatient or Emergency Department (IP*/ED) Care Settings among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023
<b><u>Table 5</u></b>	Sequential Statistics for Severe Hyperglycemia Diagnosed in Inpatient Primary Position (IPP) Care Setting among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023
<b><u>Table 6</u></b>	Summary of Patient - Level Cohort Attrition in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023
<b><u>Figure 1</u></b>	Histograms Depicting Propensity Score Distributions Before and After Adjustment in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023
<b><u>Figure 2a</u></b>	Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Site-Adjusted Analyses in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023
<b><u>Figure 2b</u></b>	Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Propensity Score Matched Unconditional Analyses in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023
<b><u>Figure 3a</u></b>	Aggregated Unadjusted Kaplan-Meier Estimate and 95% Confidence Interval of Severe Hyperglycemia (IP*/ED) Not Occurring Among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023
<b><u>Figure 3b</u></b>	Aggregated Adjusted Kaplan-Meier Estimate and 95% Confidence Interval of Severe Hyperglycemia (IP*/ED) Not Occurring Among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes from the Unconditional Matched Population after Corticosteroid and Azithromycin Initiators in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023
<b><u>Figure 4a</u></b>	Aggregated Unadjusted Kaplan-Meier Estimate and 95% Confidence Interval of Severe Hyperglycemia (IPP) Not Occurring Among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023
<b><u>Figure 4b</u></b>	Aggregated Adjusted Kaplan-Meier Estimate and 95% Confidence Interval of Severe Hyperglycemia (IPP) Not Occurring Among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes from the Unconditional Matched Population in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023
<b><u>Figure 5a</u></b>	Optimal Alpha Spending Function for Sequential Analysis of Severe Hyperglycemia Diagnosed in Inpatient or Emergency Department (IP*/ED) Care Settings with Target Risk Ratio of 1.5 and Target Power of 80%
<b><u>Figure 5b</u></b>	Optimal Alpha Spending Function for Sequential Analysis of Severe Hyperglycemia Diagnosed in Inpatient Primary Position (IPP) Care Setting with Target Risk Ratio of 3 and Target Power of 80%
<b><u>Appendix A</u></b>	Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (July 26, 2024)
<b><u>Appendix B</u></b>	List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Exposures in this Request

## Table of Contents

<b><u>Appendix C</u></b>	List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Inclusion Criteria in this Request
<b><u>Appendix D</u></b>	List of Codes Used to Define Inclusion Criteria in this Request
<b><u>Appendix E</u></b>	List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Inclusion Criteria in this Request
<b><u>Appendix F</u></b>	List of Lab Codes Used to Define Inclusion Criteria in this Request
<b><u>Appendix G</u></b>	List of International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Outcomes in this Request
<b><u>Appendix H</u></b>	List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Covariates in this Request
<b><u>Appendix I</u></b>	List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request
<b><u>Appendix J</u></b>	List of Lab Codes Used to Define Covariates in this Request
<b><u>Appendix K</u></b>	Baseline Covariate Groups Evaluated in this Request
<b><u>Appendix L</u></b>	Specifications Defining Parameters
<b><u>Appendix M</u></b>	Design Diagram of Cohort Entry Requirements, Index Exposure, and Event Outcome Assessment

**Table 1a. Aggregated Unadjusted Characteristics of Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

Patient Characteristics <sup>1</sup>	Medical Product				Covariate Balance	
	Corticosteroid and Azithromycin Initiators		Azithromycin Initiators		Absolute Difference	Standardized Difference
	Number/Mean	Percent/ Standard Deviation <sup>2</sup>	Number/Mean	Percent/ Standard Deviation <sup>2</sup>		
Unique patients	44,930	100.0%	77,866	100.0%	N/A	N/A
<b>Demographic Characteristics</b>						
Age (years)	67.5	10.5	68.9	10.5	-1.376	-0.131
Age						
18-44 years	2,864	6.4%	4,224	5.4%	0.950	0.040
45-64 years	12,061	26.8%	18,174	23.3%	3.504	0.081
65-74 years	17,229	38.3%	30,501	39.2%	-0.825	-0.017
75-79 years	6,303	14.0%	11,751	15.1%	-1.063	-0.030
≥ 80 years	6,473	14.4%	13,216	17.0%	-2.566	-0.071
Sex <sup>*</sup>						
Female	23,102	51.4%	41,058	52.7%	-1.311	-0.026
Male	21,828	48.6%	36,808	47.3%	1.311	0.026
Race <sup>3</sup>						
American Indian or Alaska Native	137	0.3%	287	0.4%	-0.064	-0.011
Asian	616	1.4%	2,715	3.5%	-2.116	-0.138
Black or African American	2,820	6.3%	6,468	8.3%	-2.030	-0.078
Multi-racial	155	0.3%	325	0.4%	-0.072	-0.012
Native Hawaiian or Other Pacific Islander	100	0.2%	225	0.3%	-0.066	-0.013
Unknown	13,441	29.9%	22,100	28.4%	1.533	0.034
White	27,661	61.6%	45,746	58.7%	2.815	0.058
Hispanic origin						
Yes	1,237	2.8%	2,888	3.7%	-0.956	-0.054
No	29,125	64.8%	51,602	66.3%	-1.447	-0.030

**Table 1a. Aggregated Unadjusted Characteristics of Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

Patient Characteristics <sup>1</sup>	Medical Product				Covariate Balance	
	Corticosteroid and Azithromycin Initiators		Azithromycin Initiators		Absolute Difference	Standardized Difference
	Number/Mean	Percent/ Standard Deviation <sup>2</sup>	Number/Mean	Percent/ Standard Deviation <sup>2</sup>		
Unknown	14,568	32.4%	23,376	30.0%	2.403	0.052
Year <sup>*</sup>						
2021	14,179	31.6%	19,041	24.5%	7.104	0.159
2022	26,195	58.3%	48,917	62.8%	-4.520	-0.093
2023	4,556	10.1%	9,908	12.7%	-2.584	-0.081
<b>Health Characteristics</b>						
Adapted Diabetes Complications Severity Index(aDCSI) <sup>*,4</sup>	1.4	1.6	1.5	1.7	-0.115	-0.069
Adapted Diabetes Complications Severity Index (aDCSI) categories						
0	19,869	44.2%	32,120	41.3%	2.972	0.060
1	7,797	17.4%	14,090	18.1%	-0.742	-0.019
2	7,522	16.7%	13,220	17.0%	-0.236	-0.006
3+	9,742	21.7%	18,436	23.7%	-1.994	-0.048
Claims-Based frailty index <sup>*5</sup>	0.2	0.0	0.2	0.0	-0.001	-0.023
Combined comorbidity score <sup>*6</sup>	1.7	2.3	1.9	2.4	-0.142	-0.060
Nicotine Dependence (Smoking) <sup>*</sup>	6,959	15.5%	10,574	13.6%	1.909	0.054
Obesity <sup>*</sup>	15,319	34.1%	24,556	31.5%	2.559	0.055
Nephropathy <sup>*</sup>	7,929	17.6%	15,356	19.7%	-2.074	-0.053
Neuropathy <sup>*</sup>	1,624	3.6%	3,102	4.0%	-0.369	-0.019
Retinopathy <sup>*</sup>	2,027	4.5%	4,015	5.2%	-0.645	-0.030
Hospitalized Myocardial infarction <sup>*</sup>	164	0.4%	331	0.4%	-0.060	-0.010
Hospitalized Stroke/Transient Ischemic Attack <sup>*</sup>	143	0.3%	257	0.3%	-0.012	-0.002
Peripheral vascular disease <sup>*</sup>	3,238	7.2%	6,182	7.9%	-0.733	-0.028

**Table 1a. Aggregated Unadjusted Characteristics of Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

Patient Characteristics <sup>1</sup>	Medical Product				Covariate Balance	
	Corticosteroid and Azithromycin Initiators		Azithromycin Initiators		Absolute Difference	Standardized Difference
	Number/Mean	Percent/ Standard Deviation <sup>2</sup>	Number/Mean	Percent/ Standard Deviation <sup>2</sup>		
Outpatient Diabetic Ketoacidosis*	47	0.1%	89	0.1%	-0.010	-0.003
Asthma*	3,377	7.5%	4,975	6.4%	1.127	0.044
COPD*	5,479	12.2%	7,087	9.1%	3.093	0.100
Heart Failure*	4,834	10.8%	8,786	11.3%	-0.525	-0.017
Hypertension*	34,947	77.8%	61,536	79.0%	-1.247	-0.030
Cancer*	5,560	12.4%	10,492	13.5%	-1.100	-0.033
Chronic kidney disease*	17,772	39.6%	33,248	42.7%	-3.144	-0.064
Hyperlipidemia*	32,795	73.0%	58,320	74.9%	-1.907	-0.043
Psychosis or psychotic disorder*	661	1.5%	1,171	1.5%	-0.033	-0.003
Rheumatological and inflammatory disease*	3,319	7.4%	6,019	7.7%	-0.343	-0.013
Chronic liver disease*	2,448	5.4%	4,704	6.0%	-0.593	-0.025
Coronary artery disease*	10,853	24.2%	19,508	25.1%	-0.898	-0.021
Cerebrovascular disease*	3,917	8.7%	7,516	9.7%	-0.934	-0.032
Outpatient COVID Diagnosis	43,647	97.1%	75,190	96.6%	0.581	0.033
Positive Outpatient SARS-COV-2 PCR Test	2,496	5.6%	4,581	5.9%	-0.328	-0.014
<b>Medical Product Use</b>						
Metformin*	24,986	55.6%	43,787	56.2%	-0.623	-0.013
Insulin*	6,317	14.1%	12,942	16.6%	-2.561	-0.071
Sulfonylureas*	8,888	19.8%	16,471	21.2%	-1.371	-0.034
DPP-4 Inhibitors*	2,796	6.2%	5,942	7.6%	-1.408	-0.055
GLP-1 agonists*	6,547	14.6%	11,707	15.0%	-0.463	-0.013
SGLT-2 Inhibitors*	5,284	11.8%	10,513	13.5%	-1.741	-0.052
Thiazolidinediones*	2,422	5.4%	4,248	5.5%	-0.065	-0.003

**Table 1a. Aggregated Unadjusted Characteristics of Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

Patient Characteristics <sup>1</sup>	Medical Product				Covariate Balance	
	Corticosteroid and Azithromycin Initiators		Azithromycin Initiators		Absolute Difference	Standardized Difference
	Number/Mean	Percent/ Standard Deviation <sup>2</sup>	Number/Mean	Percent/ Standard Deviation <sup>2</sup>		
Meglitinides*	257	0.6%	686	0.9%	-0.309	-0.036
Alpha-glucosidase inhibitors*	90	0.2%	225	0.3%	-0.089	-0.018
Paxlovid*	1,180	2.6%	3,298	4.2%	-1.609	-0.088
Remdesivir*	*****	0.0%	*****	0.0%	0.004	0.004
Molnupiravir*	220	0.5%	622	0.8%	-0.309	-0.039
Hydroxychloroquine*	269	0.6%	485	0.6%	-0.024	-0.003
ACE Inhibitors*	14,396	32.0%	23,849	30.6%	1.413	0.030
Angiotensin receptor blockers*	14,382	32.0%	26,778	34.4%	-2.380	-0.051
Loop diuretics*	6,624	14.7%	11,070	14.2%	0.526	0.015
Other diuretics*	8,874	19.8%	14,853	19.1%	0.676	0.017
Statins*	29,957	66.7%	54,032	69.4%	-2.716	-0.058
Beta Blockers*	17,816	39.7%	31,717	40.7%	-1.080	-0.022
Calcium Channel Blockers*	12,421	27.6%	22,963	29.5%	-1.845	-0.041
<b>Health Service Utilization Intensity Metrics</b>						
Mean number of ambulatory encounters*	10.2	11.9	11.4	13.6	-1.180	-0.092
Mean number of emergency room encounters*	0.3	0.8	0.3	0.8	-0.016	-0.021
Mean number of inpatient hospital encounters*	0.0	0.2	0.0	0.3	-0.002	-0.008
Mean number of non-acute institutional encounters	0.0	NaN	0.0	NaN	NaN	NaN
Mean number of other ambulatory encounters*	3.1	7.6	3.5	8.3	-0.465	-0.058
Mean number of filled prescriptions*	21.3	18.6	21.9	19.5	-0.651	-0.034
Mean number of generics dispensed*	8.6	4.5	8.7	4.7	-0.161	-0.035
Mean number of unique drug classes dispensed*	8.0	4.2	8.1	4.2	-0.084	-0.020
Mean number of outpatient hyperglycemiadiagnoses*	0.6	2.1	0.7	2.3	-0.058	-0.026

**Table 1a. Aggregated Unadjusted Characteristics of Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

Patient Characteristics <sup>1</sup>	Medical Product				Covariate Balance	
	Corticosteroid and Azithromycin Initiators		Azithromycin Initiators		Absolute Difference	Standardized Difference
	Number/Mean	Percent/ Standard Deviation <sup>2</sup>	Number/Mean	Percent/ Standard Deviation <sup>2</sup>		
Mean number of unique oral antidiabetics*	1.3	1.1	1.4	1.2	-0.096	-0.083

\*Covariate included in the propensity score logistic regression model.

<sup>1</sup>Covariates in blue show a standardized difference greater than 0.1.

<sup>2</sup>Value represents standard deviation where no % follows the value.

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

<sup>4</sup>Chang H-Y, Weiner JP, Richards TM, Bleich SN, Segal JB. Validating the adapted Diabetes Complications Severity Index in claims data. *Am J Manag Care.* 2012;18(11):721-726.

<sup>5</sup>Kim DH, Schneeweiss S, Glynn RJ, Lipsitz LA, Rockwood K, Avorn J. Measuring frailty in Medicare data: development and validation of a claims-based frailty index. *J Gerontol A Biol Sci Med Sci.* 2018;73(7):980-987.

<sup>6</sup>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. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. *Med Care.* 2017;55(12):1046-1051.

NaN: Not a number

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

**Table 1b. Aggregated Adjusted Characteristics of Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.05) in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

Patient Characteristics <sup>1</sup>	Medical Product				Covariate Balance	
	Corticosteroid and Azithromycin Initiators		Azithromycin Initiators		Absolute Difference	Standardized Difference
	Number/Mean	Percent/ Standard Deviation <sup>2</sup>	Number/Mean	Percent/ Standard Deviation <sup>2</sup>		
Unique patients	44,610	99.3%	44,610	57.3%	N/A	N/A
<b>Demographic Characteristics</b>						
Age (years)	67.5	10.5	67.6	10.5	-0.077	-0.007
Age						
18-44 years	2,846	6.4%	2,805	6.3%	0.092	0.004
45-64 years	11,873	26.6%	11,924	26.7%	-0.114	-0.003
65-74 years	17,153	38.5%	17,178	38.5%	-0.056	-0.001
75-79 years	6,287	14.1%	6,260	14.0%	0.061	0.002
≥ 80 years	6,451	14.5%	6,443	14.4%	0.018	0.001
Sex <sup>*</sup>						
Female	22,934	51.4%	22,851	51.2%	0.186	0.004
Male	21,676	48.6%	21,759	48.8%	-0.186	-0.004
Race <sup>3</sup>						
American Indian or Alaska Native	136	0.3%	166	0.4%	-0.067	-0.012
Asian	614	1.4%	1,258	2.8%	-1.444	-0.101
Black or African American	2,811	6.3%	3,583	8.0%	-1.731	-0.067
Multi-racial	155	0.3%	194	0.4%	-0.087	-0.014
Native Hawaiian or Other Pacific Islander	98	0.2%	138	0.3%	-0.090	-0.017
Unknown	13,277	29.8%	13,931	31.2%	-1.466	-0.032
White	27,519	61.7%	25,340	56.8%	4.885	0.100
Hispanic origin						
Yes	1,236	2.8%	1,466	3.3%	-0.516	-0.030
No	28,986	65.0%	28,373	63.6%	1.374	0.029
Unknown	14,388	32.3%	14,771	33.1%	-0.859	-0.018
Year <sup>*</sup>						
2021	13,941	31.3%	13,924	31.2%	0.038	0.001
2022	26,118	58.5%	26,170	58.7%	-0.117	-0.002
2023	4,551	10.2%	4,516	10.1%	0.078	0.003



**Table 1b. Aggregated Adjusted Characteristics of Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.05) in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

Patient Characteristics <sup>1</sup>	Medical Product				Covariate Balance	
	Corticosteroid and Azithromycin Initiators		Azithromycin Initiators		Absolute Difference	Standardized Difference
	Number/Mean	Percent/ Standard Deviation <sup>2</sup>	Number/Mean	Percent/ Standard Deviation <sup>2</sup>		
<b>Health Characteristics</b>						
Adapted Diabetes Complications Severity Index(aDCSI) <sup>*,4</sup>	1.4	1.6	1.4	1.6	-0.000	-0.000
Adapted Diabetes Complications Severity Index (aDCSI) categories						
0	19,747	44.3%	19,705	44.2%	0.094	0.002
1	7,736	17.3%	7,927	17.8%	-0.428	-0.011
2	7,476	16.8%	7,423	16.6%	0.119	0.003
3+	9,651	21.6%	9,555	21.4%	0.215	0.005
Claims-Based frailty index <sup>*,5</sup>	0.2	0.0	0.2	0.0	-0.000	-0.001
Combined comorbidity score <sup>*,6</sup>	1.7	2.3	1.7	2.3	-0.009	-0.004
Nicotine Dependence (Smoking) <sup>*</sup>	6,821	15.3%	6,822	15.3%	-0.002	-0.000
Obesity <sup>*</sup>	15,153	34.0%	15,211	34.1%	-0.130	-0.003
Nephropathy <sup>*</sup>	7,885	17.7%	7,869	17.6%	0.036	0.001
Neuropathy <sup>*</sup>	1,605	3.6%	1,622	3.6%	-0.038	-0.002
Retinopathy <sup>*</sup>	2,022	4.5%	2,000	4.5%	0.049	0.002
Hospitalized Myocardial infarction <sup>*</sup>	162	0.4%	169	0.4%	-0.016	-0.003
Hospitalized Stroke/Transient Ischemic Attack <sup>*</sup>	142	0.3%	128	0.3%	0.031	0.006
Peripheral vascular disease <sup>*</sup>	3,195	7.2%	3,206	7.2%	-0.025	-0.001
Outpatient Diabetic Ketoacidosis <sup>*</sup>	45	0.1%	42	0.1%	0.007	0.002
Asthma <sup>*</sup>	3,291	7.4%	3,323	7.4%	-0.072	-0.003
COPD <sup>*</sup>	5,282	11.8%	5,201	11.7%	0.182	0.006
Heart Failure <sup>*</sup>	4,781	10.7%	4,795	10.7%	-0.031	-0.001
Hypertension <sup>*</sup>	34,682	77.7%	34,659	77.7%	0.052	0.001
Cancer <sup>*</sup>	5,532	12.4%	5,547	12.4%	-0.034	-0.001
Chronic kidney disease <sup>*</sup>	17,682	39.6%	17,656	39.6%	0.058	0.001
Hyperlipidemia <sup>*</sup>	32,569	73.0%	32,545	73.0%	0.054	0.001

**Table 1b. Aggregated Adjusted Characteristics of Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.05) in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

Patient Characteristics <sup>1</sup>	Medical Product				Covariate Balance	
	Corticosteroid and Azithromycin Initiators		Azithromycin Initiators		Absolute Difference	Standardized Difference
	Number/Mean	Percent/ Standard Deviation <sup>2</sup>	Number/Mean	Percent/ Standard Deviation <sup>2</sup>		
Psychosis or psychotic disorder*	654	1.5%	630	1.4%	0.054	0.005
Rheumatological and inflammatory disease*	3,283	7.4%	3,377	7.6%	-0.211	-0.008
Chronic liver disease*	2,431	5.4%	2,428	5.4%	0.007	0.000
Coronary artery disease*	10,753	24.1%	10,740	24.1%	0.029	0.001
Cerebrovascular disease*	3,891	8.7%	3,858	8.6%	0.074	0.003
Outpatient COVID Diagnosis	43,349	97.2%	42,856	96.1%	1.105	0.061
Positive Outpatient SARS-COV-2 PCR Test	2,461	5.5%	2,992	6.7%	-1.190	-0.050
<b>Medical Product Use</b>						
Metformin*	24,850	55.7%	24,630	55.2%	0.493	0.010
Insulin*	6,300	14.1%	6,354	14.2%	-0.121	-0.003
Sulfonylureas*	8,850	19.8%	8,785	19.7%	0.146	0.004
DPP-4 Inhibitors*	2,784	6.2%	2,765	6.2%	0.043	0.002
GLP-1 agonists*	6,502	14.6%	6,524	14.6%	-0.049	-0.001
SGLT-2 Inhibitors*	5,266	11.8%	5,217	11.7%	0.110	0.003
Thiazolidinediones*	2,406	5.4%	2,433	5.5%	-0.061	-0.003
Meglitinides*	257	0.6%	273	0.6%	-0.036	-0.005
Alpha-glucosidase inhibitors*	90	0.2%	80	0.2%	0.022	0.005
Paxlovid*	1,180	2.6%	1,187	2.7%	-0.016	-0.001
Remdesivir*	*****	0.0%	*****	0.0%	-0.002	-0.003
Molnupiravir*	220	0.5%	220	0.5%	0.000	0.000
Hydroxychloroquine*	267	0.6%	261	0.6%	0.013	0.002
ACE Inhibitors*	14,272	32.0%	14,345	32.2%	-0.164	-0.004
Angiotensin receptor blockers*	14,300	32.1%	14,256	32.0%	0.099	0.002
Loop diuretics*	6,510	14.6%	6,542	14.7%	-0.072	-0.002
Other diuretics*	8,789	19.7%	8,730	19.6%	0.132	0.003
Statins*	29,778	66.8%	29,829	66.9%	-0.114	-0.002

**Table 1b. Aggregated Adjusted Characteristics of Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.05) in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

Patient Characteristics <sup>1</sup>	Medical Product				Covariate Balance	
	Corticosteroid and Azithromycin Initiators		Azithromycin Initiators		Absolute Difference	Standardized Difference
	Number/Mean	Percent/ Standard Deviation <sup>2</sup>	Number/Mean	Percent/ Standard Deviation <sup>2</sup>		
Beta Blockers*	17,665	39.6%	17,638	39.5%	0.061	0.001
Calcium Channel Blockers*	12,352	27.7%	12,305	27.6%	0.105	0.002
<b>Health Service Utilization Intensity Metrics</b>						
Mean number of ambulatory encounters*	10.2	11.9	10.2	11.2	-0.014	-0.001
Mean number of emergency room encounters*	0.3	0.8	0.3	0.7	-0.001	-0.001
Mean number of inpatient hospital encounters*	0.0	0.2	0.0	0.2	-0.001	-0.003
Mean number of non-acute institutional encounters	0.0	NaN	0.0	NaN	NaN	NaN
Mean number of other ambulatory encounters*	3.1	7.6	3.1	6.9	-0.001	-0.000
Mean number of filled prescriptions*	21.2	18.5	21.2	18.2	0.014	0.001
Mean number of generics dispensed*	8.6	4.5	8.5	4.6	0.019	0.004
Mean number of unique drug classes dispensed*	8.0	4.1	7.9	4.2	0.016	0.004
Mean number of outpatient hyperglycemiadiagnoses*	0.6	2.2	0.6	2.0	0.005	0.002
Mean number of unique oral antidiabetics*	1.3	1.1	1.3	1.1	0.004	0.003

\* Covariate included in the propensity score logistic regression model.

<sup>1</sup> Covariates in blue show a standardized difference greater than 0.1.

<sup>2</sup> Value represents standard deviation where no % follows the value.

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

<sup>4</sup> Chang H-Y, Weiner JP, Richards TM, Bleich SN, Segal JB. Validating the adapted Diabetes Complications Severity Index in claims data. Am J Manag Care. 2012;18(11):721-726.

<sup>5</sup> Kim DH, Schneeweiss S, Glynn RJ, Lipsitz LA, Rockwood K, Avorn J. Measuring frailty in Medicare data: development and validation of a claims-based frailty index. J Gerontol A Biol Sci Med Sci. 2018;73(7):980-987.

<sup>6</sup> 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. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. Med Care. 2017;55(12):1046-1051.

NaN: Not a number

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

**Table 2. Effect Estimates for Severe Hyperglycemia Diagnosed in Inpatient or Emergency Department (IP\*/ED) Care Settings among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023, by Analysis Type**

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years
<b>Site-Adjusted Analysis</b>								
Corticosteroid and Azithromycin Initiators	44,930	3,506.58	28.51	0.08	1,599	456.00	35.59	173.79
Azithromycin Initiators	77,866	6,126.70	28.74	0.08	1,729	282.21	22.20	
<b>nconditional Analysis; Caliper= 0.05</b>								
Corticosteroid and Azithromycin Initiators	44,610	3,481.56	28.51	0.08	1,585	455.26	35.53	154.92
Azithromycin Initiators	44,610	3,516.12	28.79	0.08	1,056	300.33	23.67	

IP\*/ED: Inpatient Any Position/Emergency Department

**Table 2. Effect Estimates for Severe Hyperglycemia Diagnosed in Inpatient or Emergency Department (IP\*/ED) Care Settings among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database from May 1, 2021 to October 1, 2023, by Analysis Type**

<b>Medical Product</b>	<b>Risk Difference per 1,000 New Users</b>	<b>Hazard Ratio (95% Confidence Interval)</b>	<b>Wald P-Value</b>
<b>Site-Adjusted Analysis</b>			
Corticosteroid and Azithromycin Initiators	13.38	1.62 (1.51, 1.73)	<0.001
Azithromycin Initiators			
<b>Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05</b>			
Corticosteroid and Azithromycin Initiators	11.86	1.51 (1.39, 1.63)	<0.001
Azithromycin Initiators			

IP\*/ED: Inpatient Any Position/Emergency Department

**Table 3. Effect Estimates for Severe Hyperglycemia Diagnosed in Inpatient Primary Position (IPP) Care Setting among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023, by Analysis Type**

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years
<b>Site-Adjusted Analysis</b>								
Corticosteroid and Azithromycin Initiators	44,930	*****	*****	*****	*****	1.95	*****	0.98
Azithromycin Initiators	77,866	*****	*****	*****	*****	0.96	*****	
<b>Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05</b>								
Corticosteroid and Azithromycin Initiators	44,610	*****	*****	*****	*****	1.96	*****	1.68
Azithromycin Initiators	44,610	*****	*****	*****	*****	0.28	*****	

IP\*/ED: Inpatient Any Position/Emergency Department; IPP: Inpatient Primary Position

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

**Table 3. Effect Estimates for Severe Hyperglycemia Diagnosed in Inpatient Primary Position (IPP) Care Setting among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database from May 1, 2021 to October 1, 2023, by Analysis Type**

Medical Product	Risk Difference per 1,000	Hazard Ratio	Wald P-Value
	New Users	(95% Confidence Interval)	
<b>Site-Adjusted Analysis</b>			
Corticosteroid and Azithromycin Initiators	0.08	1.98 (0.66, 5.91)	0.22
Azithromycin Initiators			
<b>Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05</b>			
Corticosteroid and Azithromycin Initiators	0.13	7.01 (0.86, 56.98)	0.069
Azithromycin Initiators			

IP\*/ED: Inpatient Any Position/Emergency Department; IPP: Inpatient Primary Position

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

**Table 4. Sequential Statistics for Severe Hyperglycemia Diagnosed in Inpatient or Emergency Department (IP\*/ED) Care Settings among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

Look	Exposed Cases	Reference Cases	Cumulative Exposed Cases	Cumulative Reference Cases	Expected Exposed Cases Under Null	Risk Ratio	Log Likelihood Ratio	Target Alpha	Actual Alpha	Exposed Cases Required to	Reject Null?
1	1,574	1,044	1,574	1,044	1,309	1.51	54.02	0.05	0.048	1,352	Yes
2	11	12	1,585	1,056	1,320.5	1.51	53.34	N/A	N/A	N/A	Yes

IP\*/ED: Inpatient Any Position/Emergency Department

N/A: Not applicable



**Table 5. Sequential Statistics for Severe Hyperglycemia Diagnosed in Inpatient Primary Position (IPP) Care Setting among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

Look	Exposed Cases	Reference Cases	Cumulative Exposed Cases	Cumulative Reference Cases	Expected Exposed Cases Under Null	Risk Ratio	Log Likelihood Ratio	Target Alpha	Actual Alpha	Exposed Cases Required to Reject Null	Reject Null?
1	*****	*****	*****	*****	*****	7.01	2.53	0	0	N/A	No
2	0	0	*****	*****	*****	7.01	2.53	0.05	0.0352	*****	Yes

IPP: Inpatient Primary Position

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

**Table 6. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

	Severe Hyperglycemia (IP*/ED)				Severe Hyperglycemia (IPP)			
	Corticosteroid and Azithromycin		Azithromycin Initiators		Corticosteroid and Azithromycin Initiators (IPP)		Azithromycin Initiators (IPP)	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<b>Members meeting enrollment and demographic requirements</b>								
Enrolled at any point during the query period	146,934,381	N/A	146,934,381	N/A	146,934,381	N/A	146,934,381	N/A
Had required coverage type (medical and/or drug coverage)	92,122,666	54,811,715	92,122,666	54,811,715	92,122,666	54,811,715	92,122,666	54,811,715
Enrolled during specified age range	81,912,445	10,210,221	81,912,445	10,210,221	81,912,445	10,210,221	81,912,445	10,210,221
Met demographic requirements (sex, race, and Hispanic origin)	81,871,870	40,575	81,871,870	40,575	81,871,870	40,575	81,871,870	40,575
<b>Members with a valid index event</b>								
Had any cohort-defining claim during the query period	9,414,639	72,457,231	9,414,639	72,457,231	9,414,639	72,457,231	9,414,639	72,457,231
Claim recorded during specified age range	9,361,037	53,602	9,361,037	53,602	9,361,037	53,602	9,361,037	53,602
<b>Members with required pre-index history</b>								
Had sufficient pre-index continuous enrollment	8,468,831	892,206	8,468,831	892,206	8,468,831	892,206	8,468,831	892,206
Met inclusion and exclusion criteria <sup>1</sup>	45,051	8,423,780	78,061	8,390,770	45,051	8,423,780	78,061	8,390,770
<i>Evidence of COVID-19 on days -30 to -15 before index</i>	N/A	3,544	N/A	3,522	N/A	3,544	N/A	3,522
<i>Evidence of prior azithromycin</i>	N/A	1,823,260	N/A	1,817,722	N/A	1,823,260	N/A	1,817,722
<i>Evidence of corticosteroids on index date</i>	N/A	N/A	N/A	2,816,556	N/A	N/A	N/A	2,816,556
<i>Evidence of corticosteroids prior to index date</i>	N/A	3,203,224	N/A	3,205,196	N/A	3,203,224	N/A	3,205,196
<i>Evidence of prior severe hyperglycemia</i>	N/A	161,917	N/A	161,610	N/A	161,917	N/A	161,610
<i>Evidence of hospitalization during 14 days before index</i>	N/A	235,660	N/A	235,455	N/A	235,660	N/A	235,455
<i>Evidence of institutional stay</i>	N/A	159,861	N/A	159,767	N/A	159,861	N/A	159,767
<i>Evidence of Type 1 diabetes</i>	N/A	101,138	N/A	100,965	N/A	101,138	N/A	100,965
<i>No evidence of outpatient COVID-19 during 14 days prior to index and no evidence of Type 2 diabetes</i>	N/A	N/A	N/A	8,297,204	N/A	N/A	N/A	8,297,204
<i>No evidence of outpatient COVID-19 during 14 days prior to index, Type 2 diabetes, and corticosteroids on the index date</i>	N/A	8,401,387	N/A	N/A	N/A	8,401,387	N/A	N/A
<b>Final cohort</b>								
Number of members	45,051	N/A	78,061	N/A	45,051	N/A	78,061	N/A
Number of episodes	45,051	N/A	78,061	N/A	45,051	N/A	78,061	N/A
<b>Members meeting comparative cohort eligibility requirements</b>								
Excluded due to prior initiation of other exposure group	44,930	117	77,866	174	44,930	117	77,866	174
Included in comparative analysis	44,610	320	44,610	33,256	44,610	320	44,610	33,256

**Table 6. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

	Severe Hyperglycemia (IP*/ED)				Severe Hyperglycemia (IPP)			
	Corticosteroid and Azithromycin		Azithromycin Initiators		Corticosteroid and Azithromycin Initiators (IPP)		Azithromycin Initiators (IPP)	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<b>Additional information</b>								
Number of events in comparative analysis	1,585	N/A	1,056	N/A	*****	N/A	*****	N/A

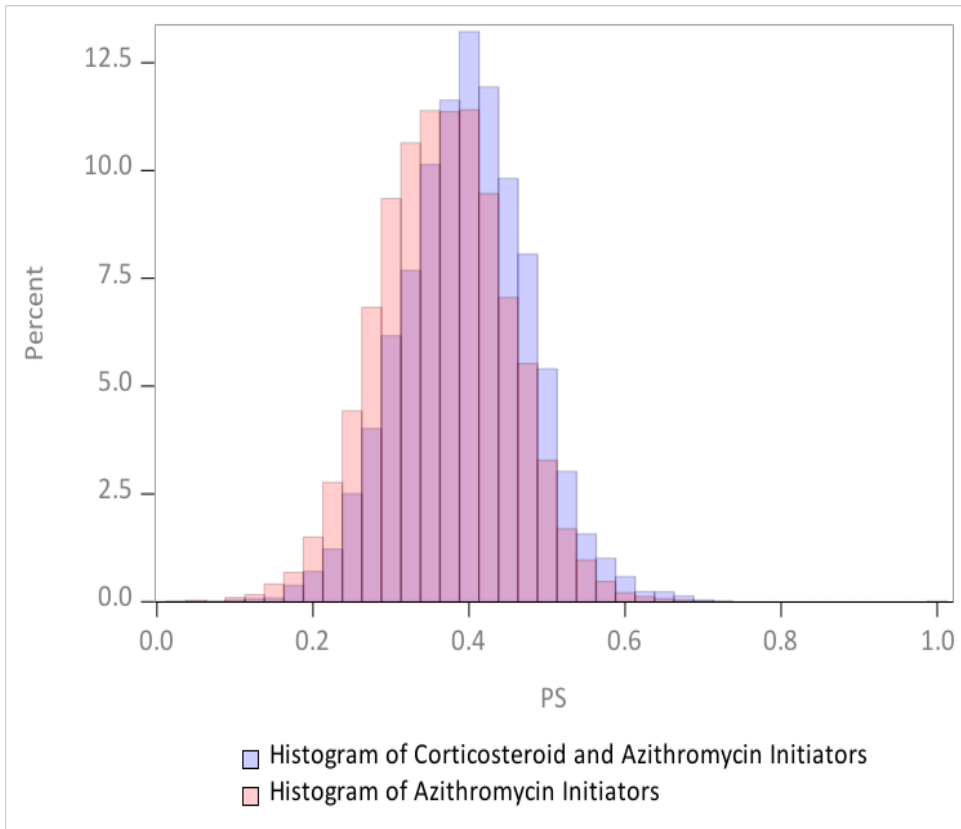
<sup>1</sup>Patients can meet multiple inclusion and/or exclusion criteria; therefore, the total number of patients excluded overall may not equal the sum of all patients in each criterion.

IP\*/ED: Inpatient Any Position/Emergency Department; IPP: Inpatient Primary Position

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

**Figure 1. Histograms Depicting Propensity Score Distributions Before and After Adjustment in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

Unadjusted Propensity Score Distribution



**Figure 1. Histograms Depicting Propensity Score Distributions Before and After Adjustment in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

Propensity Score Fixed Ratio 1:1 Adjusted Cohort, Matched Caliper = 0.05

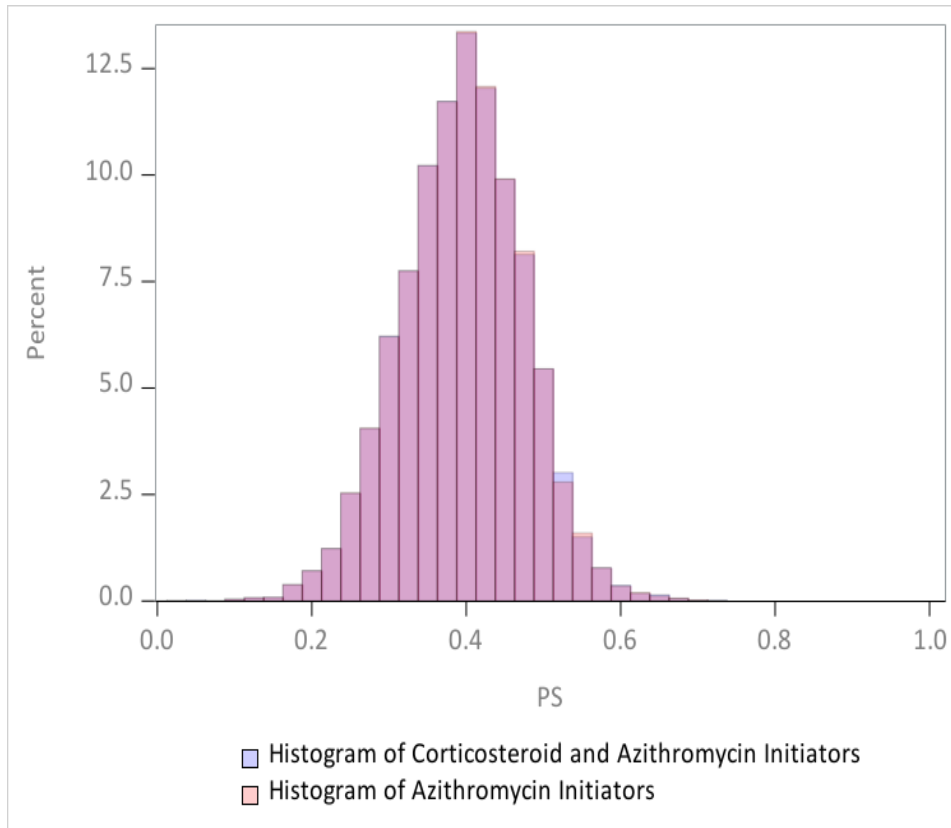
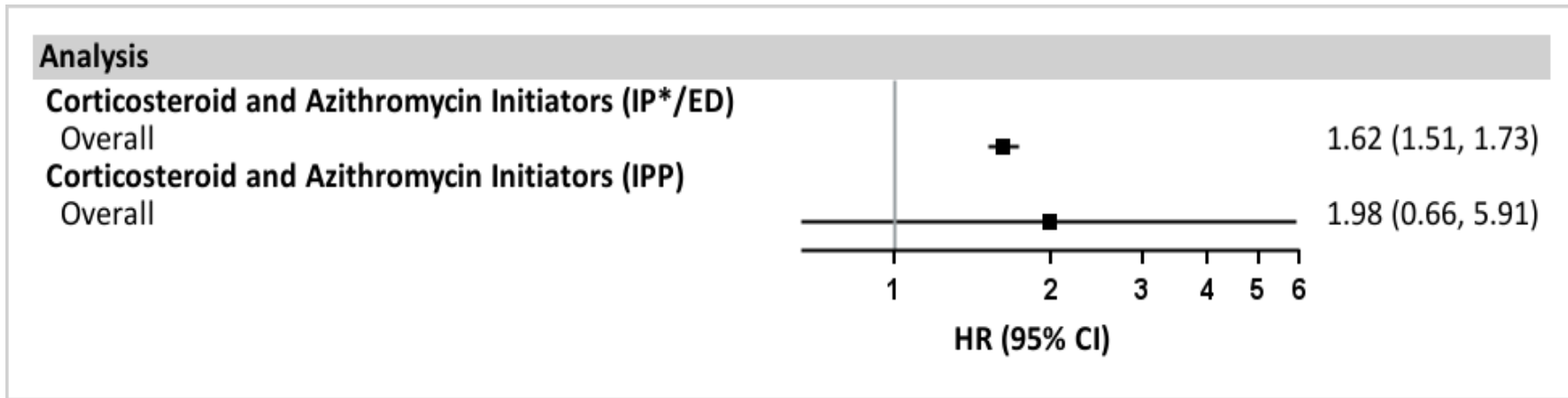
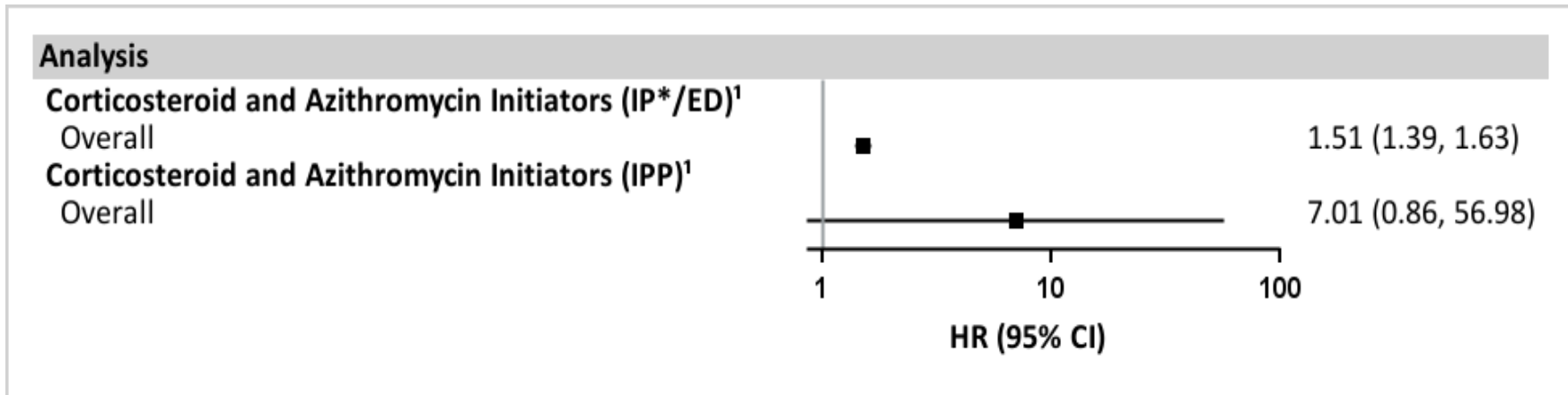


Figure 2a. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Site-Adjusted Analyses in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023



IP\*/ED: Inpatient Any Position/Emergency Department  
 IPP: Inpatient Primary Position

**Figure 2b. Forest Plot of Hazard Ratios (HR) and 95% Confidence Intervals (CI) for Propensity Score Matched Unconditional Analyses in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**

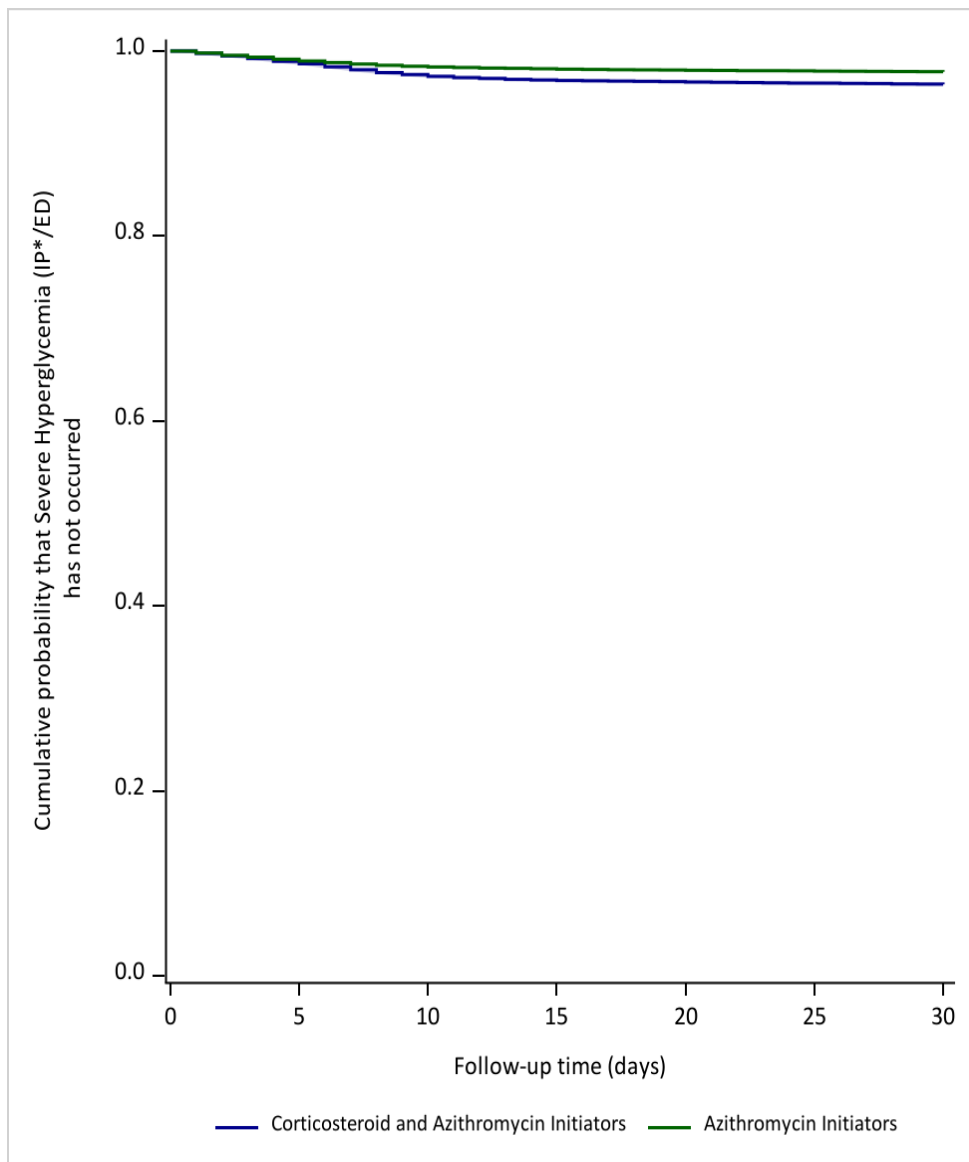


<sup>1</sup>Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper=0.05

IP\*/ED: Inpatient Any Position/Emergency Department

IPP: Inpatient Primary Position

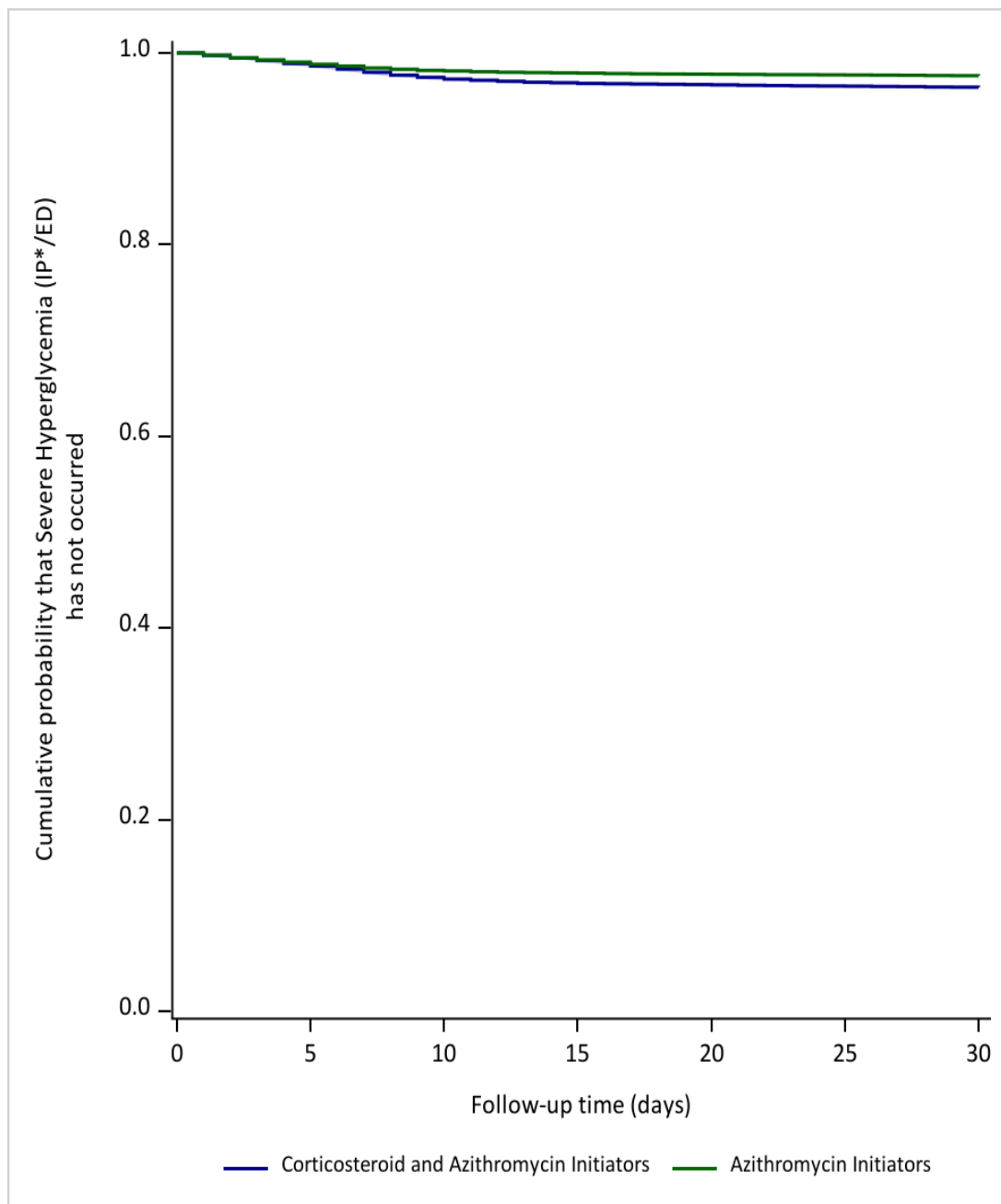
**Figure 3a. Aggregated Unadjusted Kaplan-Meier Estimate and 95% Confidence Interval of Severe Hyperglycemia (IP\*/ED) Not Occurring Among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**



IP\*/ED: Inpatient Any Position/Emergency Department

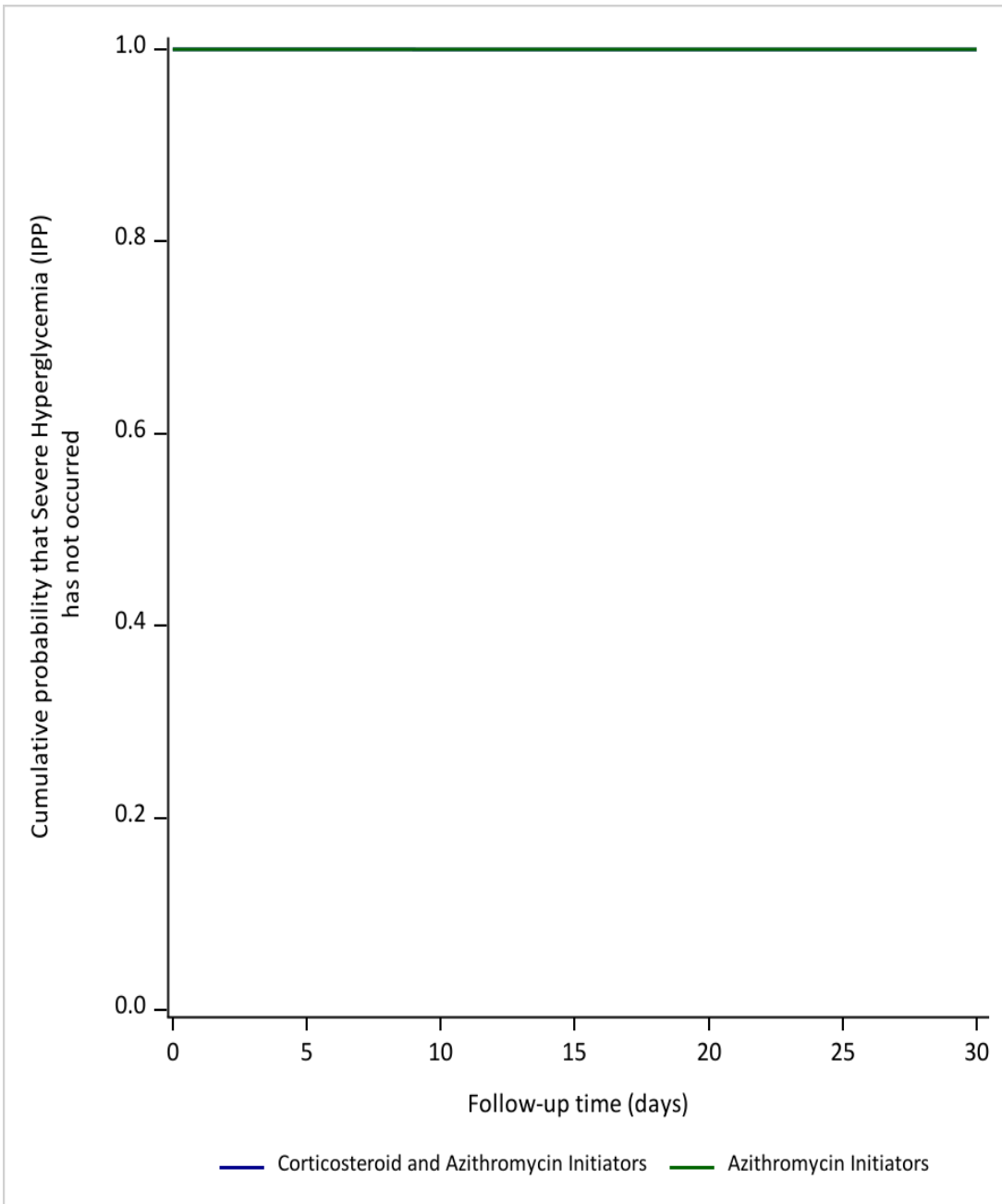


**Figure 3b. Aggregated Adjusted Kaplan-Meier Estimate and 95% Confidence Interval of Severe Hyperglycemia (IP\*/ED) Not Occurring Among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes from the Unconditional Matched Population after Corticosteroid and Azithromycin Initiators in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**



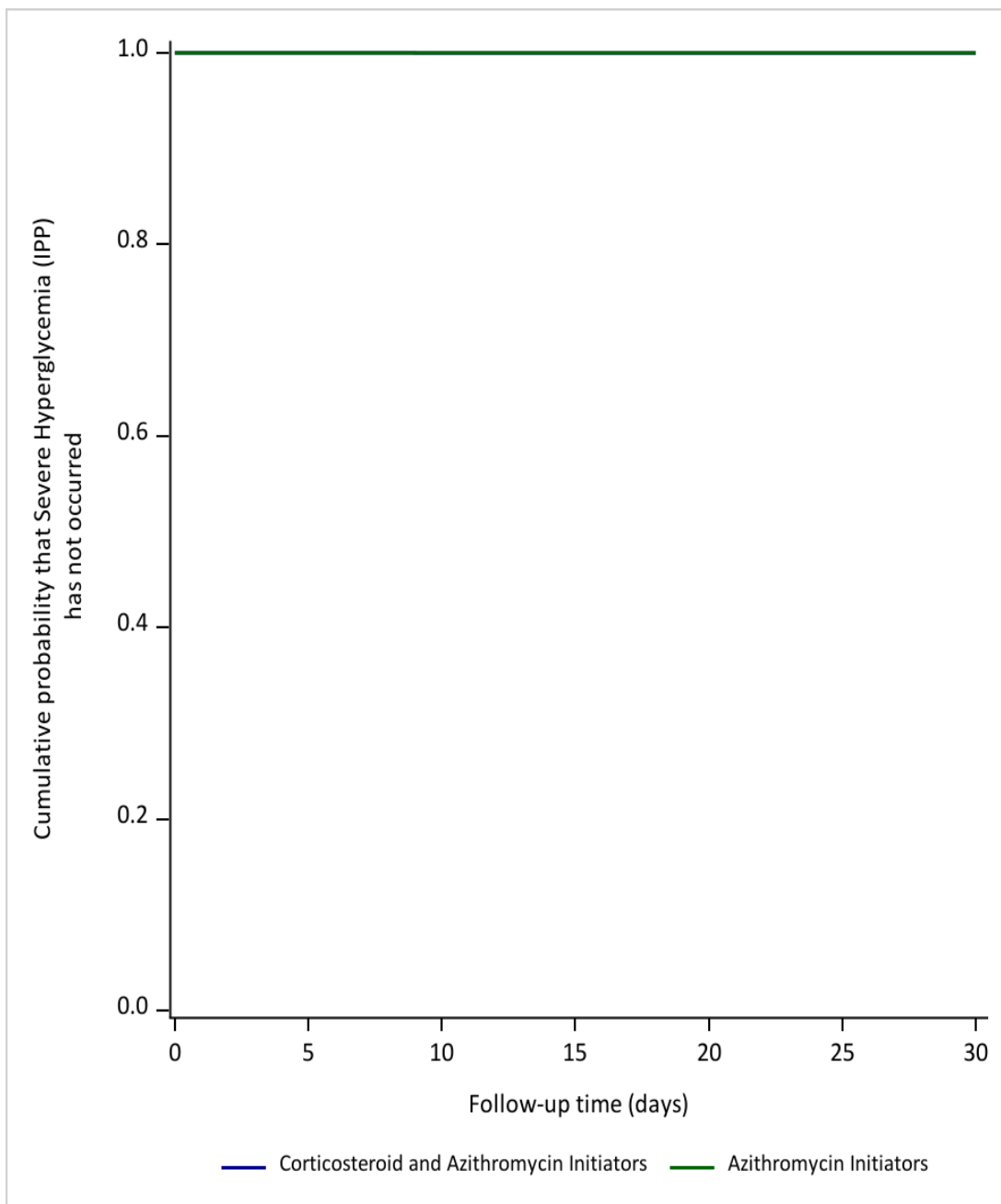
IP\*/ED: Inpatient Any Position/Emergency Department

**Figure 4a. Aggregated Unadjusted Kaplan-Meier Estimate and 95% Confidence Interval of Severe Hyperglycemia (IPP) Not Occurring Among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**



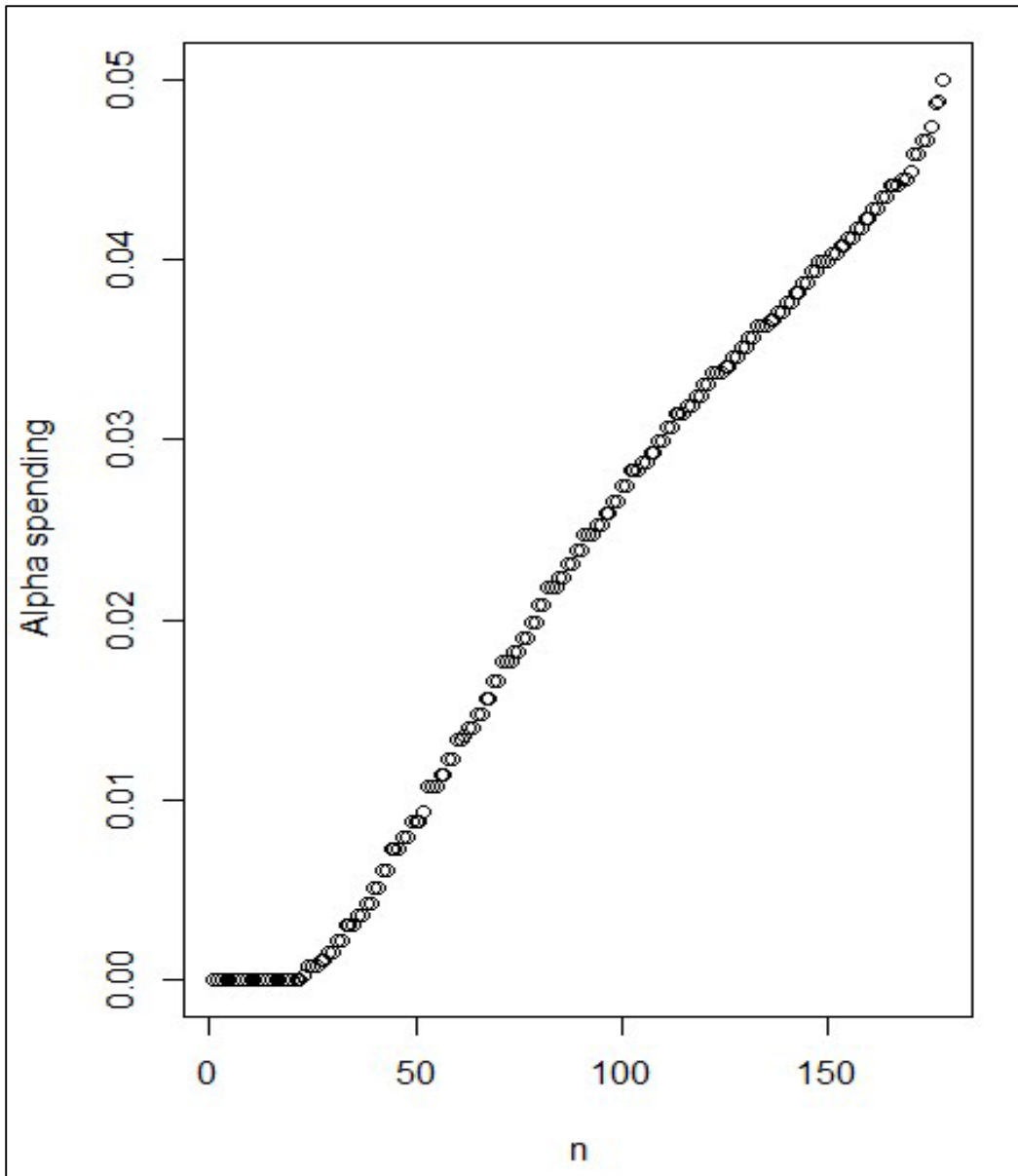
IPP: Inpatient Primary Position

**Figure 4b. Aggregated Adjusted Kaplan-Meier Estimate and 95% Confidence Interval of Severe Hyperglycemia (IPP) Not Occurring Among Corticosteroid and Azithromycin Initiators with COVID-19 and Type 2 Diabetes from the Unconditional Matched Population in the Sentinel Distributed Database (SDD) from May 1, 2021 to October 1, 2023**



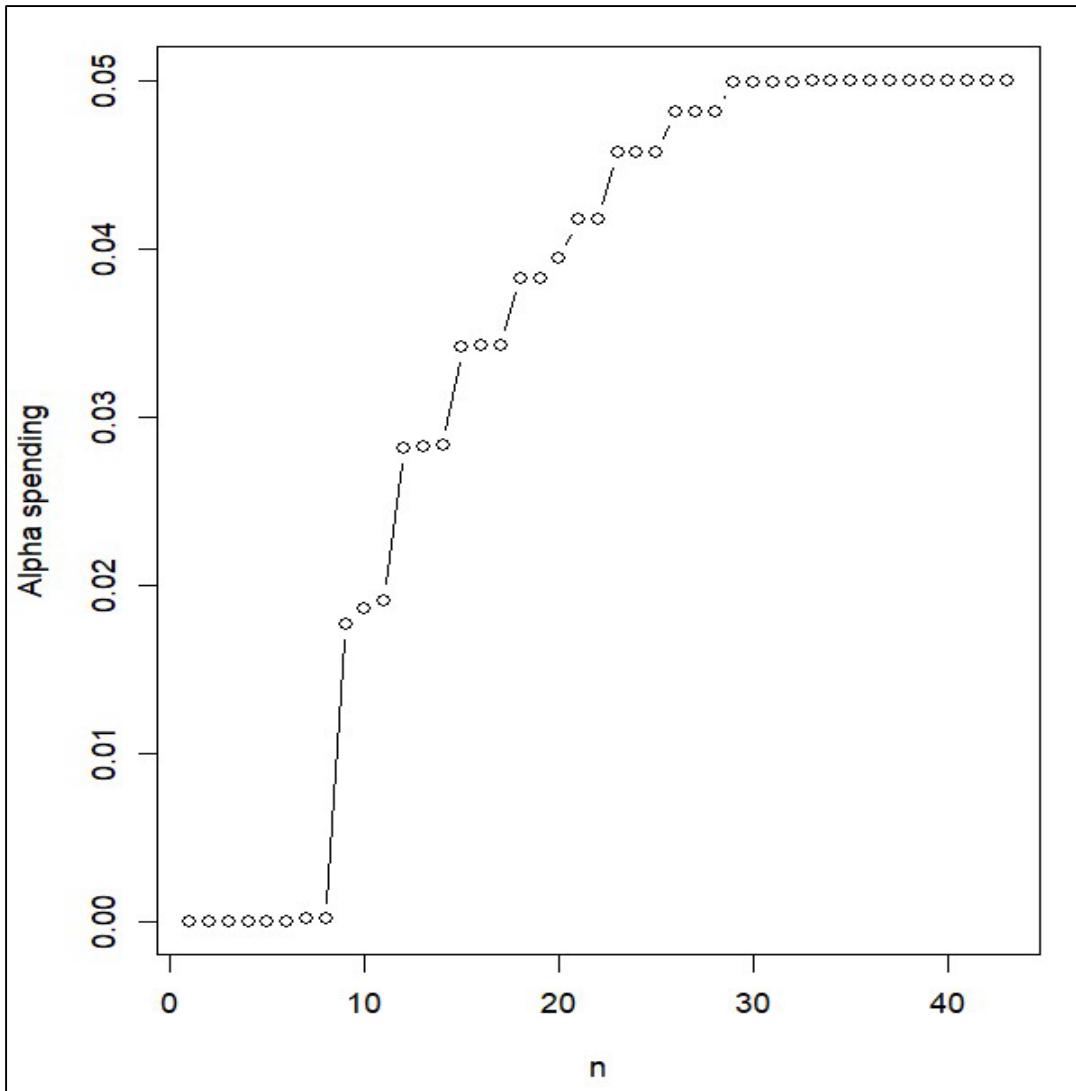
IPP: Inpatient Primary Position

Figure 5a. Optimal Alpha Spending Function for Sequential Analysis of Severe Hyperglycemia Diagnosed in Inpatient or Emergency Department (IP\*/ED) Care Settings with Target Risk Ratio of 1.5 and Target Power of 80%



IP\*/ED: Inpatient Any Position/Emergency Department  
n = number of observed cases in both exposure groups combined

**Figure 5b. Optimal Alpha Spending Function for Sequential Analysis of Severe Hyperglycemia Diagnosed in Inpatient Primary Position (IPP) Care Setting with Target Risk Ratio of 3 and Target Power of 80%**



IPP: Inpatient Primary Position  
 n = number of observed cases in both exposure groups combined

**Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (July 26, 2024)**

Masked DP ID	DP Start Date	DP End Date <sup>1</sup>	DP Follow Up End Date <sup>2</sup>
DP01	01/01/2008	8/31/2023	8/1/2023
DP02	01/01/2010	6/30/2023	5/31/2023
DP03	01/01/2006	6/30/2023	5/31/2023
DP04	01/01/2008	9/30/2023	8/31/2023
DP05	01/01/2007	10/31/2023	10/1/2023

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

<sup>2</sup>Follow Up End Date represents the last day a patient could contribute follow-up time to the analysis. For this sequential analyses, this is set to thirty days prior to the DP End Date based on database completeness.

**Appendix B. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Exposures in this Request**

Non-Proprietary	Proprietary
<b>Azithromycin</b>	
azithromycin	Zithromax
azithromycin	Zithromax TRI-PAK
azithromycin	Zithromax Z-Pak
azithromycin	azithromycin
<b>Corticosteroids</b>	
betamethasone acetate/betamethasone sodium phosphate	BSP-0820
betamethasone acetate/betamethasone sodium phosphate	Beta-1
betamethasone acetate/betamethasone sodium phosphate	Celestone Soluspan
betamethasone acetate/betamethasone sodium phosphate	Pod-Care 100C
betamethasone acetate/betamethasone sodium phosphate	ReadySharp Betamethasone
betamethasone acetate/betamethasone sodium phosphate	betamethasone acet,sod phos
betamethasone sodium phosph in sterile water for injection	betamethasone sod phosph-water
bupivacaine HCl/dexamethasone sodium phos in sterile water	bupivacaine-dexameth in water
cortisone acetate	cortisone
dexamethasone	DexPak 10 day
dexamethasone	DexPak 13 Day
dexamethasone	DexPak 6 Day
dexamethasone	Dexabliss
dexamethasone	Dexamethasone Intensol
dexamethasone	Dxevo
dexamethasone	Hemady
dexamethasone	HiDex
dexamethasone	TaperDex
dexamethasone	ZCort
dexamethasone	dexamethasone
dexamethasone sodium phosphate	ReadySharp dexamethasone
dexamethasone sodium phosphate	dexamethasone sodium phosphate
dexamethasone sodium phosphate in 0.9 % sodium chloride	dexamethasone-0.9 % sod. chlor
dexamethasone sodium phosphate/PF	Active Injection Kit D (PF)
dexamethasone sodium phosphate/PF	DoubleDex (PF)
dexamethasone sodium phosphate/PF	MAS Care-Pak (PF)
dexamethasone sodium phosphate/PF	dexamethasone sodium phos (PF)
dexamethasone sodium phosphate/lidocaine HCl	Lidocidex-I
hydrocortisone	Alkindi Sprinkle
hydrocortisone	Cortef
hydrocortisone	hydrocortisone
hydrocortisone sodium succinate	A-Hydrocort
hydrocortisone sodium succinate	Solu-Cortef
hydrocortisone sodium succinate/PF	Solu-Cortef Act-O-Vial (PF)
methylprednisolone	Medrol
methylprednisolone	Medrol (Pak)
methylprednisolone	Methylpred DP
methylprednisolone	methylprednisolone
methylprednisolone acetate	Depo-Medrol
methylprednisolone acetate	P-Care D40
methylprednisolone acetate	P-Care D80
methylprednisolone acetate	methylprednisolone acetate
methylprednisolone acetate in sodium chloride,iso-osmotic/PF	methylpred ac(PF)-NaCl,iso-osm
methylprednisolone sodium succinate	Solu-Medrol

**Appendix B. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Exposures in this Request**

<b>Non-Proprietary</b>	<b>Proprietary</b>
methylprednisolone sodium succinate	methylprednisolone sodium succ
methylprednisolone sodium succinate/PF	Solu-Medrol (PF)
prednisolone	Millipred
prednisolone	Millipred DP
prednisolone	prednisolone
prednisolone sodium phosphate	Orapred ODT
prednisolone sodium phosphate	Pediapred
prednisolone sodium phosphate	Veripred 20
prednisolone sodium phosphate	prednisolone sodium phosphate
prednisone	Prednisone Intensol
prednisone	Rayos
prednisone	prednisone
triamcinolone acetonide	Kenalog
triamcinolone acetonide	Kenalog-80
triamcinolone acetonide	P-Care K40
triamcinolone acetonide	P-Care K80
triamcinolone acetonide	Pod-Care 100K
triamcinolone acetonide	Pro-C-Dure 5
triamcinolone acetonide	Pro-C-Dure 6
triamcinolone acetonide	triamcinolone acetonide
triamcinolone acetonide/0.9% sodium chloride/PF	triamcinol ac (PF) in 0.9%NaCl
triamcinolone acetonide/lidocaine HCl	Lidocilone I
triamcinolone hexacetonide	Aristospan Intra-Articular
triamcinolone hexacetonide	Aristospan Intralesional
triamcinolone hexacetonide	Hexatrione



**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Inclusion Criteria in this Request**

Code	Description	Code Category	Code Type
<b>COVID-19 (Inclusion)</b>			
U07.1	COVID-19	Diagnosis	ICD-10-CM
<b>Type 2 Diabetes (Inclusion)</b>			
E11	Type 2 diabetes mellitus	Diagnosis	ICD-10-CM
E11.0	Type 2 diabetes mellitus with hyperosmolarity	Diagnosis	ICD-10-CM
E11.00	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E11.01	Type 2 diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E11.1	Type 2 diabetes mellitus with ketoacidosis	Diagnosis	ICD-10-CM
E11.10	Type 2 diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E11.11	Type 2 diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E11.2	Type 2 diabetes mellitus with kidney complications	Diagnosis	ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.3	Type 2 diabetes mellitus with ophthalmic complications	Diagnosis	ICD-10-CM
E11.31	Type 2 diabetes mellitus with unspecified diabetic retinopathy	Diagnosis	ICD-10-CM
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.32	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy	Diagnosis	ICD-10-CM
E11.321	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3211	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3212	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3213	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3219	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.329	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3291	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3292	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3293	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3299	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.33	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy	Diagnosis	ICD-10-CM

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Inclusion Criteria in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
E11.331	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3311	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3312	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3313	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3319	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.339	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3391	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3392	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3393	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3399	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.34	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy	Diagnosis	ICD-10-CM
E11.341	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3411	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3412	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3413	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3419	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.349	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3491	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3492	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3493	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3499	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.35	Type 2 diabetes mellitus with proliferative diabetic retinopathy	Diagnosis	ICD-10-CM
E11.351	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Inclusion Criteria in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
E11.3511	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3512	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3513	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3519	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.352	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula	Diagnosis	ICD-10-CM
E11.3521	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E11.3522	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E11.3523	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E11.3529	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E11.353	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula	Diagnosis	ICD-10-CM
E11.3531	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E11.3532	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E11.3533	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E11.3539	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E11.354	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment	Diagnosis	ICD-10-CM
E11.3541	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E11.3542	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E11.3543	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E11.3549	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Inclusion Criteria in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
E11.355	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy	Diagnosis	ICD-10-CM
E11.3551	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E11.3552	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E11.3553	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E11.3559	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E11.359	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3591	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3592	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3593	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3599	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.36	Type 2 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E11.37	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment	Diagnosis	ICD-10-CM
E11.37X1	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E11.37X2	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E11.37X3	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E11.37X9	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E11.39	Type 2 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E11.4	Type 2 diabetes mellitus with neurological complications	Diagnosis	ICD-10-CM
E11.40	Type 2 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E11.43	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E11.44	Type 2 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E11.5	Type 2 diabetes mellitus with circulatory complications	Diagnosis	ICD-10-CM
E11.51	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Inclusion Criteria in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
E11.52	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E11.59	Type 2 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E11.6	Type 2 diabetes mellitus with other specified complications	Diagnosis	ICD-10-CM
E11.61	Type 2 diabetes mellitus with diabetic arthropathy	Diagnosis	ICD-10-CM
E11.610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E11.618	Type 2 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E11.62	Type 2 diabetes mellitus with skin complications	Diagnosis	ICD-10-CM
E11.620	Type 2 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E11.621	Type 2 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E11.622	Type 2 diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E11.628	Type 2 diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E11.63	Type 2 diabetes mellitus with oral complications	Diagnosis	ICD-10-CM
E11.630	Type 2 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E11.638	Type 2 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E11.64	Type 2 diabetes mellitus with hypoglycemia	Diagnosis	ICD-10-CM
E11.641	Type 2 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E11.649	Type 2 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E11.69	Type 2 diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E11.8	Type 2 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E11.9	Type 2 diabetes mellitus without complications	Diagnosis	ICD-10-CM
O24.1	Pre-existing type 2 diabetes mellitus, in pregnancy, childbirth and the puerperium	Diagnosis	ICD-10-CM
O24.11	Pre-existing type 2 diabetes mellitus, in pregnancy	Diagnosis	ICD-10-CM
O24.111	Pre-existing type 2 diabetes mellitus, in pregnancy, first trimester	Diagnosis	ICD-10-CM
O24.112	Pre-existing type 2 diabetes mellitus, in pregnancy, second trimester	Diagnosis	ICD-10-CM
O24.113	Pre-existing type 2 diabetes mellitus, in pregnancy, third trimester	Diagnosis	ICD-10-CM
O24.119	Pre-existing type 2 diabetes mellitus, in pregnancy, unspecified trimester	Diagnosis	ICD-10-CM
O24.12	Pre-existing type 2 diabetes mellitus, in childbirth	Diagnosis	ICD-10-CM
O24.13	Pre-existing type 2 diabetes mellitus, in the puerperium	Diagnosis	ICD-10-CM
<b>Type 1 Diabetes (Exclusion)</b>			
250.01	Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.03	Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.11	Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.13	Diabetes with ketoacidosis, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.21	Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.23	Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.31	Diabetes with other coma, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Inclusion Criteria in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
250.33	Diabetes with other coma, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.41	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.43	Diabetes with renal manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.51	Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.53	Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.61	Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.63	Diabetes with neurological manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.71	Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.73	Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.81	Diabetes with other specified manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.83	Diabetes with other specified manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.91	Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.93	Diabetes with unspecified complication, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
E10	Type 1 diabetes mellitus	Diagnosis	ICD-10-CM
E10.1	Type 1 diabetes mellitus with ketoacidosis	Diagnosis	ICD-10-CM
E10.10	Type 1 diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E10.11	Type 1 diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E10.2	Type 1 diabetes mellitus with kidney complications	Diagnosis	ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E10.3	Type 1 diabetes mellitus with ophthalmic complications	Diagnosis	ICD-10-CM
E10.31	Type 1 diabetes mellitus with unspecified diabetic retinopathy	Diagnosis	ICD-10-CM
E10.311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.32	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy	Diagnosis	ICD-10-CM
E10.321	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3211	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM



**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Inclusion Criteria in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
E10.3212	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3213	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3219	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.329	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3291	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3292	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3293	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3299	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.33	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy	Diagnosis	ICD-10-CM
E10.331	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3311	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3312	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3313	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3319	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.339	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3391	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3392	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3393	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3399	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.34	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy	Diagnosis	ICD-10-CM
E10.341	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3411	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Inclusion Criteria in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
E10.3412	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3413	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3419	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.349	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3491	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3492	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3493	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3499	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.35	Type 1 diabetes mellitus with proliferative diabetic retinopathy	Diagnosis	ICD-10-CM
E10.351	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3511	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3512	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3513	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3519	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.352	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula	Diagnosis	ICD-10-CM
E10.3521	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E10.3522	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E10.3523	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E10.3529	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E10.353	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula	Diagnosis	ICD-10-CM
E10.3531	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E10.3532	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E10.3533	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM



**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Inclusion Criteria in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
E10.3539	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E10.354	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment	Diagnosis	ICD-10-CM
E10.3541	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E10.3542	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E10.3543	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E10.3549	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E10.355	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy	Diagnosis	ICD-10-CM
E10.3551	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E10.3552	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E10.3553	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E10.3559	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E10.359	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3591	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3592	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3593	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3599	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.36	Type 1 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E10.37	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment	Diagnosis	ICD-10-CM
E10.37X1	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E10.37X2	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Inclusion Criteria in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
E10.37X3	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E10.37X9	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E10.39	Type 1 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E10.4	Type 1 diabetes mellitus with neurological complications	Diagnosis	ICD-10-CM
E10.40	Type 1 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E10.41	Type 1 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E10.42	Type 1 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E10.43	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E10.44	Type 1 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E10.49	Type 1 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E10.5	Type 1 diabetes mellitus with circulatory complications	Diagnosis	ICD-10-CM
E10.51	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E10.52	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E10.59	Type 1 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E10.6	Type 1 diabetes mellitus with other specified complications	Diagnosis	ICD-10-CM
E10.61	Type 1 diabetes mellitus with diabetic arthropathy	Diagnosis	ICD-10-CM
E10.610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E10.618	Type 1 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E10.62	Type 1 diabetes mellitus with skin complications	Diagnosis	ICD-10-CM
E10.620	Type 1 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E10.621	Type 1 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E10.622	Type 1 diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E10.628	Type 1 diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E10.63	Type 1 diabetes mellitus with oral complications	Diagnosis	ICD-10-CM
E10.630	Type 1 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E10.638	Type 1 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E10.64	Type 1 diabetes mellitus with hypoglycemia	Diagnosis	ICD-10-CM
E10.641	Type 1 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E10.649	Type 1 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E10.65	Type 1 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E10.69	Type 1 diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E10.8	Type 1 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E10.9	Type 1 diabetes mellitus without complications	Diagnosis	ICD-10-CM
O24.0	Pre-existing type 1 diabetes mellitus, in pregnancy, childbirth and the puerperium	Diagnosis	ICD-10-CM
O24.01	Pre-existing type 1 diabetes mellitus, in pregnancy	Diagnosis	ICD-10-CM
O24.011	Pre-existing type 1 diabetes mellitus, in pregnancy, first trimester	Diagnosis	ICD-10-CM
O24.012	Pre-existing type 1 diabetes mellitus, in pregnancy, second trimester	Diagnosis	ICD-10-CM
O24.013	Pre-existing type 1 diabetes mellitus, in pregnancy, third trimester	Diagnosis	ICD-10-CM

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Inclusion Criteria in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
O24.019	Pre-existing type 1 diabetes mellitus, in pregnancy, unspecified trimester	Diagnosis	ICD-10-CM
O24.02	Pre-existing type 1 diabetes mellitus, in childbirth	Diagnosis	ICD-10-CM
O24.03	Pre-existing type 1 diabetes mellitus, in the puerperium	Diagnosis	ICD-10-CM
<b>Hyperglycemia and Diabetic Ketoacidosis (Exclusion)</b>			
E08.1	Diabetes mellitus due to underlying condition with ketoacidosis	Diagnosis	ICD-10-CM
E08.10	Diabetes mellitus due to underlying condition with ketoacidosis without coma	Diagnosis	ICD-10-CM
E08.11	Diabetes mellitus due to underlying condition with ketoacidosis with coma	Diagnosis	ICD-10-CM
E08.65	Diabetes mellitus due to underlying condition with hyperglycemia	Diagnosis	ICD-10-CM
E09.1	Drug or chemical induced diabetes mellitus with ketoacidosis	Diagnosis	ICD-10-CM
E09.10	Drug or chemical induced diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E09.11	Drug or chemical induced diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E09.65	Drug or chemical induced diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E11.1	Type 2 diabetes mellitus with ketoacidosis	Diagnosis	ICD-10-CM
E11.10	Type 2 diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E11.11	Type 2 diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E13.1	Other specified diabetes mellitus with ketoacidosis	Diagnosis	ICD-10-CM
E13.10	Other specified diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E13.11	Other specified diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E13.65	Other specified diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
R73.9	Hyperglycemia, unspecified	Diagnosis	ICD-10-CM
<b>COVID-19 (Exclusion)</b>			
B97.29	Other coronavirus as the cause of diseases classified elsewhere	Diagnosis	ICD-10-CM
U07.1	COVID-19	Diagnosis	ICD-10-CM

**Appendix D. List of Codes Used to Define Inclusion Criteria in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
<b>Skilled Nursing Facility (Exclusion)</b>			
IS	snf exclusion	EN	AD
<b>Inpatient Hospitalization (Exclusion)</b>			
IP	inpatient hospitalization exclusion	EN	AD

EN = Encounter

IS = Non-acute institutional stay

IP= In-patient hospital stay

SNF = Skilled nursing facility

**Appendix E. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Inclusion Criteria in this Request**

Non-Proprietary Name	Proprietary Name
<b>Type 2 Diabetes Treatment (Inclusion)</b>	
acarbose	Precose
acarbose	acarbose
alogliptin benzoate	Nesina
alogliptin benzoate	alogliptin
alogliptin benzoate/metformin HCl	Kazano
alogliptin benzoate/metformin HCl	alogliptin-metformin
alogliptin benzoate/pioglitazone HCl	Oseni
alogliptin benzoate/pioglitazone HCl	alogliptin-pioglitazone
bromocriptine mesylate	Cycloset
canagliflozin	Invokana
canagliflozin/metformin HCl	Invokamet
canagliflozin/metformin HCl	Invokamet XR
dapagliflozin propanediol	Farxiga
dapagliflozin propanediol/metformin HCl	Xigduo XR
dapagliflozin propanediol/saxagliptin HCl	Qtern
dulaglutide	Trulicity
empagliflozin	Jardiance
empagliflozin/linagliptin	Glyxambi
empagliflozin/linagliptin/metformin HCl	Trijardy XR
empagliflozin/metformin HCl	Synjardy
empagliflozin/metformin HCl	Synjardy XR
ertugliflozin pidolate	Steglatro
ertugliflozin pidolate/metformin HCl	Segluromet
ertugliflozin pidolate/sitagliptin phosphate	Steglujan
exenatide	Byetta
exenatide microspheres	Bydureon
exenatide microspheres	Bydureon BCise
glimepiride	Amaryl
glimepiride	glimepiride
glipizide	Glucotrol
glipizide	Glucotrol XL
glipizide	glipizide
glipizide/metformin HCl	glipizide-metformin
glyburide	glyburide
glyburide,micronized	Glynase
glyburide,micronized	glyburide micronized
glyburide/metformin HCl	glyburide-metformin
insulin NPH human isophane	Humulin N NPH Insulin KwikPen
insulin NPH human isophane	Humulin N NPH U-100 Insulin
insulin NPH human isophane	Novolin N FlexPen
insulin NPH human isophane	Novolin N NPH U-100 Insulin
insulin NPH human isophane/insulin regular, human	Humulin 70/30 U-100 Insulin
insulin NPH human isophane/insulin regular, human	Humulin 70/30 U-100 KwikPen
insulin NPH human isophane/insulin regular, human	Novolin 70-30 FlexPen U-100
insulin NPH human isophane/insulin regular, human	Novolin 70/30 U-100 Insulin
insulin aspart	Novolog FlexPen U-100 Insulin

**Appendix E. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Inclusion Criteria in this Request**

<b>Non-Proprietary Name</b>	<b>Proprietary Name</b>
insulin aspart	Novolog PenFill U-100 Insulin
insulin aspart	Novolog U-100 Insulin aspart
insulin aspart	insulin aspart U-100
insulin aspart (niacinamide)	Fiasp FlexTouch U-100 Insulin
insulin aspart (niacinamide)	Fiasp Penfill U-100 Insulin
insulin aspart (niacinamide)	Fiasp U-100 Insulin
insulin aspart protamine human/insulin aspart	Novolog Mix 70-30 U-100 Insulin
insulin aspart protamine human/insulin aspart	Novolog Mix 70-30FlexPen U-100
insulin aspart protamine human/insulin aspart	insulin asp prt-insulin aspart
insulin degludec	Tresiba FlexTouch U-100
insulin degludec	Tresiba FlexTouch U-200
insulin degludec	Tresiba U-100 Insulin
insulin degludec	insulin degludec
insulin degludec/liraglutide	Xultophy 100/3.6
insulin detemir	Levemir FlexPen
insulin detemir	Levemir FlexTouch U100 Insulin
insulin detemir	Levemir U-100 Insulin
insulin glargine,human recombinant analog	Basaglar KwikPen U-100 Insulin
insulin glargine,human recombinant analog	Basaglar Tempo Pen(U-100)Insln
insulin glargine,human recombinant analog	Lantus Solostar U-100 Insulin
insulin glargine,human recombinant analog	Lantus U-100 Insulin
insulin glargine,human recombinant analog	Semglee Pen U-100 Insulin
insulin glargine,human recombinant analog	Semglee U-100 Insulin
insulin glargine,human recombinant analog	Toujeo Max U-300 SoloStar
insulin glargine,human recombinant analog	Toujeo SoloStar U-300 Insulin
insulin glargine,human recombinant analog	insulin glargine
insulin glargine,human recombinant analog/lixisenatide	Soliqua 100/33
insulin glargine-aglr	Rezvoglar KwikPen
insulin glargine-yfgn	Semglee(insulin glarg-yfgn)Pen
insulin glargine-yfgn	Semglee(insulin glargine-yfgn)
insulin glargine-yfgn	insulin glargine-yfgn
insulin glulisine	Apidra SoloStar U-100 Insulin
insulin glulisine	Apidra U-100 Insulin
insulin lispro	Admelog SoloStar U-100 Insulin
insulin lispro	Admelog U-100 Insulin lispro
insulin lispro	Humalog Junior KwikPen U-100
insulin lispro	Humalog KwikPen Insulin
insulin lispro	Humalog Tempo Pen(U-100)Insulin
insulin lispro	Humalog U-100 Insulin
insulin lispro	insulin lispro
insulin lispro protamine and insulin lispro	Humalog Mix 50-50 Insulin U-100
insulin lispro protamine and insulin lispro	Humalog Mix 50-50 KwikPen
insulin lispro protamine and insulin lispro	Humalog Mix 75-25 KwikPen
insulin lispro protamine and insulin lispro	Humalog Mix 75-25(U-100)Insulin
insulin lispro protamine and insulin lispro	insulin lispro protamin-lispro
insulin lispro-aabc	Lyumjev KwikPen U-100 Insulin
insulin lispro-aabc	Lyumjev KwikPen U-200 Insulin

**Appendix E. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Inclusion Criteria in this Request**

<b>Non-Proprietary Name</b>	<b>Proprietary Name</b>
insulin lispro-aabc	Lyumjev Tempo Pen(U-100)Insuln
insulin lispro-aabc	Lyumjev U-100 Insulin
insulin regular, human	Afrezza
insulin regular, human	Humulin R Regular U-100 Insuln
insulin regular, human	Humulin R U-500 (Conc) Insulin
insulin regular, human	Humulin R U-500 (Conc) Kwikpen
insulin regular, human	Novolin R FlexPen
insulin regular, human	Novolin R Regular U100 Insulin
insulin regular, human in 0.9 % sodium chloride	Myxredlin
linagliptin	Tradjenta
linagliptin/metformin HCl	Jentadueto
linagliptin/metformin HCl	Jentadueto XR
liraglutide	Victoza 2-Pak
liraglutide	Victoza 3-Pak
lixisenatide	Adlyxin
metformin HCl	Fortamet
metformin HCl	Glumetza
metformin HCl	Riomet
metformin HCl	Riomet ER
metformin HCl	metformin
mifepristone	Korlym
miglitol	Glyset
miglitol	miglitol
nateglinide	Starlix
nateglinide	nateglinide
pioglitazone HCl	Actos
pioglitazone HCl	pioglitazone
pioglitazone HCl/glimepiride	DUETACT
pioglitazone HCl/glimepiride	pioglitazone-glimepiride
pioglitazone HCl/metformin HCl	Actoplus MET
pioglitazone HCl/metformin HCl	Actoplus Met XR
pioglitazone HCl/metformin HCl	pioglitazone-metformin
pramlintide acetate	SymlinPen 120
pramlintide acetate	SymlinPen 60
repaglinide	repaglinide
repaglinide/metformin HCl	repaglinide-metformin
rosiglitazone maleate	Avandia
saxagliptin HCl	Onglyza
saxagliptin HCl/metformin HCl	Kombiglyze XR
semaglutide	Ozempic
semaglutide	Rybelsus
sitagliptin phosphate	Januvia
sitagliptin phosphate/metformin HCl	Janumet
sitagliptin phosphate/metformin HCl	Janumet XR
sotagliflozin	Inpefa
teplizumab-mzww	Tzield
tirzepatide	Mounjaro

**Appendix F. List of Lab Codes Used to Define Inclusion Criteria in this Request**

Code	Description	Code Category	Code Type
<b>Positive COVID-19 Lab (Inclusion)</b>			
L0241031010401	PCR_BAL_O	LB	01C
L0241031010501	PCR_BAL_U	LB	01C
L0241031020401	PCR_NSWAB_O	LB	01C
L0241031020501	PCR_NSWAB_U	LB	01C
L0241031030401	PCR_NWASH_O	LB	01C
L0241031030501	PCR_NWASH_U	LB	01C
L0241031040401	PCR_NPH_O	LB	01C
L0241031040501	PCR_NPH_U	LB	01C
L0241031050401	PCR_NPWASH_O	LB	01C
L0241031050501	PCR_NPWASH_U	LB	01C
L0241031060401	PCR_SPUTUM_O	LB	01C
L0241031060501	PCR_SPUTUM_U	LB	01C
L0241031070401	PCR_THRT_O	LB	01C
L0241031070501	PCR_THRT_U	LB	01C
L0241031080401	PCR_UNK_O	LB	01C
L0241031080501	PCR_UNK_U	LB	01C
L0241031090401	PCR_BLOOD_O	LB	01C
L0241031090501	PCR_BLOOD_U	LB	01C
L0241031100401	PCR_PLASMA_O	LB	01C
L0241031100501	PCR_PLASMA_U	LB	01C
L0241031110401	PCR_SERUM_O	LB	01C
L0241031110501	PCR_SERUM_U	LB	01C
L0241031120401	PCR_SR_PLS_O	LB	01C
L0241031120501	PCR_SR_PLS_U	LB	01C
L0241031130401	PCR_SALIVA_O	LB	01C
L0241031130501	PCR_SALIVA_U	LB	01C

LB: Laboratory code



**Appendix G. List of International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Outcomes in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
<b>Severe Hyperglycemia</b>			
E08.65	Diabetes mellitus due to underlying condition with hyperglycemia	Diagnosis	ICD-10-CM
E09.65	Drug or chemical induced diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E13.65	Other specified diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
R73.9	Hyperglycemia, unspecified	Diagnosis	ICD-10-CM

**Appendix H. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Covariates in this Request**

<b>Non-Proprietary</b>	<b>Proprietary</b>
<b>Nicotine Dependence</b>	
nicotine	Nicoderm CQ
nicotine	Nicotrol
nicotine	Nicotrol NS
nicotine	nicotine
nicotine polacrilex	Nicorette
nicotine polacrilex	Quit 2
nicotine polacrilex	Quit 4
nicotine polacrilex	Stop Smoking Aid
nicotine polacrilex	nicotine (polacrilex)
varenicline tartrate	Chantix
varenicline tartrate	Chantix Continuing Month Box
varenicline tartrate	Chantix Starting Month Box
varenicline tartrate	varenicline
<b>Metformin</b>	
Actoplus MET	pioglitazone HCl/metformin HCl
Actoplus Met XR	pioglitazone HCl/metformin HCl
Fortamet	metformin HCl
Glumetza	metformin HCl
Invokamet	canagliflozin/metformin HCl
Invokamet XR	canagliflozin/metformin HCl
Janumet	sitagliptin phosphate/metformin HCl
Janumet XR	sitagliptin phosphate/metformin HCl
Jentadueto	linagliptin/metformin HCl
Jentadueto XR	linagliptin/metformin HCl
Kazano	alogliptin benzoate/metformin HCl
Kombiglyze XR	saxagliptin HCl/metformin HCl
Riomet	metformin HCl
Riomet ER	metformin HCl
Segluromet	ertugliflozin pidolate/metformin HCl
Synjardy	empagliflozin/metformin HCl
Synjardy XR	empagliflozin/metformin HCl
Trijardy XR	empagliflozin/linagliptin/metformin HCl
Xigduo XR	dapagliflozin propanediol/metformin HCl
alogliptin-metformin	alogliptin benzoate/metformin HCl
glipizide-metformin	glipizide/metformin HCl
glyburide-metformin	glyburide/metformin HCl
metformin	metformin HCl
pioglitazone-metformin	pioglitazone HCl/metformin HCl
repaglinide-metformin	repaglinide/metformin HCl
<b>Insulin</b>	
insulin NPH human isophane	Humulin N NPH Insulin KwikPen
insulin NPH human isophane	Humulin N NPH U-100 Insulin
insulin NPH human isophane	Novolin N FlexPen
insulin NPH human isophane	Novolin N NPH U-100 Insulin
insulin NPH human isophane/insulin regular, human	Humulin 70/30 U-100 Insulin
insulin NPH human isophane/insulin regular, human	Humulin 70/30 U-100 KwikPen

**Appendix H. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Covariates in this Request**

<b>Non-Proprietary</b>	<b>Proprietary</b>
insulin NPH human isophane/insulin regular, human	Novolin 70-30 FlexPen U-100
insulin NPH human isophane/insulin regular, human	Novolin 70/30 U-100 Insulin
insulin aspart	Novolog FlexPen U-100 Insulin
insulin aspart	Novolog PenFill U-100 Insulin
insulin aspart	Novolog U-100 Insulin aspart
insulin aspart	insulin aspart U-100
insulin aspart (niacinamide)	Fiasp FlexTouch U-100 Insulin
insulin aspart (niacinamide)	Fiasp Penfill U-100 Insulin
insulin aspart (niacinamide)	Fiasp U-100 Insulin
insulin aspart protamine human/insulin aspart	Novolog Mix 70-30 U-100 Insulin
insulin aspart protamine human/insulin aspart	Novolog Mix 70-30FlexPen U-100
insulin aspart protamine human/insulin aspart	insulin asp prt-insulin aspart
insulin degludec	Tresiba FlexTouch U-100
insulin degludec	Tresiba FlexTouch U-200
insulin degludec	Tresiba U-100 Insulin
insulin degludec	insulin degludec
insulin detemir	Levemir FlexPen
insulin detemir	Levemir FlexTouch U100 Insulin
insulin detemir	Levemir U-100 Insulin
insulin glargine,human recombinant analog	Basaglar KwikPen U-100 Insulin
insulin glargine,human recombinant analog	Basaglar Tempo Pen(U-100)Insln
insulin glargine,human recombinant analog	Lantus Solostar U-100 Insulin
insulin glargine,human recombinant analog	Lantus U-100 Insulin
insulin glargine,human recombinant analog	Semglee Pen U-100 Insulin
insulin glargine,human recombinant analog	Semglee U-100 Insulin
insulin glargine,human recombinant analog	Toujeo Max U-300 SoloStar
insulin glargine,human recombinant analog	Toujeo SoloStar U-300 Insulin
insulin glargine,human recombinant analog	insulin glargine
insulin glargine-yfgn	Semglee(insulin glarg-yfgn)Pen
insulin glargine-yfgn	Semglee(insulin glargine-yfgn)
insulin glargine-yfgn	insulin glargine-yfgn
insulin glulisine	Apidra SoloStar U-100 Insulin
insulin glulisine	Apidra U-100 Insulin
insulin lispro	Admelog SoloStar U-100 Insulin
insulin lispro	Admelog U-100 Insulin lispro
insulin lispro	Humalog Junior KwikPen U-100
insulin lispro	Humalog KwikPen Insulin
insulin lispro	Humalog Tempo Pen(U-100)Insuln
insulin lispro	Humalog U-100 Insulin
insulin lispro	insulin lispro
insulin lispro protamine and insulin lispro	Humalog Mix 50-50 Insuln U-100
insulin lispro protamine and insulin lispro	Humalog Mix 50-50 KwikPen
insulin lispro protamine and insulin lispro	Humalog Mix 75-25 KwikPen
insulin lispro protamine and insulin lispro	Humalog Mix 75-25(U-100)Insuln
insulin lispro protamine and insulin lispro	insulin lispro protamin-lispro
insulin lispro-aabc	Lyumjev KwikPen U-100 Insulin
insulin lispro-aabc	Lyumjev KwikPen U-200 Insulin

**Appendix H. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Covariates in this Request**

<b>Non-Proprietary</b>	<b>Proprietary</b>
insulin lispro-aabc	Lyumjev Tempo Pen(U-100)Insuln
insulin lispro-aabc	Lyumjev U-100 Insulin
insulin regular, human	Afrezza
insulin regular, human	Humulin R Regular U-100 Insulin
insulin regular, human	Humulin R U-500 (Conc) Insulin
insulin regular, human	Humulin R U-500 (Conc) Kwikpen
insulin regular, human	Novolin R FlexPen
insulin regular, human	Novolin R Regular U100 Insulin
insulin regular, human in 0.9 % sodium chloride	Myxedrin
<b>Sulfonylureas</b>	
glimepiride	Amaryl
glimepiride	glimepiride
glipizide	Glucotrol
glipizide	Glucotrol XL
glipizide	glipizide
glipizide/metformin HCl	glipizide-metformin
glyburide	glyburide
glyburide,micronized	Glynase
glyburide,micronized	glyburide micronized
glyburide/metformin HCl	glyburide-metformin
pioglitazone HCl/glimepiride	DUETACT
pioglitazone HCl/glimepiride	pioglitazone-glimepiride
<b>DPP4</b>	
alogliptin benzoate	Nesina
alogliptin benzoate	alogliptin
linagliptin	Tradjenta
saxagliptin HCl	Onglyza
sitagliptin phosphate	Januvia
<b>GLP1</b>	
dulaglutide	Trulicity
exenatide	Byetta
exenatide microspheres	Bydureon
exenatide microspheres	Bydureon BCise
insulin degludec/liraglutide	Xultophy 100/3.6
insulin glargine,human recombinant analog/lixisenatide	Soliqua 100/33
liraglutide	Victoza 2-Pak
liraglutide	Victoza 3-Pak
lixisenatide	Adlyxin
semaglutide	Ozempic
semaglutide	Rybelsus
tirzepatide	Mounjaro
<b>SGLT2</b>	
canagliflozin	Invokana
canagliflozin/metformin HCl	Invokamet
canagliflozin/metformin HCl	Invokamet XR
dapagliflozin propanediol	Farxiga
dapagliflozin propanediol/metformin HCl	Xigduo XR

**Appendix H. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Covariates in this Request**

<b>Non-Proprietary</b>	<b>Proprietary</b>
dapagliflozin propanediol/saxagliptin HCl	Qtern
empagliflozin	Jardiance
empagliflozin/linagliptin	Glyxambi
empagliflozin/linagliptin/metformin HCl	Trijardy XR
empagliflozin/metformin HCl	Synjardy
empagliflozin/metformin HCl	Synjardy XR
ertugliflozin pidolate	Steglatro
ertugliflozin pidolate/metformin HCl	Segluromet
ertugliflozin pidolate/sitagliptin phosphate	Steglujan
sotagliflozin	Inpefa
<b>Thiazolidinediones</b>	
alogliptin benzoate/pioglitazone HCl	Oseni
alogliptin benzoate/pioglitazone HCl	alogliptin-pioglitazone
pioglitazone HCl	Actos
pioglitazone HCl	pioglitazone
pioglitazone HCl/glimepiride	DUETACT
pioglitazone HCl/glimepiride	pioglitazone-glimepiride
pioglitazone HCl/metformin HCl	Actoplus MET
pioglitazone HCl/metformin HCl	Actoplus Met XR
pioglitazone HCl/metformin HCl	pioglitazone-metformin
rosiglitazone maleate	Avandia
<b>Meglitinides</b>	
nateglinide	Starlix
nateglinide	nateglinide
repaglinide	repaglinide
repaglinide/metformin HCl	repaglinide-metformin
<b>Alpha glucosidase</b>	
acarbose	Precose
acarbose	acarbose
miglitol	Glyset
miglitol	miglitol
<b>Paxlovid</b>	
nirmatrelvir/ritonavir	Paxlovid
<b>Remdesivir</b>	
REMDESIVIR FOR IV	
remdesivir	
remdesivir	Veklury
remdesivir	remdesivir
<b>Molnupiravir</b>	
molnupiravir	Lagevrio (EUA)
<b>Hydroxychloroquine</b>	
hydroxychloroquine sulfate	Plaquenil
hydroxychloroquine sulfate	hydroxychloroquine
<b>ACE Inhibitors</b>	
amlodipine besylate/benazepril HCl	Lotrel
amlodipine besylate/benazepril HCl	amlodipine-benazepril
benazepril HCl	Lotensin

**Appendix H. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Covariates in this Request**

<b>Non-Proprietary</b>	<b>Proprietary</b>
benazepril HCl	benazepril
benazepril HCl/hydrochlorothiazide	Lotensin HCT
benazepril HCl/hydrochlorothiazide	benazepril-hydrochlorothiazide
captopril	captopril
captopril/hydrochlorothiazide	captopril-hydrochlorothiazide
enalapril maleate	Epaned
enalapril maleate	Vasotec
enalapril maleate	enalapril maleate
enalapril maleate/hydrochlorothiazide	Vaseretic
enalapril maleate/hydrochlorothiazide	enalapril-hydrochlorothiazide
enalaprilat dihydrate	enalaprilat
fosinopril sodium	fosinopril
fosinopril sodium/hydrochlorothiazide	fosinopril-hydrochlorothiazide
lisinopril	Prinivil
lisinopril	Qbrelis
lisinopril	Zestril
lisinopril	lisinopril
lisinopril/hydrochlorothiazide	Zestoretic
lisinopril/hydrochlorothiazide	lisinopril-hydrochlorothiazide
moexipril HCl	moexipril
perindopril arginine/amlopidine besylate	Prestalia
perindopril erbumine	perindopril erbumine
quinapril HCl	Accupril
quinapril HCl	quinapril
quinapril HCl/hydrochlorothiazide	Accuretic
quinapril HCl/hydrochlorothiazide	quinapril-hydrochlorothiazide
ramipril	Altace
ramipril	ramipril
trandolapril	trandolapril
trandolapril/verapamil HCl	Tarka
trandolapril/verapamil HCl	trandolapril-verapamil
<b>Angiotensin Receptor Blockers (ARBs)</b>	
amlodipine besylate/olmesartan medoxomil	Azor
amlodipine besylate/olmesartan medoxomil	amlodipine-olmesartan
amlodipine besylate/valsartan	Exforge
amlodipine besylate/valsartan	amlodipine-valsartan
amlodipine besylate/valsartan/hydrochlorothiazide	Exforge HCT
amlodipine besylate/valsartan/hydrochlorothiazide	amlodipine-valsartan-hcthiazid
azilsartan medoxomil	Edarbi
azilsartan medoxomil/chlorthalidone	Edarbyclor
candesartan cilexetil	Atacand
candesartan cilexetil	candesartan
candesartan cilexetil/hydrochlorothiazide	Atacand HCT
candesartan cilexetil/hydrochlorothiazide	candesartan-hydrochlorothiazid
eprosartan mesylate	eprosartan
irbesartan	Avapro
irbesartan	irbesartan

**Appendix H. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Covariates in this Request**

<b>Non-Proprietary</b>	<b>Proprietary</b>
irbesartan/hydrochlorothiazide	Avalide
irbesartan/hydrochlorothiazide	irbesartan-hydrochlorothiazide
losartan potassium	Cozaar
losartan potassium	losartan
losartan potassium/hydrochlorothiazide	Hyzaar
losartan potassium/hydrochlorothiazide	losartan-hydrochlorothiazide
olmesartan medoxomil	Benicar
olmesartan medoxomil	olmesartan
olmesartan medoxomil/amlodipine	
besylate/hydrochlorothiazide	Tribenzor
olmesartan medoxomil/amlodipine	
besylate/hydrochlorothiazide	olmesartan-amlodipin-hcthiazyd
olmesartan medoxomil/hydrochlorothiazide	Benicar HCT
olmesartan medoxomil/hydrochlorothiazide	olmesartan-hydrochlorothiazide
sacubitril/valsartan	Entresto
telmisartan	Micardis
telmisartan	telmisartan
telmisartan/amlodipine besylate	Twynsta
telmisartan/amlodipine besylate	telmisartan-amlodipine
telmisartan/hydrochlorothiazide	Micardis HCT
telmisartan/hydrochlorothiazide	telmisartan-hydrochlorothiazid
valsartan	Diovan
valsartan	valsartan
valsartan/hydrochlorothiazide	Diovan HCT
valsartan/hydrochlorothiazide	valsartan-hydrochlorothiazide
<b>Loop Diuretics</b>	
bumetanide	bumetanide
ethacrynate sodium	Sodium Edecrin
ethacrynate sodium	ethacrynate sodium
ethacrynic acid	Edecrin
ethacrynic acid	ethacrynic acid
furosemide	Furoscix
furosemide	Lasix
furosemide	furosemide
furosemide in 0.9 % sodium chloride	furosemide in 0.9 % NaCl
torsemide	Soaanz
torsemide	torsemide
<b>Other Diuretic</b>	
amiloride HCl	amiloride
amiloride HCl/hydrochlorothiazide	amiloride-hydrochlorothiazide
chlorothiazide	Diuril
chlorothiazide sodium	Diuril IV
chlorothiazide sodium	chlorothiazide sodium
chlorthalidone	Thalitone
chlorthalidone	chlorthalidone
conivaptan HCl/dextrose 5 % in water	Vaprisol in 5 % dextrose
eplerenone	Inspra

**Appendix H. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Covariates in this Request**

<b>Non-Proprietary</b>	<b>Proprietary</b>
eplerenone	eplerenone
hydrochlorothiazide	hydrochlorothiazide
indapamide	indapamide
metolazone	metolazone
pamabrom	Diuretic Softgels
pamabrom	Diurex Max
spironolactone	Aldactone
spironolactone	CaroSpir
spironolactone	spironolactone
spironolactone/hydrochlorothiazide	Aldactazide
spironolactone/hydrochlorothiazide	spironolacton-hydrochlorothiaz
triamterene	Dyrenium
triamterene	triamterene
triamterene/hydrochlorothiazide	Dyazide
triamterene/hydrochlorothiazide	Maxzide
triamterene/hydrochlorothiazide	Maxzide-25mg
triamterene/hydrochlorothiazide	triamterene-hydrochlorothiazid
<b>Statins</b>	
atorvastatin calcium	AtorvaliQ
atorvastatin calcium	Lipitor
atorvastatin calcium	atorvastatin
fluvastatin sodium	Lescol
fluvastatin sodium	Lescol XL
fluvastatin sodium	fluvastatin
lovastatin	Altoprev
lovastatin	lovastatin
pitavastatin calcium	Livalo
pitavastatin magnesium	Zypitamag
pravastatin sodium	Pravachol
pravastatin sodium	pravastatin
rosuvastatin calcium	Crestor
rosuvastatin calcium	Ezallor Sprinkle
rosuvastatin calcium	rosuvastatin
simvastatin	FloLipid
simvastatin	Zocor
simvastatin	simvastatin
<b>Beta Blockers</b>	
acebutolol HCl	acebutolol
atenolol	Tenormin
atenolol	atenolol
betaxolol HCl	betaxolol
bisoprolol fumarate	bisoprolol fumarate
carvedilol	Coreg
carvedilol	carvedilol
carvedilol phosphate	Coreg CR
carvedilol phosphate	carvedilol phosphate
esmolol HCl	Brevibloc



**Appendix H. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Covariates in this Request**

<b>Non-Proprietary</b>	<b>Proprietary</b>
esmolol HCl	esmolol
esmolol HCl in sodium chloride, iso-osmotic	Brevibloc in NaCl (iso-osm)
esmolol HCl in sodium chloride, iso-osmotic	esmolol in NaCl (iso-osm)
esmolol HCl in sterile water	esmolol in sterile water
labetalol HCl	labetalol
labetalol HCl in dextrose, iso-osmotic	labetalol in dextrose, iso-osm
labetalol HCl in sodium chloride, iso-osmotic	labetalol in NaCl (iso-osmot)
metoprolol succinate	Kapsargo Sprinkle
metoprolol succinate	Toprol XL
metoprolol succinate	metoprolol succinate
metoprolol tartrate	Lopressor
metoprolol tartrate	metoprolol tartrate
nadolol	Corgard
nadolol	nadolol
nebivolol HCl	Bystolic
nebivolol HCl	nebivolol
pindolol	pindolol
propranolol HCl	Hemangeol
propranolol HCl	Inderal LA
propranolol HCl	Inderal XL
propranolol HCl	InnoPran XL
propranolol HCl	propranolol
sotalol HCl	Betapace
sotalol HCl	Betapace AF
sotalol HCl	Sorine
sotalol HCl	Sotalol AF
sotalol HCl	Sotylyze
sotalol HCl	sotalol
timolol maleate	timolol maleate
<b>Calcium channel blockers</b>	
amlodipine benzoate	Katerzia
amlodipine besylate	Norliqva
amlodipine besylate	Norvasc
amlodipine besylate	amlodipine
amlodipine besylate/celecoxib	Consensi
clevidipine butyrate	Cleviprex
diltiazem HCl	Cardizem
diltiazem HCl	Cardizem CD
diltiazem HCl	Cardizem LA
diltiazem HCl	Cartia XT
diltiazem HCl	DILT-XR
diltiazem HCl	Matzim LA
diltiazem HCl	Taztia XT
diltiazem HCl	Tiadylt ER
diltiazem HCl	Tiazac
diltiazem HCl	diltiazem HCl
diltiazem HCl in 0.9 % sodium chloride	diltiazem HCl in 0.9% NaCl

**Appendix H. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Covariates in this Request**

<b>Non-Proprietary</b>	<b>Proprietary</b>
diltiazem HCl/dextrose 5 % in water	diltiazem in dextrose 5 %
felodipine	felodipine
isradipine	isradipine
levamlodipine maleate	Conjupri
levamlodipine maleate	levamlodipine
nicardipine HCl	Cardene IV
nicardipine HCl	nicardipine
nicardipine HCl in 0.9 % sodium chloride	nicardipine in 0.9 % sod chlor
nicardipine in dextrose, iso-osmotic	Cardene IV in dextrose
nicardipine in sodium chloride, iso-osmotic	Cardene IV in sodium chloride
nicardipine in sodium chloride, iso-osmotic	nicardipine in NaCl (iso-os)
nifedipine	Procardia
nifedipine	Procardia XL
nifedipine	nifedipine
nimodipine	Nymalize
nimodipine	nimodipine
nisoldipine	Sular
nisoldipine	nisoldipine
verapamil HCl	Calan SR
verapamil HCl	Verelan
verapamil HCl	Verelan PM
verapamil HCl	verapamil

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
<b>Nephropathy</b>			
E08.22	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication	Diagnosis	ICD-10-CM
E09.22	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
M32.14	Glomerular disease in systemic lupus erythematosus	Diagnosis	ICD-10-CM
N00.0	Acute nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N00.1	Acute nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N00.2	Acute nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N00.3	Acute nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N00.4	Acute nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N00.5	Acute nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N00.6	Acute nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N00.7	Acute nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N00.8	Acute nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N00.9	Acute nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N01.0	Rapidly progressive nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N01.1	Rapidly progressive nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N01.2	Rapidly progressive nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N01.3	Rapidly progressive nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N01.4	Rapidly progressive nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N01.5	Rapidly progressive nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N01.6	Rapidly progressive nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N01.7	Rapidly progressive nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N01.8	Rapidly progressive nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N01.9	Rapidly progressive nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N02.0	Recurrent and persistent hematuria with minor glomerular abnormality	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
N02.1	Recurrent and persistent hematuria with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N02.2	Recurrent and persistent hematuria with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N02.3	Recurrent and persistent hematuria with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.4	Recurrent and persistent hematuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.5	Recurrent and persistent hematuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N02.6	Recurrent and persistent hematuria with dense deposit disease	Diagnosis	ICD-10-CM
N02.7	Recurrent and persistent hematuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N02.8	Recurrent and persistent hematuria with other morphologic changes	Diagnosis	ICD-10-CM
N02.9	Recurrent and persistent hematuria with unspecified morphologic changes	Diagnosis	ICD-10-CM
N03.0	Chronic nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N03.1	Chronic nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N03.2	Chronic nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N03.3	Chronic nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.4	Chronic nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.5	Chronic nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N03.6	Chronic nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N03.7	Chronic nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N03.8	Chronic nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N03.9	Chronic nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N04.0	Nephrotic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N04.1	Nephrotic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N04.2	Nephrotic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N04.3	Nephrotic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.4	Nephrotic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.5	Nephrotic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N04.6	Nephrotic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N04.7	Nephrotic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N04.8	Nephrotic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N04.9	Nephrotic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N05.0	Unspecified nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N05.1	Unspecified nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N05.2	Unspecified nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N05.3	Unspecified nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
N05.4	Unspecified nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N05.5	Unspecified nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N05.6	Unspecified nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N05.7	Unspecified nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N05.8	Unspecified nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N05.9	Unspecified nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N06.0	Isolated proteinuria with minor glomerular abnormality	Diagnosis	ICD-10-CM
N06.1	Isolated proteinuria with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N06.2	Isolated proteinuria with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N06.3	Isolated proteinuria with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N06.4	Isolated proteinuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N06.5	Isolated proteinuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N06.6	Isolated proteinuria with dense deposit disease	Diagnosis	ICD-10-CM
N06.7	Isolated proteinuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N06.8	Isolated proteinuria with other morphologic lesion	Diagnosis	ICD-10-CM
N06.9	Isolated proteinuria with unspecified morphologic lesion	Diagnosis	ICD-10-CM
N08	Glomerular disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N15.8	Other specified renal tubulo-interstitial diseases	Diagnosis	ICD-10-CM
N15.9	Renal tubulo-interstitial disease, unspecified	Diagnosis	ICD-10-CM
N16	Renal tubulo-interstitial disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N17.0	Acute kidney failure with tubular necrosis	Diagnosis	ICD-10-CM
N17.1	Acute kidney failure with acute cortical necrosis	Diagnosis	ICD-10-CM
N17.2	Acute kidney failure with medullary necrosis	Diagnosis	ICD-10-CM
N17.8	Other acute kidney failure	Diagnosis	ICD-10-CM
N17.9	Acute kidney failure, unspecified	Diagnosis	ICD-10-CM
N18.1	Chronic kidney disease, stage 1	Diagnosis	ICD-10-CM
N18.2	Chronic kidney disease, stage 2 (mild)	Diagnosis	ICD-10-CM
N18.3	Chronic kidney disease, stage 3 (moderate)	Diagnosis	ICD-10-CM
N18.4	Chronic kidney disease, stage 4 (severe)	Diagnosis	ICD-10-CM
N18.5	Chronic kidney disease, stage 5	Diagnosis	ICD-10-CM
N18.6	End stage renal disease	Diagnosis	ICD-10-CM
N18.9	Chronic kidney disease, unspecified	Diagnosis	ICD-10-CM
N19	Unspecified kidney failure	Diagnosis	ICD-10-CM
N25.0	Renal osteodystrophy	Diagnosis	ICD-10-CM
N25.1	Nephrogenic diabetes insipidus	Diagnosis	ICD-10-CM
N25.81	Secondary hyperparathyroidism of renal origin	Diagnosis	ICD-10-CM
N25.89	Other disorders resulting from impaired renal tubular function	Diagnosis	ICD-10-CM
N25.9	Disorder resulting from impaired renal tubular function, unspecified	Diagnosis	ICD-10-CM
N26.1	Atrophy of kidney (terminal)	Diagnosis	ICD-10-CM
N26.9	Renal sclerosis, unspecified	Diagnosis	ICD-10-CM
N27.0	Small kidney, unilateral	Diagnosis	ICD-10-CM
N27.1	Small kidney, bilateral	Diagnosis	ICD-10-CM
N27.9	Small kidney, unspecified	Diagnosis	ICD-10-CM
N28.9	Disorder of kidney and ureter, unspecified	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
N29	Other disorders of kidney and ureter in diseases classified elsewhere	Diagnosis	ICD-10-CM
<b>Neuropathy</b>			
A52.16	Charcot's arthropathy (tabetic)	Diagnosis	ICD-10-CM
E08.610	Diabetes mellitus due to underlying condition with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E09.610	Drug or chemical induced diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E10.44	Type 1 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E10.49	Type 1 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E10.610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E11.44	Type 2 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E11.610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E13.44	Other specified diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E13.49	Other specified diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E13.610	Other specified diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
G56.00	Carpal tunnel syndrome, unspecified upper limb	Diagnosis	ICD-10-CM
G56.01	Carpal tunnel syndrome, right upper limb	Diagnosis	ICD-10-CM
G56.02	Carpal tunnel syndrome, left upper limb	Diagnosis	ICD-10-CM
G56.03	Carpal tunnel syndrome, bilateral upper limbs	Diagnosis	ICD-10-CM
G56.10	Other lesions of median nerve, unspecified upper limb	Diagnosis	ICD-10-CM
G56.11	Other lesions of median nerve, right upper limb	Diagnosis	ICD-10-CM
G56.12	Other lesions of median nerve, left upper limb	Diagnosis	ICD-10-CM
G56.13	Other lesions of median nerve, bilateral upper limbs	Diagnosis	ICD-10-CM
G56.20	Lesion of ulnar nerve, unspecified upper limb	Diagnosis	ICD-10-CM
G56.21	Lesion of ulnar nerve, right upper limb	Diagnosis	ICD-10-CM
G56.22	Lesion of ulnar nerve, left upper limb	Diagnosis	ICD-10-CM
G56.23	Lesion of ulnar nerve, bilateral upper limbs	Diagnosis	ICD-10-CM
G56.30	Lesion of radial nerve, unspecified upper limb	Diagnosis	ICD-10-CM
G56.31	Lesion of radial nerve, right upper limb	Diagnosis	ICD-10-CM
G56.32	Lesion of radial nerve, left upper limb	Diagnosis	ICD-10-CM
G56.33	Lesion of radial nerve, bilateral upper limbs	Diagnosis	ICD-10-CM
G56.40	Causalgia of unspecified upper limb	Diagnosis	ICD-10-CM
G56.41	Causalgia of right upper limb	Diagnosis	ICD-10-CM
G56.42	Causalgia of left upper limb	Diagnosis	ICD-10-CM
G56.43	Causalgia of bilateral upper limbs	Diagnosis	ICD-10-CM
G56.80	Other specified mononeuropathies of unspecified upper limb	Diagnosis	ICD-10-CM
G56.81	Other specified mononeuropathies of right upper limb	Diagnosis	ICD-10-CM
G56.82	Other specified mononeuropathies of left upper limb	Diagnosis	ICD-10-CM
G56.83	Other specified mononeuropathies of bilateral upper limbs	Diagnosis	ICD-10-CM
G57.00	Lesion of sciatic nerve, unspecified lower limb	Diagnosis	ICD-10-CM
G57.01	Lesion of sciatic nerve, right lower limb	Diagnosis	ICD-10-CM
G57.02	Lesion of sciatic nerve, left lower limb	Diagnosis	ICD-10-CM
G57.03	Lesion of sciatic nerve, bilateral lower limbs	Diagnosis	ICD-10-CM
G57.10	Meralgia paresthetica, unspecified lower limb	Diagnosis	ICD-10-CM
G57.11	Meralgia paresthetica, right lower limb	Diagnosis	ICD-10-CM
G57.12	Meralgia paresthetica, left lower limb	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
G57.13	Meralgia paresthetica, bilateral lower limbs	Diagnosis	ICD-10-CM
G57.20	Lesion of femoral nerve, unspecified lower limb	Diagnosis	ICD-10-CM
G57.21	Lesion of femoral nerve, right lower limb	Diagnosis	ICD-10-CM
G57.22	Lesion of femoral nerve, left lower limb	Diagnosis	ICD-10-CM
G57.23	Lesion of femoral nerve, bilateral lower limbs	Diagnosis	ICD-10-CM
G57.30	Lesion of lateral popliteal nerve, unspecified lower limb	Diagnosis	ICD-10-CM
G57.31	Lesion of lateral popliteal nerve, right lower limb	Diagnosis	ICD-10-CM
G57.32	Lesion of lateral popliteal nerve, left lower limb	Diagnosis	ICD-10-CM
G57.40	Lesion of medial popliteal nerve, unspecified lower limb	Diagnosis	ICD-10-CM
G57.41	Lesion of medial popliteal nerve, right lower limb	Diagnosis	ICD-10-CM
G57.42	Lesion of medial popliteal nerve, left lower limb	Diagnosis	ICD-10-CM
G57.43	Lesion of medial popliteal nerve, bilateral lower limbs	Diagnosis	ICD-10-CM
G57.50	Tarsal tunnel syndrome, unspecified lower limb	Diagnosis	ICD-10-CM
G57.51	Tarsal tunnel syndrome, right lower limb	Diagnosis	ICD-10-CM
G57.52	Tarsal tunnel syndrome, left lower limb	Diagnosis	ICD-10-CM
G57.53	Tarsal tunnel syndrome, bilateral lower limbs	Diagnosis	ICD-10-CM
G57.60	Lesion of plantar nerve, unspecified lower limb	Diagnosis	ICD-10-CM
G57.61	Lesion of plantar nerve, right lower limb	Diagnosis	ICD-10-CM
G57.62	Lesion of plantar nerve, left lower limb	Diagnosis	ICD-10-CM
G57.63	Lesion of plantar nerve, bilateral lower limbs	Diagnosis	ICD-10-CM
G57.70	Causalgia of unspecified lower limb	Diagnosis	ICD-10-CM
G57.71	Causalgia of right lower limb	Diagnosis	ICD-10-CM
G57.72	Causalgia of left lower limb	Diagnosis	ICD-10-CM
G57.73	Causalgia of bilateral lower limbs	Diagnosis	ICD-10-CM
G57.80	Other specified mononeuropathies of unspecified lower limb	Diagnosis	ICD-10-CM
G57.81	Other specified mononeuropathies of right lower limb	Diagnosis	ICD-10-CM
G57.82	Other specified mononeuropathies of left lower limb	Diagnosis	ICD-10-CM
G57.83	Other specified mononeuropathies of bilateral lower limbs	Diagnosis	ICD-10-CM
G58.7	Mononeuritis multiplex	Diagnosis	ICD-10-CM
G58.8	Other specified mononeuropathies	Diagnosis	ICD-10-CM
G73.3	Myasthenic syndromes in other diseases classified elsewhere	Diagnosis	ICD-10-CM
M14.60	Charcot's joint, unspecified site	Diagnosis	ICD-10-CM
M14.611	Charcot's joint, right shoulder	Diagnosis	ICD-10-CM
M14.612	Charcot's joint, left shoulder	Diagnosis	ICD-10-CM
M14.619	Charcot's joint, unspecified shoulder	Diagnosis	ICD-10-CM
M14.621	Charcot's joint, right elbow	Diagnosis	ICD-10-CM
M14.622	Charcot's joint, left elbow	Diagnosis	ICD-10-CM
M14.629	Charcot's joint, unspecified elbow	Diagnosis	ICD-10-CM
M14.631	Charcot's joint, right wrist	Diagnosis	ICD-10-CM
M14.632	Charcot's joint, left wrist	Diagnosis	ICD-10-CM
M14.639	Charcot's joint, unspecified wrist	Diagnosis	ICD-10-CM
M14.641	Charcot's joint, right hand	Diagnosis	ICD-10-CM
M14.642	Charcot's joint, left hand	Diagnosis	ICD-10-CM
M14.649	Charcot's joint, unspecified hand	Diagnosis	ICD-10-CM
M14.651	Charcot's joint, right hip	Diagnosis	ICD-10-CM
M14.652	Charcot's joint, left hip	Diagnosis	ICD-10-CM
M14.659	Charcot's joint, unspecified hip	Diagnosis	ICD-10-CM
M14.661	Charcot's joint, right knee	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
M14.662	Charcot's joint, left knee	Diagnosis	ICD-10-CM
M14.669	Charcot's joint, unspecified knee	Diagnosis	ICD-10-CM
M14.671	Charcot's joint, right ankle and foot	Diagnosis	ICD-10-CM
M14.672	Charcot's joint, left ankle and foot	Diagnosis	ICD-10-CM
M14.679	Charcot's joint, unspecified ankle and foot	Diagnosis	ICD-10-CM
M14.68	Charcot's joint, vertebrae	Diagnosis	ICD-10-CM
M14.69	Charcot's joint, multiple sites	Diagnosis	ICD-10-CM
S04.10XA	Injury of oculomotor nerve, unspecified side, initial encounter	Diagnosis	ICD-10-CM
S04.11XA	Injury of oculomotor nerve, right side, initial encounter	Diagnosis	ICD-10-CM
S04.12XA	Injury of oculomotor nerve, left side, initial encounter	Diagnosis	ICD-10-CM
S04.20XA	Injury of trochlear nerve, unspecified side, initial encounter	Diagnosis	ICD-10-CM
S04.21XA	Injury of trochlear nerve, right side, initial encounter	Diagnosis	ICD-10-CM
S04.22XA	Injury of trochlear nerve, left side, initial encounter	Diagnosis	ICD-10-CM
S04.40XA	Injury of abducent nerve, unspecified side, initial encounter	Diagnosis	ICD-10-CM
S04.41XA	Injury of abducent nerve, right side, initial encounter	Diagnosis	ICD-10-CM
S04.42XA	Injury of abducent nerve, left side, initial encounter	Diagnosis	ICD-10-CM
<b>Retinopathy</b>			
E10.36	Type 1 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E10.37X1	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E10.37X2	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E10.37X3	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E10.37X9	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E10.39	Type 1 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E11.36	Type 2 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E11.37X1	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E11.37X2	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E11.37X3	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E11.37X9	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E11.39	Type 2 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E13.36	Other specified diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E13.37X1	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E13.37X2	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E13.37X3	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E13.37X9	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E13.39	Other specified diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
H33.001	Unspecified retinal detachment with retinal break, right eye	Diagnosis	ICD-10-CM
H33.002	Unspecified retinal detachment with retinal break, left eye	Diagnosis	ICD-10-CM
H33.003	Unspecified retinal detachment with retinal break, bilateral	Diagnosis	ICD-10-CM
H33.009	Unspecified retinal detachment with retinal break, unspecified eye	Diagnosis	ICD-10-CM
H33.011	Retinal detachment with single break, right eye	Diagnosis	ICD-10-CM
H33.012	Retinal detachment with single break, left eye	Diagnosis	ICD-10-CM
H33.013	Retinal detachment with single break, bilateral	Diagnosis	ICD-10-CM
H33.019	Retinal detachment with single break, unspecified eye	Diagnosis	ICD-10-CM
H33.021	Retinal detachment with multiple breaks, right eye	Diagnosis	ICD-10-CM
H33.022	Retinal detachment with multiple breaks, left eye	Diagnosis	ICD-10-CM
H33.023	Retinal detachment with multiple breaks, bilateral	Diagnosis	ICD-10-CM
H33.029	Retinal detachment with multiple breaks, unspecified eye	Diagnosis	ICD-10-CM
H33.031	Retinal detachment with giant retinal tear, right eye	Diagnosis	ICD-10-CM
H33.032	Retinal detachment with giant retinal tear, left eye	Diagnosis	ICD-10-CM
H33.033	Retinal detachment with giant retinal tear, bilateral	Diagnosis	ICD-10-CM
H33.039	Retinal detachment with giant retinal tear, unspecified eye	Diagnosis	ICD-10-CM
H33.041	Retinal detachment with retinal dialysis, right eye	Diagnosis	ICD-10-CM
H33.042	Retinal detachment with retinal dialysis, left eye	Diagnosis	ICD-10-CM
H33.043	Retinal detachment with retinal dialysis, bilateral	Diagnosis	ICD-10-CM
H33.049	Retinal detachment with retinal dialysis, unspecified eye	Diagnosis	ICD-10-CM
H33.051	Total retinal detachment, right eye	Diagnosis	ICD-10-CM
H33.052	Total retinal detachment, left eye	Diagnosis	ICD-10-CM
H33.053	Total retinal detachment, bilateral	Diagnosis	ICD-10-CM
H33.059	Total retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
H33.101	Unspecified retinoschisis, right eye	Diagnosis	ICD-10-CM
H33.102	Unspecified retinoschisis, left eye	Diagnosis	ICD-10-CM
H33.103	Unspecified retinoschisis, bilateral	Diagnosis	ICD-10-CM
H33.109	Unspecified retinoschisis, unspecified eye	Diagnosis	ICD-10-CM
H33.111	Cyst of ora serrata, right eye	Diagnosis	ICD-10-CM
H33.112	Cyst of ora serrata, left eye	Diagnosis	ICD-10-CM
H33.113	Cyst of ora serrata, bilateral	Diagnosis	ICD-10-CM
H33.119	Cyst of ora serrata, unspecified eye	Diagnosis	ICD-10-CM
H33.191	Other retinoschisis and retinal cysts, right eye	Diagnosis	ICD-10-CM
H33.192	Other retinoschisis and retinal cysts, left eye	Diagnosis	ICD-10-CM
H33.193	Other retinoschisis and retinal cysts, bilateral	Diagnosis	ICD-10-CM
H33.199	Other retinoschisis and retinal cysts, unspecified eye	Diagnosis	ICD-10-CM
H33.20	Serous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
H33.21	Serous retinal detachment, right eye	Diagnosis	ICD-10-CM
H33.22	Serous retinal detachment, left eye	Diagnosis	ICD-10-CM
H33.23	Serous retinal detachment, bilateral	Diagnosis	ICD-10-CM
H33.301	Unspecified retinal break, right eye	Diagnosis	ICD-10-CM
H33.302	Unspecified retinal break, left eye	Diagnosis	ICD-10-CM
H33.303	Unspecified retinal break, bilateral	Diagnosis	ICD-10-CM
H33.309	Unspecified retinal break, unspecified eye	Diagnosis	ICD-10-CM
H33.311	Horseshoe tear of retina without detachment, right eye	Diagnosis	ICD-10-CM
H33.312	Horseshoe tear of retina without detachment, left eye	Diagnosis	ICD-10-CM
H33.313	Horseshoe tear of retina without detachment, bilateral	Diagnosis	ICD-10-CM
H33.319	Horseshoe tear of retina without detachment, unspecified eye	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
H33.321	Round hole, right eye	Diagnosis	ICD-10-CM
H33.322	Round hole, left eye	Diagnosis	ICD-10-CM
H33.323	Round hole, bilateral	Diagnosis	ICD-10-CM
H33.329	Round hole, unspecified eye	Diagnosis	ICD-10-CM
H33.331	Multiple defects of retina without detachment, right eye	Diagnosis	ICD-10-CM
H33.332	Multiple defects of retina without detachment, left eye	Diagnosis	ICD-10-CM
H33.333	Multiple defects of retina without detachment, bilateral	Diagnosis	ICD-10-CM
H33.339	Multiple defects of retina without detachment, unspecified eye	Diagnosis	ICD-10-CM
H33.40	Traction detachment of retina, unspecified eye	Diagnosis	ICD-10-CM
H33.41	Traction detachment of retina, right eye	Diagnosis	ICD-10-CM
H33.42	Traction detachment of retina, left eye	Diagnosis	ICD-10-CM
H33.43	Traction detachment of retina, bilateral	Diagnosis	ICD-10-CM
H33.8	Other retinal detachments	Diagnosis	ICD-10-CM
H35.011	Changes in retinal vascular appearance, right eye	Diagnosis	ICD-10-CM
H35.012	Changes in retinal vascular appearance, left eye	Diagnosis	ICD-10-CM
H35.013	Changes in retinal vascular appearance, bilateral	Diagnosis	ICD-10-CM
H35.019	Changes in retinal vascular appearance, unspecified eye	Diagnosis	ICD-10-CM
H35.041	Retinal micro-aneurysms, unspecified, right eye	Diagnosis	ICD-10-CM
H35.042	Retinal micro-aneurysms, unspecified, left eye	Diagnosis	ICD-10-CM
H35.043	Retinal micro-aneurysms, unspecified, bilateral	Diagnosis	ICD-10-CM
H35.049	Retinal micro-aneurysms, unspecified, unspecified eye	Diagnosis	ICD-10-CM
H35.051	Retinal neovascularization, unspecified, right eye	Diagnosis	ICD-10-CM
H35.052	Retinal neovascularization, unspecified, left eye	Diagnosis	ICD-10-CM
H35.053	Retinal neovascularization, unspecified, bilateral	Diagnosis	ICD-10-CM
H35.059	Retinal neovascularization, unspecified, unspecified eye	Diagnosis	ICD-10-CM
H35.061	Retinal vasculitis, right eye	Diagnosis	ICD-10-CM
H35.062	Retinal vasculitis, left eye	Diagnosis	ICD-10-CM
H35.063	Retinal vasculitis, bilateral	Diagnosis	ICD-10-CM
H35.069	Retinal vasculitis, unspecified eye	Diagnosis	ICD-10-CM
H35.071	Retinal telangiectasis, right eye	Diagnosis	ICD-10-CM
H35.072	Retinal telangiectasis, left eye	Diagnosis	ICD-10-CM
H35.073	Retinal telangiectasis, bilateral	Diagnosis	ICD-10-CM
H35.079	Retinal telangiectasis, unspecified eye	Diagnosis	ICD-10-CM
H35.09	Other intraretinal microvascular abnormalities	Diagnosis	ICD-10-CM
H35.351	Cystoid macular degeneration, right eye	Diagnosis	ICD-10-CM
H35.352	Cystoid macular degeneration, left eye	Diagnosis	ICD-10-CM
H35.353	Cystoid macular degeneration, bilateral	Diagnosis	ICD-10-CM
H35.359	Cystoid macular degeneration, unspecified eye	Diagnosis	ICD-10-CM
H35.60	Retinal hemorrhage, unspecified eye	Diagnosis	ICD-10-CM
H35.61	Retinal hemorrhage, right eye	Diagnosis	ICD-10-CM
H35.62	Retinal hemorrhage, left eye	Diagnosis	ICD-10-CM
H35.63	Retinal hemorrhage, bilateral	Diagnosis	ICD-10-CM
H35.81	Retinal edema	Diagnosis	ICD-10-CM
H35.82	Retinal ischemia	Diagnosis	ICD-10-CM
H35.89	Other specified retinal disorders	Diagnosis	ICD-10-CM
H43.10	Vitreous hemorrhage, unspecified eye	Diagnosis	ICD-10-CM
H43.11	Vitreous hemorrhage, right eye	Diagnosis	ICD-10-CM
H43.12	Vitreous hemorrhage, left eye	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
H43.13	Vitreous hemorrhage, bilateral	Diagnosis	ICD-10-CM
H44.2C1	Degenerative myopia with retinal detachment, right eye	Diagnosis	ICD-10-CM
H44.2C2	Degenerative myopia with retinal detachment, left eye	Diagnosis	ICD-10-CM
H44.2C3	Degenerative myopia with retinal detachment, bilateral eye	Diagnosis	ICD-10-CM
H44.2C9	Degenerative myopia with retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
H54.OX33	Blindness right eye category 3, blindness left eye category 3	Diagnosis	ICD-10-CM
H54.OX34	Blindness right eye category 3, blindness left eye category 4	Diagnosis	ICD-10-CM
H54.OX35	Blindness right eye category 3, blindness left eye category 5	Diagnosis	ICD-10-CM
H54.OX43	Blindness right eye category 4, blindness left eye category 3	Diagnosis	ICD-10-CM
H54.OX44	Blindness right eye category 4, blindness left eye category 4	Diagnosis	ICD-10-CM
H54.OX45	Blindness right eye category 4, blindness left eye category 5	Diagnosis	ICD-10-CM
H54.OX53	Blindness right eye category 5, blindness left eye category 3	Diagnosis	ICD-10-CM
H54.OX54	Blindness right eye category 5, blindness left eye category 4	Diagnosis	ICD-10-CM
H54.OX55	Blindness right eye category 5, blindness left eye category 5	Diagnosis	ICD-10-CM
H54.10	Blindness, one eye, low vision other eye, unspecified eyes	Diagnosis	ICD-10-CM
H54.1131	Blindness right eye category 3, low vision left eye category 1	Diagnosis	ICD-10-CM
H54.1132	Blindness right eye category 3, low vision left eye category 2	Diagnosis	ICD-10-CM
H54.1141	Blindness right eye category 4, low vision left eye category 1	Diagnosis	ICD-10-CM
H54.1142	Blindness right eye category 4, low vision left eye category 2	Diagnosis	ICD-10-CM
H54.1151	Blindness right eye category 5, low vision left eye category 1	Diagnosis	ICD-10-CM
H54.1152	Blindness right eye category 5, low vision left eye category 2	Diagnosis	ICD-10-CM
H54.1213	Low vision right eye category 1, blindness left eye category 3	Diagnosis	ICD-10-CM
H54.1214	Low vision right eye category 1, blindness left eye category 4	Diagnosis	ICD-10-CM
H54.1215	Low vision right eye category 1, blindness left eye category 5	Diagnosis	ICD-10-CM
H54.1223	Low vision right eye category 2, blindness left eye category 3	Diagnosis	ICD-10-CM
H54.1224	Low vision right eye category 2, blindness left eye category 4	Diagnosis	ICD-10-CM
H54.1225	Low vision right eye category 2, blindness left eye category 5	Diagnosis	ICD-10-CM
H54.2X11	Low vision right eye category 1, low vision left eye category 1	Diagnosis	ICD-10-CM
H54.2X12	Low vision right eye category 1, low vision left eye category 2	Diagnosis	ICD-10-CM
H54.2X21	Low vision right eye category 2, low vision left eye category 1	Diagnosis	ICD-10-CM
H54.2X22	Low vision right eye category 2, low vision left eye category 2	Diagnosis	ICD-10-CM
H54.3	Unqualified visual loss, both eyes	Diagnosis	ICD-10-CM
H54.40	Blindness, one eye, unspecified eye	Diagnosis	ICD-10-CM
H54.413A	Blindness right eye category 3, normal vision left eye	Diagnosis	ICD-10-CM
H54.414A	Blindness right eye category 4, normal vision left eye	Diagnosis	ICD-10-CM
H54.415A	Blindness right eye category 5, normal vision left eye	Diagnosis	ICD-10-CM
H54.42A3	Blindness left eye category 3, normal vision right eye	Diagnosis	ICD-10-CM
H54.42A4	Blindness left eye category 4, normal vision right eye	Diagnosis	ICD-10-CM
H54.42A5	Blindness left eye category 5, normal vision right eye	Diagnosis	ICD-10-CM
H54.50	Low vision, one eye, unspecified eye	Diagnosis	ICD-10-CM
H54.511A	Low vision right eye category 1, normal vision left eye	Diagnosis	ICD-10-CM
H54.512A	Low vision right eye category 2, normal vision left eye	Diagnosis	ICD-10-CM
H54.52A1	Low vision left eye category 1, normal vision right eye	Diagnosis	ICD-10-CM
H54.52A2	Low vision left eye category 2, normal vision right eye	Diagnosis	ICD-10-CM
H54.60	Unqualified visual loss, one eye, unspecified	Diagnosis	ICD-10-CM
H54.61	Unqualified visual loss, right eye, normal vision left eye	Diagnosis	ICD-10-CM
H54.62	Unqualified visual loss, left eye, normal vision right eye	Diagnosis	ICD-10-CM
H54.7	Unspecified visual loss	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
H54.8	Legal blindness, as defined in USA	Diagnosis	ICD-10-CM
<b>Hospitalized Myocardial Infarction</b>			
I2101	ST elevation (STEMI) myocardial infarction involving left main coronary artery	Diagnosis	ICD-10-CM
I2102	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery	Diagnosis	ICD-10-CM
I2109	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall	Diagnosis	ICD-10-CM
I2111	ST elevation (STEMI) myocardial infarction involving right coronary artery	Diagnosis	ICD-10-CM
I2119	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall	Diagnosis	ICD-10-CM
I2121	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery	Diagnosis	ICD-10-CM
I2129	ST elevation (STEMI) myocardial infarction involving other sites	Diagnosis	ICD-10-CM
I213	ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
I214	Non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I219	Acute myocardial infarction, unspecified	Diagnosis	ICD-10-CM
I21A1	Myocardial infarction type 2	Diagnosis	ICD-10-CM
I21A9	Other myocardial infarction type	Diagnosis	ICD-10-CM
I220	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall	Diagnosis	ICD-10-CM
I221	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall	Diagnosis	ICD-10-CM
I222	Subsequent non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I228	Subsequent ST elevation (STEMI) myocardial infarction of other sites	Diagnosis	ICD-10-CM
I229	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
<b>Hospitalized Stroke/TIA</b>			
G450	Vertebro-basilar artery syndrome	Diagnosis	ICD-10-CM
G451	Carotid artery syndrome (hemispheric)	Diagnosis	ICD-10-CM
G452	Multiple and bilateral precerebral artery syndromes	Diagnosis	ICD-10-CM
G453	Amaurosis fugax	Diagnosis	ICD-10-CM
G454	Transient global amnesia	Diagnosis	ICD-10-CM
G458	Other transient cerebral ischemic attacks and related syndromes	Diagnosis	ICD-10-CM
G459	Transient cerebral ischemic attack, unspecified	Diagnosis	ICD-10-CM
G460	Middle cerebral artery syndrome	Diagnosis	ICD-10-CM
G461	Anterior cerebral artery syndrome	Diagnosis	ICD-10-CM
G462	Posterior cerebral artery syndrome	Diagnosis	ICD-10-CM
G463	Brain stem stroke syndrome	Diagnosis	ICD-10-CM
G464	Cerebellar stroke syndrome	Diagnosis	ICD-10-CM
G465	Pure motor lacunar syndrome	Diagnosis	ICD-10-CM
G466	Pure sensory lacunar syndrome	Diagnosis	ICD-10-CM
G467	Other lacunar syndromes	Diagnosis	ICD-10-CM
G468	Other vascular syndromes of brain in cerebrovascular diseases	Diagnosis	ICD-10-CM
I6000	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I6001	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I6002	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I6010	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I6011	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery	Diagnosis	ICD-10-CM
I6012	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery	Diagnosis	ICD-10-CM
I602	Nontraumatic subarachnoid hemorrhage from anterior communicating artery	Diagnosis	ICD-10-CM
I6020	Nontraumatic subarachnoid hemorrhage from unspecified anterior communicating artery	Diagnosis	ICD-10-CM
I6021	Nontraumatic subarachnoid hemorrhage from right anterior communicating artery	Diagnosis	ICD-10-CM
I6022	Nontraumatic subarachnoid hemorrhage from left anterior communicating artery	Diagnosis	ICD-10-CM
I6030	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery	Diagnosis	ICD-10-CM
I6031	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery	Diagnosis	ICD-10-CM
I6032	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery	Diagnosis	ICD-10-CM
I604	Nontraumatic subarachnoid hemorrhage from basilar artery	Diagnosis	ICD-10-CM
I6050	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery	Diagnosis	ICD-10-CM
I6051	Nontraumatic subarachnoid hemorrhage from right vertebral artery	Diagnosis	ICD-10-CM
I6052	Nontraumatic subarachnoid hemorrhage from left vertebral artery	Diagnosis	ICD-10-CM
I606	Nontraumatic subarachnoid hemorrhage from other intracranial arteries	Diagnosis	ICD-10-CM
I607	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery	Diagnosis	ICD-10-CM
I608	Other nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I609	Nontraumatic subarachnoid hemorrhage, unspecified	Diagnosis	ICD-10-CM
I610	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical	Diagnosis	ICD-10-CM
I611	Nontraumatic intracerebral hemorrhage in hemisphere, cortical	Diagnosis	ICD-10-CM
I612	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified	Diagnosis	ICD-10-CM
I613	Nontraumatic intracerebral hemorrhage in brain stem	Diagnosis	ICD-10-CM
I614	Nontraumatic intracerebral hemorrhage in cerebellum	Diagnosis	ICD-10-CM
I615	Nontraumatic intracerebral hemorrhage, intraventricular	Diagnosis	ICD-10-CM
I616	Nontraumatic intracerebral hemorrhage, multiple localized	Diagnosis	ICD-10-CM
I618	Other nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I619	Nontraumatic intracerebral hemorrhage, unspecified	Diagnosis	ICD-10-CM
I6200	Nontraumatic subdural hemorrhage, unspecified	Diagnosis	ICD-10-CM
I6201	Nontraumatic acute subdural hemorrhage	Diagnosis	ICD-10-CM
I6202	Nontraumatic subacute subdural hemorrhage	Diagnosis	ICD-10-CM
I6203	Nontraumatic chronic subdural hemorrhage	Diagnosis	ICD-10-CM
I629	Nontraumatic intracranial hemorrhage, unspecified	Diagnosis	ICD-10-CM
I63	Cerebral infarction	Diagnosis	ICD-10-CM
I630	Cerebral infarction due to thrombosis of precerebral arteries	Diagnosis	ICD-10-CM
I6300	Cerebral infarction due to thrombosis of unspecified precerebral artery	Diagnosis	ICD-10-CM
I6301	Cerebral infarction due to thrombosis of vertebral artery	Diagnosis	ICD-10-CM
I63011	Cerebral infarction due to thrombosis of right vertebral artery	Diagnosis	ICD-10-CM
I63012	Cerebral infarction due to thrombosis of left vertebral artery	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I63013	Cerebral infarction due to thrombosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63019	Cerebral infarction due to thrombosis of unspecified vertebral artery	Diagnosis	ICD-10-CM
I6302	Cerebral infarction due to thrombosis of basilar artery	Diagnosis	ICD-10-CM
I6303	Cerebral infarction due to thrombosis of carotid artery	Diagnosis	ICD-10-CM
I63031	Cerebral infarction due to thrombosis of right carotid artery	Diagnosis	ICD-10-CM
I63032	Cerebral infarction due to thrombosis of left carotid artery	Diagnosis	ICD-10-CM
I63033	Cerebral infarction due to thrombosis of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63039	Cerebral infarction due to thrombosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I6309	Cerebral infarction due to thrombosis of other precerebral artery	Diagnosis	ICD-10-CM
I631	Cerebral infarction due to embolism of precerebral arteries	Diagnosis	ICD-10-CM
I6310	Cerebral infarction due to embolism of unspecified precerebral artery	Diagnosis	ICD-10-CM
I6311	Cerebral infarction due to embolism of vertebral artery	Diagnosis	ICD-10-CM
I63111	Cerebral infarction due to embolism of right vertebral artery	Diagnosis	ICD-10-CM
I63112	Cerebral infarction due to embolism of left vertebral artery	Diagnosis	ICD-10-CM
I63113	Cerebral infarction due to embolism of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63119	Cerebral infarction due to embolism of unspecified vertebral artery	Diagnosis	ICD-10-CM
I6312	Cerebral infarction due to embolism of basilar artery	Diagnosis	ICD-10-CM
I6313	Cerebral infarction due to embolism of carotid artery	Diagnosis	ICD-10-CM
I63131	Cerebral infarction due to embolism of right carotid artery	Diagnosis	ICD-10-CM
I63132	Cerebral infarction due to embolism of left carotid artery	Diagnosis	ICD-10-CM
I63133	Cerebral infarction due to embolism of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63139	Cerebral infarction due to embolism of unspecified carotid artery	Diagnosis	ICD-10-CM
I6319	Cerebral infarction due to embolism of other precerebral artery	Diagnosis	ICD-10-CM
I632	Cerebral infarction due to unspecified occlusion or stenosis of precerebral arteries	Diagnosis	ICD-10-CM
I6320	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries	Diagnosis	ICD-10-CM
I6321	Cerebral infarction due to unspecified occlusion or stenosis of vertebral arteries	Diagnosis	ICD-10-CM
I63211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral artery	Diagnosis	ICD-10-CM
I63212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral artery	Diagnosis	ICD-10-CM
I63213	Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral artery	Diagnosis	ICD-10-CM
I6322	Cerebral infarction due to unspecified occlusion or stenosis of basilar artery	Diagnosis	ICD-10-CM
I6323	Cerebral infarction due to unspecified occlusion or stenosis of carotid arteries	Diagnosis	ICD-10-CM
I63231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries	Diagnosis	ICD-10-CM
I63232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries	Diagnosis	ICD-10-CM
I63233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I63239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I6329	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries	Diagnosis	ICD-10-CM
I633	Cerebral infarction due to thrombosis of cerebral arteries	Diagnosis	ICD-10-CM
I6330	Cerebral infarction due to thrombosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I6331	Cerebral infarction due to thrombosis of middle cerebral artery	Diagnosis	ICD-10-CM
I63311	Cerebral infarction due to thrombosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I63312	Cerebral infarction due to thrombosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I63313	Cerebral infarction due to thrombosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I6332	Cerebral infarction due to thrombosis of anterior cerebral artery	Diagnosis	ICD-10-CM
I63321	Cerebral infarction due to thrombosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63322	Cerebral infarction due to thrombosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63323	Cerebral infarction due to thrombosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I6333	Cerebral infarction due to thrombosis of posterior cerebral artery	Diagnosis	ICD-10-CM
I63331	Cerebral infarction due to thrombosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63332	Cerebral infarction due to thrombosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63333	Cerebral infarction due to thrombosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I6334	Cerebral infarction due to thrombosis of cerebellar artery	Diagnosis	ICD-10-CM
I63341	Cerebral infarction due to thrombosis of right cerebellar artery	Diagnosis	ICD-10-CM
I63342	Cerebral infarction due to thrombosis of left cerebellar artery	Diagnosis	ICD-10-CM
I63343	Cerebral infarction due to thrombosis of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63349	Cerebral infarction due to thrombosis of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I6339	Cerebral infarction due to thrombosis of other cerebral artery	Diagnosis	ICD-10-CM
I634	Cerebral infarction due to embolism of cerebral arteries	Diagnosis	ICD-10-CM
I6340	Cerebral infarction due to embolism of unspecified cerebral artery	Diagnosis	ICD-10-CM
I6341	Cerebral infarction due to embolism of middle cerebral artery	Diagnosis	ICD-10-CM
I63411	Cerebral infarction due to embolism of right middle cerebral artery	Diagnosis	ICD-10-CM
I63412	Cerebral infarction due to embolism of left middle cerebral artery	Diagnosis	ICD-10-CM
I63413	Cerebral infarction due to embolism of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63419	Cerebral infarction due to embolism of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I6342	Cerebral infarction due to embolism of anterior cerebral artery	Diagnosis	ICD-10-CM
I63421	Cerebral infarction due to embolism of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63422	Cerebral infarction due to embolism of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63423	Cerebral infarction due to embolism of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63429	Cerebral infarction due to embolism of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I6343	Cerebral infarction due to embolism of posterior cerebral artery	Diagnosis	ICD-10-CM
I63431	Cerebral infarction due to embolism of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63432	Cerebral infarction due to embolism of left posterior cerebral artery	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
I63433	Cerebral infarction due to embolism of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63439	Cerebral infarction due to embolism of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I6344	Cerebral infarction due to embolism of cerebellar artery	Diagnosis	ICD-10-CM
I63441	Cerebral infarction due to embolism of right cerebellar artery	Diagnosis	ICD-10-CM
I63442	Cerebral infarction due to embolism of left cerebellar artery	Diagnosis	ICD-10-CM
I63443	Cerebral infarction due to embolism of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63449	Cerebral infarction due to embolism of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I6349	Cerebral infarction due to embolism of other cerebral artery	Diagnosis	ICD-10-CM
I635	Cerebral infarction due to unspecified occlusion or stenosis of cerebral arteries	Diagnosis	ICD-10-CM
I6350	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I6351	Cerebral infarction due to unspecified occlusion or stenosis of middle cerebral artery	Diagnosis	ICD-10-CM
I63511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I63512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I63513	Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63519	Cerebral infarction due to unspecified occlusion or stenosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I6352	Cerebral infarction due to unspecified occlusion or stenosis of anterior cerebral artery	Diagnosis	ICD-10-CM
I63521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63523	Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63529	Cerebral infarction due to unspecified occlusion or stenosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I6353	Cerebral infarction due to unspecified occlusion or stenosis of posterior cerebral artery	Diagnosis	ICD-10-CM
I63531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I6354	Cerebral infarction due to unspecified occlusion or stenosis of cerebellar artery	Diagnosis	ICD-10-CM
I63541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I63542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery	Diagnosis	ICD-10-CM
I63543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I6359	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery	Diagnosis	ICD-10-CM
I636	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic	Diagnosis	ICD-10-CM
I638	Other cerebral infarction	Diagnosis	ICD-10-CM
I6381	Other cerebral infarction due to occlusion or stenosis of small artery	Diagnosis	ICD-10-CM
I6389	Other cerebral infarction	Diagnosis	ICD-10-CM
I639	Cerebral infarction, unspecified	Diagnosis	ICD-10-CM
<b>Peripheral Vascular Disease</b>			
I73	Other peripheral vascular diseases	Diagnosis	ICD-10-CM
I73.8	Other specified peripheral vascular diseases	Diagnosis	ICD-10-CM
I73.89	Other specified peripheral vascular diseases	Diagnosis	ICD-10-CM
I73.9	Peripheral vascular disease, unspecified	Diagnosis	ICD-10-CM
<b>Outpatient Diabetic Ketoacidosis</b>			
E08.1	Diabetes mellitus due to underlying condition with ketoacidosis	Diagnosis	ICD-10-CM
E08.10	Diabetes mellitus due to underlying condition with ketoacidosis without coma	Diagnosis	ICD-10-CM
E08.11	Diabetes mellitus due to underlying condition with ketoacidosis with coma	Diagnosis	ICD-10-CM
E09.1	Drug or chemical induced diabetes mellitus with ketoacidosis	Diagnosis	ICD-10-CM
E09.10	Drug or chemical induced diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E09.11	Drug or chemical induced diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E11.1	Type 2 diabetes mellitus with ketoacidosis	Diagnosis	ICD-10-CM
E11.10	Type 2 diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E11.11	Type 2 diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E13.1	Other specified diabetes mellitus with ketoacidosis	Diagnosis	ICD-10-CM
E13.10	Other specified diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E13.11	Other specified diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
<b>Asthma</b>			
J4520	Mild intermittent asthma, uncomplicated	Diagnosis	ICD-10-CM
J4521	Mild intermittent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J4522	Mild intermittent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J4530	Mild persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J4531	Mild persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J4532	Mild persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J4540	Moderate persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J4541	Moderate persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J4542	Moderate persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J4550	Severe persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J4551	Severe persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J4552	Severe persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45901	Unspecified asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45902	Unspecified asthma with status asthmaticus	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
J45909	Unspecified asthma, uncomplicated	Diagnosis	ICD-10-CM
J45990	Exercise induced bronchospasm	Diagnosis	ICD-10-CM
J45991	Cough variant asthma	Diagnosis	ICD-10-CM
J45998	Other asthma	Diagnosis	ICD-10-CM
<b>Chronic Obstructive Pulmonary Disease</b>			
J410	Simple chronic bronchitis	Diagnosis	ICD-10-CM
J411	Mucopurulent chronic bronchitis	Diagnosis	ICD-10-CM
J418	Mixed simple and mucopurulent chronic bronchitis	Diagnosis	ICD-10-CM
J42	Unspecified chronic bronchitis	Diagnosis	ICD-10-CM
J431	Panlobular emphysema	Diagnosis	ICD-10-CM
J432	Centrilobular emphysema	Diagnosis	ICD-10-CM
J438	Other emphysema	Diagnosis	ICD-10-CM
J439	Emphysema, unspecified	Diagnosis	ICD-10-CM
J440	Chronic obstructive pulmonary disease with acute lower respiratory infection	Diagnosis	ICD-10-CM
J441	Chronic obstructive pulmonary disease with (acute) exacerbation	Diagnosis	ICD-10-CM
J449	Chronic obstructive pulmonary disease, unspecified	Diagnosis	ICD-10-CM
<b>Heart Failure</b>			
G8451	Beta-blocker therapy for lvef < 40% not prescribed for reasons documented by the clinician (e.g., low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent, allergy, intolerance, other medical reasons, patient declined, other patient reasons, or other reasons attributable to the healthcare system)	Procedure	ICD-10-PCS
G8694	Left ventricular ejection fraction (lvef) < 40%	Procedure	ICD-10-PCS
G8738	Left ventricular ejection fraction (lvef) < 40% or documentation of severely or moderately depressed left ventricular systolic function	Procedure	ICD-10-PCS
G8923	Left ventricular ejection fraction (lvef) < 40% or documentation of moderately or severely depressed left ventricular systolic function	Procedure	ICD-10-PCS
G8934	Left ventricular ejection fraction (lvef) < 40% or documentation of moderately or severely depressed left ventricular systolic function	Procedure	ICD-10-PCS
I0981	Rheumatic heart failure	Diagnosis	ICD-10-CM
I110	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM
I130	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I132	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I2601	Septic pulmonary embolism with acute cor pulmonale	Diagnosis	ICD-10-CM
I2602	Saddle embolus of pulmonary artery with acute cor pulmonale	Diagnosis	ICD-10-CM
I2609	Other pulmonary embolism with acute cor pulmonale	Diagnosis	ICD-10-CM
I2781	Cor pulmonale (chronic)	Diagnosis	ICD-10-CM
I2783	Eisenmenger's syndrome	Diagnosis	ICD-10-CM
I502	Systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I5020	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I5021	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I5022	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I5023	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I503	Diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I5030	Unspecified diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I5031	Acute diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I5032	Chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I5033	Acute on chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I504	Combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I5040	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I5041	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I5042	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I5043	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I5081	Right heart failure	Diagnosis	ICD-10-CM
I50810	Right heart failure, unspecified	Diagnosis	ICD-10-CM
I50811	Acute right heart failure	Diagnosis	ICD-10-CM
I50812	Chronic right heart failure	Diagnosis	ICD-10-CM
I50813	Acute on chronic right heart failure	Diagnosis	ICD-10-CM
I50814	Right heart failure due to left heart failure	Diagnosis	ICD-10-CM
I5082	Biventricular heart failure	Diagnosis	ICD-10-CM
I5083	High output heart failure	Diagnosis	ICD-10-CM
I5084	End stage heart failure	Diagnosis	ICD-10-CM
I5089	Other heart failure	Diagnosis	ICD-10-CM
I509	Heart failure, unspecified	Diagnosis	ICD-10-CM
<b>Hypertension</b>			
I10	Essential (primary) hypertension	Diagnosis	ICD-10-CM
I11	Hypertensive heart disease	Diagnosis	ICD-10-CM
I110	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM
I119	Hypertensive heart disease without heart failure	Diagnosis	ICD-10-CM
I12	Hypertensive chronic kidney disease	Diagnosis	ICD-10-CM
I120	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease	Diagnosis	ICD-10-CM
I129	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13	Hypertensive heart and chronic kidney disease	Diagnosis	ICD-10-CM
I130	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I131	Hypertensive heart and chronic kidney disease without heart failure	Diagnosis	ICD-10-CM
I1310	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I1311	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I132	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I15	Secondary hypertension	Diagnosis	ICD-10-CM
I150	Renovascular hypertension	Diagnosis	ICD-10-CM
I151	Hypertension secondary to other renal disorders	Diagnosis	ICD-10-CM
I152	Hypertension secondary to endocrine disorders	Diagnosis	ICD-10-CM
I158	Other secondary hypertension	Diagnosis	ICD-10-CM
I159	Secondary hypertension, unspecified	Diagnosis	ICD-10-CM
I16	Hypertensive crisis	Diagnosis	ICD-10-CM
I160	Hypertensive urgency	Diagnosis	ICD-10-CM
I161	Hypertensive emergency	Diagnosis	ICD-10-CM
I169	Hypertensive crisis, unspecified	Diagnosis	ICD-10-CM
I674	Hypertensive encephalopathy	Diagnosis	ICD-10-CM
<b>Cancer</b>			
11600	Excision, malignant lesion including margins, trunk, arms, or legs; excised diameter 0.5 cm or less	Procedure	CPT-4
11601	Excision, malignant lesion including margins, trunk, arms, or legs; excised diameter 0.6 to 1.0 cm	Procedure	CPT-4
11602	Excision, malignant lesion including margins, trunk, arms, or legs; excised diameter 1.1 to 2.0 cm	Procedure	CPT-4
11603	Excision, malignant lesion including margins, trunk, arms, or legs; excised diameter 2.1 to 3.0 cm	Procedure	CPT-4
11604	Excision, malignant lesion including margins, trunk, arms, or legs; excised diameter 3.1 to 4.0 cm	Procedure	CPT-4
11606	Excision, malignant lesion including margins, trunk, arms, or legs; excised diameter over 4.0 cm	Procedure	CPT-4
11620	Excision, malignant lesion including margins, scalp, neck, hands, feet, genitalia; excised diameter 0.5 cm or less	Procedure	CPT-4
11621	Excision, malignant lesion including margins, scalp, neck, hands, feet, genitalia; excised diameter 0.6 to 1.0 cm	Procedure	CPT-4
11622	Excision, malignant lesion including margins, scalp, neck, hands, feet, genitalia; excised diameter 1.1 to 2.0 cm	Procedure	CPT-4
11623	Excision, malignant lesion including margins, scalp, neck, hands, feet, genitalia; excised diameter 2.1 to 3.0 cm	Procedure	CPT-4
11624	Excision, malignant lesion including margins, scalp, neck, hands, feet, genitalia; excised diameter 3.1 to 4.0 cm	Procedure	CPT-4
11626	Excision, malignant lesion including margins, scalp, neck, hands, feet, genitalia; excised diameter over 4.0 cm	Procedure	CPT-4
11640	Excision, malignant lesion including margins, face, ears, eyelids, nose, lips; excised diameter 0.5 cm or less	Procedure	CPT-4
11641	Excision, malignant lesion including margins, face, ears, eyelids, nose, lips; excised diameter 0.6 to 1.0 cm	Procedure	CPT-4
11642	Excision, malignant lesion including margins, face, ears, eyelids, nose, lips; excised diameter 1.1 to 2.0 cm	Procedure	CPT-4
11643	Excision, malignant lesion including margins, face, ears, eyelids, nose, lips; excised diameter 2.1 to 3.0 cm	Procedure	CPT-4
11644	Excision, malignant lesion including margins, face, ears, eyelids, nose, lips; excised diameter 3.1 to 4.0 cm	Procedure	CPT-4

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
11646	Excision, malignant lesion including margins, face, ears, eyelids, nose, lips; excised diameter over 4.0 cm	Procedure	CPT-4
17260	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), trunk, arms or legs; lesion diameter 0.5 cm or less	Procedure	CPT-4
17261	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), trunk, arms or legs; lesion diameter 0.6 to 1.0 cm	Procedure	CPT-4
17262	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), trunk, arms or legs; lesion diameter 1.1 to 2.0 cm	Procedure	CPT-4
17263	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), trunk, arms or legs; lesion diameter 2.1 to 3.0 cm	Procedure	CPT-4
17264	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), trunk, arms or legs; lesion diameter 3.1 to 4.0 cm	Procedure	CPT-4
17266	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), trunk, arms or legs; lesion diameter over 4.0 cm	Procedure	CPT-4
17270	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), scalp, neck, hands, feet, genitalia; lesion diameter 0.5 cm or less	Procedure	CPT-4
17271	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), scalp, neck, hands, feet, genitalia; lesion diameter 0.6 to 1.0 cm	Procedure	CPT-4
17272	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), scalp, neck, hands, feet, genitalia; lesion diameter 1.1 to 2.0 cm	Procedure	CPT-4
17273	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), scalp, neck, hands, feet, genitalia; lesion diameter 2.1 to 3.0 cm	Procedure	CPT-4
17274	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), scalp, neck, hands, feet, genitalia; lesion diameter 3.1 to 4.0 cm	Procedure	CPT-4
17276	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), scalp, neck, hands, feet, genitalia; lesion diameter over 4.0 cm	Procedure	CPT-4
17280	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 0.5 cm or less	Procedure	CPT-4
17281	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 0.6 to 1.0 cm	Procedure	CPT-4
17282	Destruction, malignant lesion (eg, laser surgery, electro-surgery, cryosurgery, chemosurgery, surgical curettement), face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 1.1 to 2.0 cm	Procedure	CPT-4

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
17283	Destruction, malignant lesion (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 2.1 to 3.0 cm	Procedure	CPT-4
17284	Destruction, malignant lesion (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 3.1 to 4.0 cm	Procedure	CPT-4
17286	Destruction, malignant lesion (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), face, ears, eyelids, nose, lips, mucous membrane; lesion diameter over 4.0 cm	Procedure	CPT-4
17304	Chemosurgery (Mohs micrographic technique), including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and complete histopathologic preparation including the first routine stain (eg, hematoxylin and eosin, toluidine blue); first stage, fresh tissue technique, up to 5 specimens	Procedure	CPT-4
17305	Chemosurgery (Mohs micrographic technique), including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and complete histopathologic preparation including the first routine stain (eg, hematoxylin and eosin, toluidine blue); second stage, fixed or fresh tissue, up to 5 specimens	Procedure	CPT-4
17306	Chemosurgery (Mohs micrographic technique), including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and complete histopathologic preparation including the first routine stain (eg, hematoxylin and eosin, toluidine blue); third stage, fixed or fresh tissue, up to 5 specimens	Procedure	CPT-4
17307	Chemosurgery (Mohs micrographic technique), including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and complete histopathologic preparation including the first routine stain (eg, hematoxylin and eosin, toluidine blue); additional stage(s), up to 5 specimens, each stage	Procedure	CPT-4
17310	Chemosurgery (Mohs micrographic technique), including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and complete histopathologic preparation including the first routine stain (eg, hematoxylin and eosin, toluidine blue); each additional specimen, after the first 5 specimens, fixed or fresh tissue, any stage (List separately in addition to code for primary procedure)	Procedure	CPT-4
17311	Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (eg, hematoxylin and eosin, toluidine blue), head, neck, hands, feet, genitalia, or any location with surgery directly involving muscle, cartilage, bone, tendon, major nerves, or vessels; first stage, up to 5 tissue blocks	Procedure	CPT-4



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
17312	Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (eg, hematoxylin and eosin, toluidine blue), head, neck, hands, feet, genitalia, or any location with surgery directly involving muscle, cartilage, bone, tendon, major nerves, or vessels; each additional stage after the first stage, up to 5 tissue blocks (List separately in addition to code for primary procedure)	Procedure	CPT-4
17313	Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (eg, hematoxylin and eosin, toluidine blue), of the trunk, arms, or legs; first stage, up to 5 tissue blocks	Procedure	CPT-4
17314	Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (eg, hematoxylin and eosin, toluidine blue), of the trunk, arms, or legs; each additional stage after the first stage, up to 5 tissue blocks (List separately in addition to code for primary procedure)	Procedure	CPT-4
17315	Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (eg, hematoxylin and eosin, toluidine blue), each additional block after the first 5 tissue blocks, any stage (List separately in addition to code for primary procedure)	Procedure	CPT-4
55859	Transperineal placement of needles or catheters into prostate for interstitial radioelement application, with or without cystoscopy	Procedure	CPT-4
55860	Exposure of prostate, any approach, for insertion of radioactive substance;	Procedure	CPT-4
55862	Exposure of prostate, any approach, for insertion of radioactive substance; with lymph node biopsy(s) (limited pelvic lymphadenectomy)	Procedure	CPT-4
55865	Exposure of prostate, any approach, for insertion of radioactive substance; with bilateral pelvic lymphadenectomy, including external iliac, hypogastric and obturator nodes	Procedure	CPT-4
55875	Transperineal placement of needles or catheters into prostate for interstitial radioelement application, with or without cystoscopy	Procedure	CPT-4
76950	Ultrasonic guidance for placement of radiation therapy fields	Procedure	CPT-4
76960	Ultrasonic guidance for placement of radiation therapy fields, except for B-scan echography	Procedure	CPT-4
77280	Therapeutic radiology simulation-aided field setting; simple	Procedure	CPT-4
77285	Therapeutic radiology simulation-aided field setting; intermediate	Procedure	CPT-4
77290	Therapeutic radiology simulation-aided field setting; complex	Procedure	CPT-4
77295	3-dimensional radiotherapy plan, including dose-volume histograms	Procedure	CPT-4
77299	Unlisted procedure, therapeutic radiology clinical treatment planning	Procedure	CPT-4
77300	Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician	Procedure	CPT-4

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
77305	Teletherapy, isodose plan (whether hand or computer calculated); simple (1 or 2 parallel opposed unmodified ports directed to a single area of interest)	Procedure	CPT-4
77310	Teletherapy, isodose plan (whether hand or computer calculated); intermediate (3 or more treatment ports directed to a single area of interest)	Procedure	CPT-4
77315	Teletherapy, isodose plan (whether hand or computer calculated); complex (mantle or inverted Y, tangential ports, the use of wedges, compensators, complex blocking, rotational beam, or special beam considerations)	Procedure	CPT-4
77321	Special teletherapy port plan, particles, hemibody, total body	Procedure	CPT-4
77326	Brachytherapy isodose plan; simple (calculation made from single plane, 1 to 4 sources/ribbon application, remote afterloading brachytherapy, 1 to 8 sources)	Procedure	CPT-4
77327	Brachytherapy isodose plan; intermediate (multiplane dosage calculations, application involving 5 to 10 sources/ribbons, remote afterloading brachytherapy, 9 to 12 sources)	Procedure	CPT-4
77328	Brachytherapy isodose plan; complex (multiplane isodose plan, volume implant calculations, over 10 sources/ribbons used, special spatial reconstruction, remote afterloading brachytherapy, over 12 sources)	Procedure	CPT-4
77401	Radiation treatment delivery, superficial and/or ortho voltage, per day	Procedure	CPT-4
77402	Radiation treatment delivery, =>1 MeV; simple	Procedure	CPT-4
77403	Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 6-10 MeV	Procedure	CPT-4
77404	Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 11-19 MeV	Procedure	CPT-4
77406	Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 20 MeV or greater	Procedure	CPT-4
77407	Radiation treatment delivery, =>1 MeV; intermediate	Procedure	CPT-4
77408	Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks; 6-10 MeV	Procedure	CPT-4
77409	Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks; 11-19 MeV	Procedure	CPT-4
77411	Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks; 20 MeV or greater	Procedure	CPT-4
77412	Radiation treatment delivery, =>1 MeV; complex	Procedure	CPT-4
77413	Radiation treatment delivery, 3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 6-10 MeV	Procedure	CPT-4
77414	Radiation treatment delivery, 3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 11-19 MeV	Procedure	CPT-4
77416	Radiation treatment delivery, 3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 20 MeV or greater	Procedure	CPT-4
77427	Radiation treatment management, 5 treatments	Procedure	CPT-4
77432	Stereotactic radiation treatment management of cranial lesion(s) (complete course of treatment consisting of 1 session)	Procedure	CPT-4
77469	Intraoperative radiation treatment management	Procedure	CPT-4



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
77470	Special treatment procedure (eg, total body irradiation, hemibody radiation, per oral or endocavitary irradiation)	Procedure	CPT-4
77499	Unlisted procedure, therapeutic radiology treatment management	Procedure	CPT-4
77750	Infusion or instillation of radioelement solution (includes 3-month follow-up care)	Procedure	CPT-4
77761	Intracavitary radiation source application; simple	Procedure	CPT-4
77762	Intracavitary radiation source application; intermediate	Procedure	CPT-4
77763	Intracavitary radiation source application; complex	Procedure	CPT-4
77776	Interstitial radiation source application; simple	Procedure	CPT-4
77777	Interstitial radiation source application; intermediate	Procedure	CPT-4
77778	Interstitial radiation source application; complex	Procedure	CPT-4
77781	Remote afterloading high intensity brachytherapy; 1-4 source positions or catheters	Procedure	CPT-4
77782	Remote afterloading high intensity brachytherapy; 5-8 source positions or catheters	Procedure	CPT-4
77783	Remote afterloading high intensity brachytherapy; 9-12 source positions or catheters	Procedure	CPT-4
77784	Remote afterloading high intensity brachytherapy; over 12 source positions or catheters	Procedure	CPT-4
77785	Remote afterloading high dose rate radionuclide brachytherapy; 1 channel	Procedure	CPT-4
77786	Remote afterloading high dose rate radionuclide brachytherapy; 2-12 channels	Procedure	CPT-4
77787	Remote afterloading high dose rate radionuclide brachytherapy; over 12 channels	Procedure	CPT-4
77789	Surface application of low dose rate radionuclide source	Procedure	CPT-4
77799	Unlisted procedure, clinical brachytherapy	Procedure	CPT-4
79005	Radiopharmaceutical therapy, by oral administration	Procedure	CPT-4
79101	Radiopharmaceutical therapy, by intravenous administration	Procedure	CPT-4
79200	Radiopharmaceutical therapy, by intracavitary administration	Procedure	CPT-4
79300	Radiopharmaceutical therapy, by interstitial radioactive colloid administration	Procedure	CPT-4
79400	Radiopharmaceutical therapy, nonthyroid, nonhematologic by intervenous injection	Procedure	CPT-4
79403	Radiopharmaceutical therapy, radiolabeled monoclonal antibody by intravenous infusion	Procedure	CPT-4
79420	Intravascular radiopharmaceutical therapy, particulate	Procedure	CPT-4
79440	Radiopharmaceutical therapy, by intra-articular administration	Procedure	CPT-4
79900	Provision of therapeutic radiopharmaceutical(s)	Procedure	CPT-4
79999	Radiopharmaceutical therapy, unlisted procedure	Procedure	CPT-4
C00.0	Malignant neoplasm of external upper lip	Diagnosis	ICD-10-CM
C00.1	Malignant neoplasm of external lower lip	Diagnosis	ICD-10-CM
C00.2	Malignant neoplasm of external lip, unspecified	Diagnosis	ICD-10-CM
C00.3	Malignant neoplasm of upper lip, inner aspect	Diagnosis	ICD-10-CM
C00.4	Malignant neoplasm of lower lip, inner aspect	Diagnosis	ICD-10-CM
C00.5	Malignant neoplasm of lip, unspecified, inner aspect	Diagnosis	ICD-10-CM
C00.6	Malignant neoplasm of commissure of lip, unspecified	Diagnosis	ICD-10-CM
C00.8	Malignant neoplasm of overlapping sites of lip	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C00.9	Malignant neoplasm of lip, unspecified	Diagnosis	ICD-10-CM
C01	Malignant neoplasm of base of tongue	Diagnosis	ICD-10-CM
C02.0	Malignant neoplasm of dorsal surface of tongue	Diagnosis	ICD-10-CM
C02.1	Malignant neoplasm of border of tongue	Diagnosis	ICD-10-CM
C02.2	Malignant neoplasm of ventral surface of tongue	Diagnosis	ICD-10-CM
C02.3	Malignant neoplasm of anterior two-thirds of tongue, part unspecified	Diagnosis	ICD-10-CM
C02.4	Malignant neoplasm of lingual tonsil	Diagnosis	ICD-10-CM
C02.8	Malignant neoplasm of overlapping sites of tongue	Diagnosis	ICD-10-CM
C02.9	Malignant neoplasm of tongue, unspecified	Diagnosis	ICD-10-CM
C03.0	Malignant neoplasm of upper gum	Diagnosis	ICD-10-CM
C03.1	Malignant neoplasm of lower gum	Diagnosis	ICD-10-CM
C03.9	Malignant neoplasm of gum, unspecified	Diagnosis	ICD-10-CM
C04.0	Malignant neoplasm of anterior floor of mouth	Diagnosis	ICD-10-CM
C04.1	Malignant neoplasm of lateral floor of mouth	Diagnosis	ICD-10-CM
C04.8	Malignant neoplasm of overlapping sites of floor of mouth	Diagnosis	ICD-10-CM
C04.9	Malignant neoplasm of floor of mouth, unspecified	Diagnosis	ICD-10-CM
C05.0	Malignant neoplasm of hard palate	Diagnosis	ICD-10-CM
C05.1	Malignant neoplasm of soft palate	Diagnosis	ICD-10-CM
C05.2	Malignant neoplasm of uvula	Diagnosis	ICD-10-CM
C05.8	Malignant neoplasm of overlapping sites of palate	Diagnosis	ICD-10-CM
C05.9	Malignant neoplasm of palate, unspecified	Diagnosis	ICD-10-CM
C06.0	Malignant neoplasm of cheek mucosa	Diagnosis	ICD-10-CM
C06.1	Malignant neoplasm of vestibule of mouth	Diagnosis	ICD-10-CM
C06.2	Malignant neoplasm of retromolar area	Diagnosis	ICD-10-CM
C06.80	Malignant neoplasm of overlapping sites of unspecified parts of mouth	Diagnosis	ICD-10-CM
C06.89	Malignant neoplasm of overlapping sites of other parts of mouth	Diagnosis	ICD-10-CM
C06.9	Malignant neoplasm of mouth, unspecified	Diagnosis	ICD-10-CM
C07	Malignant neoplasm of parotid gland	Diagnosis	ICD-10-CM
C08.0	Malignant neoplasm of submandibular gland	Diagnosis	ICD-10-CM
C08.1	Malignant neoplasm of sublingual gland	Diagnosis	ICD-10-CM
C08.9	Malignant neoplasm of major salivary gland, unspecified	Diagnosis	ICD-10-CM
C09.0	Malignant neoplasm of tonsillar fossa	Diagnosis	ICD-10-CM
C09.1	Malignant neoplasm of tonsillar pillar (anterior) (posterior)	Diagnosis	ICD-10-CM
C09.8	Malignant neoplasm of overlapping sites of tonsil	Diagnosis	ICD-10-CM
C09.9	Malignant neoplasm of tonsil, unspecified	Diagnosis	ICD-10-CM
C10.0	Malignant neoplasm of vallecula	Diagnosis	ICD-10-CM
C10.1	Malignant neoplasm of anterior surface of epiglottis	Diagnosis	ICD-10-CM
C10.2	Malignant neoplasm of lateral wall of oropharynx	Diagnosis	ICD-10-CM
C10.3	Malignant neoplasm of posterior wall of oropharynx	Diagnosis	ICD-10-CM
C10.4	Malignant neoplasm of branchial cleft	Diagnosis	ICD-10-CM
C10.8	Malignant neoplasm of overlapping sites of oropharynx	Diagnosis	ICD-10-CM
C10.9	Malignant neoplasm of oropharynx, unspecified	Diagnosis	ICD-10-CM
C11.0	Malignant neoplasm of superior wall of nasopharynx	Diagnosis	ICD-10-CM
C11.1	Malignant neoplasm of posterior wall of nasopharynx	Diagnosis	ICD-10-CM
C11.2	Malignant neoplasm of lateral wall of nasopharynx	Diagnosis	ICD-10-CM
C11.3	Malignant neoplasm of anterior wall of nasopharynx	Diagnosis	ICD-10-CM
C11.8	Malignant neoplasm of overlapping sites of nasopharynx	Diagnosis	ICD-10-CM
C11.9	Malignant neoplasm of nasopharynx, unspecified	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C12	Malignant neoplasm of pyriform sinus	Diagnosis	ICD-10-CM
C13.0	Malignant neoplasm of postcricoid region	Diagnosis	ICD-10-CM
C13.1	Malignant neoplasm of aryepiglottic fold, hypopharyngeal aspect	Diagnosis	ICD-10-CM
C13.2	Malignant neoplasm of posterior wall of hypopharynx	Diagnosis	ICD-10-CM
C13.8	Malignant neoplasm of overlapping sites of hypopharynx	Diagnosis	ICD-10-CM
C13.9	Malignant neoplasm of hypopharynx, unspecified	Diagnosis	ICD-10-CM
C14.0	Malignant neoplasm of pharynx, unspecified	Diagnosis	ICD-10-CM
C14.2	Malignant neoplasm of Waldeyer's ring	Diagnosis	ICD-10-CM
C14.8	Malignant neoplasm of overlapping sites of lip, oral cavity and pharynx	Diagnosis	ICD-10-CM
C15.3	Malignant neoplasm of upper third of esophagus	Diagnosis	ICD-10-CM
C15.4	Malignant neoplasm of middle third of esophagus	Diagnosis	ICD-10-CM
C15.5	Malignant neoplasm of lower third of esophagus	Diagnosis	ICD-10-CM
C15.8	Malignant neoplasm of overlapping sites of esophagus	Diagnosis	ICD-10-CM
C15.9	Malignant neoplasm of esophagus, unspecified	Diagnosis	ICD-10-CM
C16.0	Malignant neoplasm of cardia	Diagnosis	ICD-10-CM
C16.1	Malignant neoplasm of fundus of stomach	Diagnosis	ICD-10-CM
C16.2	Malignant neoplasm of body of stomach	Diagnosis	ICD-10-CM
C16.3	Malignant neoplasm of pyloric antrum	Diagnosis	ICD-10-CM
C16.4	Malignant neoplasm of pylorus	Diagnosis	ICD-10-CM
C16.5	Malignant neoplasm of lesser curvature of stomach, unspecified	Diagnosis	ICD-10-CM
C16.6	Malignant neoplasm of greater curvature of stomach, unspecified	Diagnosis	ICD-10-CM
C16.8	Malignant neoplasm of overlapping sites of stomach	Diagnosis	ICD-10-CM
C16.9	Malignant neoplasm of stomach, unspecified	Diagnosis	ICD-10-CM
C17.0	Malignant neoplasm of duodenum	Diagnosis	ICD-10-CM
C17.1	Malignant neoplasm of jejunum	Diagnosis	ICD-10-CM
C17.2	Malignant neoplasm of ileum	Diagnosis	ICD-10-CM
C17.3	Meckel's diverticulum, malignant	Diagnosis	ICD-10-CM
C17.8	Malignant neoplasm of overlapping sites of small intestine	Diagnosis	ICD-10-CM
C17.9	Malignant neoplasm of small intestine, unspecified	Diagnosis	ICD-10-CM
C18.0	Malignant neoplasm of cecum	Diagnosis	ICD-10-CM
C18.1	Malignant neoplasm of appendix	Diagnosis	ICD-10-CM
C18.2	Malignant neoplasm of ascending colon	Diagnosis	ICD-10-CM
C18.3	Malignant neoplasm of hepatic flexure	Diagnosis	ICD-10-CM
C18.4	Malignant neoplasm of transverse colon	Diagnosis	ICD-10-CM
C18.5	Malignant neoplasm of splenic flexure	Diagnosis	ICD-10-CM
C18.6	Malignant neoplasm of descending colon	Diagnosis	ICD-10-CM
C18.7	Malignant neoplasm of sigmoid colon	Diagnosis	ICD-10-CM
C18.8	Malignant neoplasm of overlapping sites of colon	Diagnosis	ICD-10-CM
C18.9	Malignant neoplasm of colon, unspecified	Diagnosis	ICD-10-CM
C19	Malignant neoplasm of rectosigmoid junction	Diagnosis	ICD-10-CM
C20	Malignant neoplasm of rectum	Diagnosis	ICD-10-CM
C21.0	Malignant neoplasm of anus, unspecified	Diagnosis	ICD-10-CM
C21.1	Malignant neoplasm of anal canal	Diagnosis	ICD-10-CM
C21.2	Malignant neoplasm of cloacogenic zone	Diagnosis	ICD-10-CM
C21.8	Malignant neoplasm of overlapping sites of rectum, anus and anal canal	Diagnosis	ICD-10-CM
C22.0	Liver cell carcinoma	Diagnosis	ICD-10-CM
C22.1	Intrahepatic bile duct carcinoma	Diagnosis	ICD-10-CM
C22.2	Hepatoblastoma	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C22.3	Angiosarcoma of liver	Diagnosis	ICD-10-CM
C22.4	Other sarcomas of liver	Diagnosis	ICD-10-CM
C22.7	Other specified carcinomas of liver	Diagnosis	ICD-10-CM
C22.8	Malignant neoplasm of liver, primary, unspecified as to type	Diagnosis	ICD-10-CM
C22.9	Malignant neoplasm of liver, not specified as primary or secondary	Diagnosis	ICD-10-CM
C23	Malignant neoplasm of gallbladder	Diagnosis	ICD-10-CM
C24.0	Malignant neoplasm of extrahepatic bile duct	Diagnosis	ICD-10-CM
C24.1	Malignant neoplasm of ampulla of Vater	Diagnosis	ICD-10-CM
C24.8	Malignant neoplasm of overlapping sites of biliary tract	Diagnosis	ICD-10-CM
C24.9	Malignant neoplasm of biliary tract, unspecified	Diagnosis	ICD-10-CM
C25.0	Malignant neoplasm of head of pancreas	Diagnosis	ICD-10-CM
C25.1	Malignant neoplasm of body of pancreas	Diagnosis	ICD-10-CM
C25.2	Malignant neoplasm of tail of pancreas	Diagnosis	ICD-10-CM
C25.3	Malignant neoplasm of pancreatic duct	Diagnosis	ICD-10-CM
C25.4	Malignant neoplasm of endocrine pancreas	Diagnosis	ICD-10-CM
C25.7	Malignant neoplasm of other parts of pancreas	Diagnosis	ICD-10-CM
C25.8	Malignant neoplasm of overlapping sites of pancreas	Diagnosis	ICD-10-CM
C25.9	Malignant neoplasm of pancreas, unspecified	Diagnosis	ICD-10-CM
C26.0	Malignant neoplasm of intestinal tract, part unspecified	Diagnosis	ICD-10-CM
C26.1	Malignant neoplasm of spleen	Diagnosis	ICD-10-CM
C26.9	Malignant neoplasm of ill-defined sites within the digestive system	Diagnosis	ICD-10-CM
C30.0	Malignant neoplasm of nasal cavity	Diagnosis	ICD-10-CM
C30.1	Malignant neoplasm of middle ear	Diagnosis	ICD-10-CM
C31.0	Malignant neoplasm of maxillary sinus	Diagnosis	ICD-10-CM
C31.1	Malignant neoplasm of ethmoidal sinus	Diagnosis	ICD-10-CM
C31.2	Malignant neoplasm of frontal sinus	Diagnosis	ICD-10-CM
C31.3	Malignant neoplasm of sphenoid sinus	Diagnosis	ICD-10-CM
C31.8	Malignant neoplasm of overlapping sites of accessory sinuses	Diagnosis	ICD-10-CM
C31.9	Malignant neoplasm of accessory sinus, unspecified	Diagnosis	ICD-10-CM
C32.0	Malignant neoplasm of glottis	Diagnosis	ICD-10-CM
C32.1	Malignant neoplasm of supraglottis	Diagnosis	ICD-10-CM
C32.2	Malignant neoplasm of subglottis	Diagnosis	ICD-10-CM
C32.3	Malignant neoplasm of laryngeal cartilage	Diagnosis	ICD-10-CM
C32.8	Malignant neoplasm of overlapping sites of larynx	Diagnosis	ICD-10-CM
C32.9	Malignant neoplasm of larynx, unspecified	Diagnosis	ICD-10-CM
C33	Malignant neoplasm of trachea	Diagnosis	ICD-10-CM
C34.00	Malignant neoplasm of unspecified main bronchus	Diagnosis	ICD-10-CM
C34.01	Malignant neoplasm of right main bronchus	Diagnosis	ICD-10-CM
C34.02	Malignant neoplasm of left main bronchus	Diagnosis	ICD-10-CM
C34.10	Malignant neoplasm of upper lobe, unspecified bronchus or lung	Diagnosis	ICD-10-CM
C34.11	Malignant neoplasm of upper lobe, right bronchus or lung	Diagnosis	ICD-10-CM
C34.12	Malignant neoplasm of upper lobe, left bronchus or lung	Diagnosis	ICD-10-CM
C34.2	Malignant neoplasm of middle lobe, bronchus or lung	Diagnosis	ICD-10-CM
C34.30	Malignant neoplasm of lower lobe, unspecified bronchus or lung	Diagnosis	ICD-10-CM
C34.31	Malignant neoplasm of lower lobe, right bronchus or lung	Diagnosis	ICD-10-CM
C34.32	Malignant neoplasm of lower lobe, left bronchus or lung	Diagnosis	ICD-10-CM
C34.80	Malignant neoplasm of overlapping sites of unspecified bronchus and lung	Diagnosis	ICD-10-CM
C34.81	Malignant neoplasm of overlapping sites of right bronchus and lung	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
C34.82	Malignant neoplasm of overlapping sites of left bronchus and lung	Diagnosis	ICD-10-CM
C34.90	Malignant neoplasm of unspecified part of unspecified bronchus or lung	Diagnosis	ICD-10-CM
C34.91	Malignant neoplasm of unspecified part of right bronchus or lung	Diagnosis	ICD-10-CM
C34.92	Malignant neoplasm of unspecified part of left bronchus or lung	Diagnosis	ICD-10-CM
C37	Malignant neoplasm of thymus	Diagnosis	ICD-10-CM
C38.0	Malignant neoplasm of heart	Diagnosis	ICD-10-CM
C38.1	Malignant neoplasm of anterior mediastinum	Diagnosis	ICD-10-CM
C38.2	Malignant neoplasm of posterior mediastinum	Diagnosis	ICD-10-CM
C38.3	Malignant neoplasm of mediastinum, part unspecified	Diagnosis	ICD-10-CM
C38.4	Malignant neoplasm of pleura	Diagnosis	ICD-10-CM
C38.8	Malignant neoplasm of overlapping sites of heart, mediastinum and pleura	Diagnosis	ICD-10-CM
C39.0	Malignant neoplasm of upper respiratory tract, part unspecified	Diagnosis	ICD-10-CM
C39.9	Malignant neoplasm of lower respiratory tract, part unspecified	Diagnosis	ICD-10-CM
C40.00	Malignant neoplasm of scapula and long bones of unspecified upper limb	Diagnosis	ICD-10-CM
C40.01	Malignant neoplasm of scapula and long bones of right upper limb	Diagnosis	ICD-10-CM
C40.02	Malignant neoplasm of scapula and long bones of left upper limb	Diagnosis	ICD-10-CM
C40.10	Malignant neoplasm of short bones of unspecified upper limb	Diagnosis	ICD-10-CM
C40.11	Malignant neoplasm of short bones of right upper limb	Diagnosis	ICD-10-CM
C40.12	Malignant neoplasm of short bones of left upper limb	Diagnosis	ICD-10-CM
C40.20	Malignant neoplasm of long bones of unspecified lower limb	Diagnosis	ICD-10-CM
C40.21	Malignant neoplasm of long bones of right lower limb	Diagnosis	ICD-10-CM
C40.22	Malignant neoplasm of long bones of left lower limb	Diagnosis	ICD-10-CM
C40.30	Malignant neoplasm of short bones of unspecified lower limb	Diagnosis	ICD-10-CM
C40.31	Malignant neoplasm of short bones of right lower limb	Diagnosis	ICD-10-CM
C40.32	Malignant neoplasm of short bones of left lower limb	Diagnosis	ICD-10-CM
C40.80	Malignant neoplasm of overlapping sites of bone and articular cartilage of unspecified limb	Diagnosis	ICD-10-CM
C40.81	Malignant neoplasm of overlapping sites of bone and articular cartilage of right limb	Diagnosis	ICD-10-CM
C40.82	Malignant neoplasm of overlapping sites of bone and articular cartilage of left limb	Diagnosis	ICD-10-CM
C40.90	Malignant neoplasm of unspecified bones and articular cartilage of unspecified limb	Diagnosis	ICD-10-CM
C40.91	Malignant neoplasm of unspecified bones and articular cartilage of right limb	Diagnosis	ICD-10-CM
C40.92	Malignant neoplasm of unspecified bones and articular cartilage of left limb	Diagnosis	ICD-10-CM
C41.0	Malignant neoplasm of bones of skull and face	Diagnosis	ICD-10-CM
C41.1	Malignant neoplasm of mandible	Diagnosis	ICD-10-CM
C41.2	Malignant neoplasm of vertebral column	Diagnosis	ICD-10-CM
C41.3	Malignant neoplasm of ribs, sternum and clavicle	Diagnosis	ICD-10-CM
C41.4	Malignant neoplasm of pelvic bones, sacrum and coccyx	Diagnosis	ICD-10-CM
C41.9	Malignant neoplasm of bone and articular cartilage, unspecified	Diagnosis	ICD-10-CM
C43.0	Malignant melanoma of lip	Diagnosis	ICD-10-CM
C43.10	Malignant melanoma of unspecified eyelid, including canthus	Diagnosis	ICD-10-CM
C43.11	Malignant melanoma of right eyelid, including canthus	Diagnosis	ICD-10-CM
C43.12	Malignant melanoma of left eyelid, including canthus	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C43.20	Malignant melanoma of unspecified ear and external auricular canal	Diagnosis	ICD-10-CM
C43.21	Malignant melanoma of right ear and external auricular canal	Diagnosis	ICD-10-CM
C43.22	Malignant melanoma of left ear and external auricular canal	Diagnosis	ICD-10-CM
C43.30	Malignant melanoma of unspecified part of face	Diagnosis	ICD-10-CM
C43.31	Malignant melanoma of nose	Diagnosis	ICD-10-CM
C43.39	Malignant melanoma of other parts of face	Diagnosis	ICD-10-CM
C43.4	Malignant melanoma of scalp and neck	Diagnosis	ICD-10-CM
C43.51	Malignant melanoma of anal skin	Diagnosis	ICD-10-CM
C43.52	Malignant melanoma of skin of breast	Diagnosis	ICD-10-CM
C43.59	Malignant melanoma of other part of trunk	Diagnosis	ICD-10-CM
C43.60	Malignant melanoma of unspecified upper limb, including shoulder	Diagnosis	ICD-10-CM
C43.61	Malignant melanoma of right upper limb, including shoulder	Diagnosis	ICD-10-CM
C43.62	Malignant melanoma of left upper limb, including shoulder	Diagnosis	ICD-10-CM
C43.70	Malignant melanoma of unspecified lower limb, including hip	Diagnosis	ICD-10-CM
C43.71	Malignant melanoma of right lower limb, including hip	Diagnosis	ICD-10-CM
C43.72	Malignant melanoma of left lower limb, including hip	Diagnosis	ICD-10-CM
C43.8	Malignant melanoma of overlapping sites of skin	Diagnosis	ICD-10-CM
C43.9	Malignant melanoma of skin, unspecified	Diagnosis	ICD-10-CM
C45.0	Mesothelioma of pleura	Diagnosis	ICD-10-CM
C45.1	Mesothelioma of peritoneum	Diagnosis	ICD-10-CM
C45.2	Mesothelioma of pericardium	Diagnosis	ICD-10-CM
C45.7	Mesothelioma of other sites	Diagnosis	ICD-10-CM
C45.9	Mesothelioma, unspecified	Diagnosis	ICD-10-CM
C46.0	Kaposi's sarcoma of skin	Diagnosis	ICD-10-CM
C46.1	Kaposi's sarcoma of soft tissue	Diagnosis	ICD-10-CM
C46.2	Kaposi's sarcoma of palate	Diagnosis	ICD-10-CM
C46.3	Kaposi's sarcoma of lymph nodes	Diagnosis	ICD-10-CM
C46.4	Kaposi's sarcoma of gastrointestinal sites	Diagnosis	ICD-10-CM
C46.50	Kaposi's sarcoma of unspecified lung	Diagnosis	ICD-10-CM
C46.51	Kaposi's sarcoma of right lung	Diagnosis	ICD-10-CM
C46.52	Kaposi's sarcoma of left lung	Diagnosis	ICD-10-CM
C46.7	Kaposi's sarcoma of other sites	Diagnosis	ICD-10-CM
C46.9	Kaposi's sarcoma, unspecified	Diagnosis	ICD-10-CM
C47.0	Malignant neoplasm of peripheral nerves of head, face and neck	Diagnosis	ICD-10-CM
C47.10	Malignant neoplasm of peripheral nerves of unspecified upper limb, including shoulder	Diagnosis	ICD-10-CM
C47.11	Malignant neoplasm of peripheral nerves of right upper limb, including shoulder	Diagnosis	ICD-10-CM
C47.12	Malignant neoplasm of peripheral nerves of left upper limb, including shoulder	Diagnosis	ICD-10-CM
C47.20	Malignant neoplasm of peripheral nerves of unspecified lower limb, including hip	Diagnosis	ICD-10-CM
C47.21	Malignant neoplasm of peripheral nerves of right lower limb, including hip	Diagnosis	ICD-10-CM
C47.22	Malignant neoplasm of peripheral nerves of left lower limb, including hip	Diagnosis	ICD-10-CM
C47.3	Malignant neoplasm of peripheral nerves of thorax	Diagnosis	ICD-10-CM
C47.4	Malignant neoplasm of peripheral nerves of abdomen	Diagnosis	ICD-10-CM
C47.5	Malignant neoplasm of peripheral nerves of pelvis	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C47.6	Malignant neoplasm of peripheral nerves of trunk, unspecified	Diagnosis	ICD-10-CM
C47.8	Malignant neoplasm of overlapping sites of peripheral nerves and autonomic nervous system	Diagnosis	ICD-10-CM
C47.9	Malignant neoplasm of peripheral nerves and autonomic nervous system, unspecified	Diagnosis	ICD-10-CM
C48.0	Malignant neoplasm of retroperitoneum	Diagnosis	ICD-10-CM
C48.1	Malignant neoplasm of specified parts of peritoneum	Diagnosis	ICD-10-CM
C48.2	Malignant neoplasm of peritoneum, unspecified	Diagnosis	ICD-10-CM
C48.8	Malignant neoplasm of overlapping sites of retroperitoneum and peritoneum	Diagnosis	ICD-10-CM
C49.0	Malignant neoplasm of connective and soft tissue of head, face and neck	Diagnosis	ICD-10-CM
C49.10	Malignant neoplasm of connective and soft tissue of unspecified upper limb, including shoulder	Diagnosis	ICD-10-CM
C49.11	Malignant neoplasm of connective and soft tissue of right upper limb, including shoulder	Diagnosis	ICD-10-CM
C49.12	Malignant neoplasm of connective and soft tissue of left upper limb, including shoulder	Diagnosis	ICD-10-CM
C49.20	Malignant neoplasm of connective and soft tissue of unspecified lower limb, including hip	Diagnosis	ICD-10-CM
C49.21	Malignant neoplasm of connective and soft tissue of right lower limb, including hip	Diagnosis	ICD-10-CM
C49.22	Malignant neoplasm of connective and soft tissue of left lower limb, including hip	Diagnosis	ICD-10-CM
C49.3	Malignant neoplasm of connective and soft tissue of thorax	Diagnosis	ICD-10-CM
C49.4	Malignant neoplasm of connective and soft tissue of abdomen	Diagnosis	ICD-10-CM
C49.5	Malignant neoplasm of connective and soft tissue of pelvis	Diagnosis	ICD-10-CM
C49.6	Malignant neoplasm of connective and soft tissue of trunk, unspecified	Diagnosis	ICD-10-CM
C49.8	Malignant neoplasm of overlapping sites of connective and soft tissue	Diagnosis	ICD-10-CM
C49.9	Malignant neoplasm of connective and soft tissue, unspecified	Diagnosis	ICD-10-CM
C49.A0	Gastrointestinal stromal tumor, unspecified site	Diagnosis	ICD-10-CM
C49.A1	Gastrointestinal stromal tumor of esophagus	Diagnosis	ICD-10-CM
C49.A2	Gastrointestinal stromal tumor of stomach	Diagnosis	ICD-10-CM
C49.A3	Gastrointestinal stromal tumor of small intestine	Diagnosis	ICD-10-CM
C49.A4	Gastrointestinal stromal tumor of large intestine	Diagnosis	ICD-10-CM
C49.A5	Gastrointestinal stromal tumor of rectum	Diagnosis	ICD-10-CM
C49.A9	Gastrointestinal stromal tumor of other sites	Diagnosis	ICD-10-CM
C4A.0	Merkel cell carcinoma of lip	Diagnosis	ICD-10-CM
C4A.10	Merkel cell carcinoma of unspecified eyelid, including canthus	Diagnosis	ICD-10-CM
C4A.11	Merkel cell carcinoma of right eyelid, including canthus	Diagnosis	ICD-10-CM
C4A.12	Merkel cell carcinoma of left eyelid, including canthus	Diagnosis	ICD-10-CM
C4A.20	Merkel cell carcinoma of unspecified ear and external auricular canal	Diagnosis	ICD-10-CM
C4A.21	Merkel cell carcinoma of right ear and external auricular canal	Diagnosis	ICD-10-CM
C4A.22	Merkel cell carcinoma of left ear and external auricular canal	Diagnosis	ICD-10-CM
C4A.30	Merkel cell carcinoma of unspecified part of face	Diagnosis	ICD-10-CM
C4A.31	Merkel cell carcinoma of nose	Diagnosis	ICD-10-CM
C4A.39	Merkel cell carcinoma of other parts of face	Diagnosis	ICD-10-CM
C4A.4	Merkel cell carcinoma of scalp and neck	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C4A.51	Merkel cell carcinoma of anal skin	Diagnosis	ICD-10-CM
C4A.52	Merkel cell carcinoma of skin of breast	Diagnosis	ICD-10-CM
C4A.59	Merkel cell carcinoma of other part of trunk	Diagnosis	ICD-10-CM
C4A.60	Merkel cell carcinoma of unspecified upper limb, including shoulder	Diagnosis	ICD-10-CM
C4A.61	Merkel cell carcinoma of right upper limb, including shoulder	Diagnosis	ICD-10-CM
C4A.62	Merkel cell carcinoma of left upper limb, including shoulder	Diagnosis	ICD-10-CM
C4A.70	Merkel cell carcinoma of unspecified lower limb, including hip	Diagnosis	ICD-10-CM
C4A.71	Merkel cell carcinoma of right lower limb, including hip	Diagnosis	ICD-10-CM
C4A.72	Merkel cell carcinoma of left lower limb, including hip	Diagnosis	ICD-10-CM
C4A.8	Merkel cell carcinoma of overlapping sites	Diagnosis	ICD-10-CM
C4A.9	Merkel cell carcinoma, unspecified	Diagnosis	ICD-10-CM
C50.011	Malignant neoplasm of nipple and areola, right female breast	Diagnosis	ICD-10-CM
C50.012	Malignant neoplasm of nipple and areola, left female breast	Diagnosis	ICD-10-CM
C50.019	Malignant neoplasm of nipple and areola, unspecified female breast	Diagnosis	ICD-10-CM
C50.021	Malignant neoplasm of nipple and areola, right male breast	Diagnosis	ICD-10-CM
C50.022	Malignant neoplasm of nipple and areola, left male breast	Diagnosis	ICD-10-CM
C50.029	Malignant neoplasm of nipple and areola, unspecified male breast	Diagnosis	ICD-10-CM
C50.111	Malignant neoplasm of central portion of right female breast	Diagnosis	ICD-10-CM
C50.112	Malignant neoplasm of central portion of left female breast	Diagnosis	ICD-10-CM
C50.119	Malignant neoplasm of central portion of unspecified female breast	Diagnosis	ICD-10-CM
C50.121	Malignant neoplasm of central portion of right male breast	Diagnosis	ICD-10-CM
C50.122	Malignant neoplasm of central portion of left male breast	Diagnosis	ICD-10-CM
C50.129	Malignant neoplasm of central portion of unspecified male breast	Diagnosis	ICD-10-CM
C50.211	Malignant neoplasm of upper-inner quadrant of right female breast	Diagnosis	ICD-10-CM
C50.212	Malignant neoplasm of upper-inner quadrant of left female breast	Diagnosis	ICD-10-CM
C50.219	Malignant neoplasm of upper-inner quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.221	Malignant neoplasm of upper-inner quadrant of right male breast	Diagnosis	ICD-10-CM
C50.222	Malignant neoplasm of upper-inner quadrant of left male breast	Diagnosis	ICD-10-CM
C50.229	Malignant neoplasm of upper-inner quadrant of unspecified male breast	Diagnosis	ICD-10-CM
C50.311	Malignant neoplasm of lower-inner quadrant of right female breast	Diagnosis	ICD-10-CM
C50.312	Malignant neoplasm of lower-inner quadrant of left female breast	Diagnosis	ICD-10-CM
C50.319	Malignant neoplasm of lower-inner quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.321	Malignant neoplasm of lower-inner quadrant of right male breast	Diagnosis	ICD-10-CM
C50.322	Malignant neoplasm of lower-inner quadrant of left male breast	Diagnosis	ICD-10-CM
C50.329	Malignant neoplasm of lower-inner quadrant of unspecified male breast	Diagnosis	ICD-10-CM
C50.411	Malignant neoplasm of upper-outer quadrant of right female breast	Diagnosis	ICD-10-CM
C50.412	Malignant neoplasm of upper-outer quadrant of left female breast	Diagnosis	ICD-10-CM
C50.419	Malignant neoplasm of upper-outer quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.421	Malignant neoplasm of upper-outer quadrant of right male breast	Diagnosis	ICD-10-CM
C50.422	Malignant neoplasm of upper-outer quadrant of left male breast	Diagnosis	ICD-10-CM
C50.429	Malignant neoplasm of upper-outer quadrant of unspecified male breast	Diagnosis	ICD-10-CM
C50.511	Malignant neoplasm of lower-outer quadrant of right female breast	Diagnosis	ICD-10-CM
C50.512	Malignant neoplasm of lower-outer quadrant of left female breast	Diagnosis	ICD-10-CM
C50.519	Malignant neoplasm of lower-outer quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.521	Malignant neoplasm of lower-outer quadrant of right male breast	Diagnosis	ICD-10-CM
C50.522	Malignant neoplasm of lower-outer quadrant of left male breast	Diagnosis	ICD-10-CM
C50.529	Malignant neoplasm of lower-outer quadrant of unspecified male breast	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
C50.611	Malignant neoplasm of axillary tail of right female breast	Diagnosis	ICD-10-CM
C50.612	Malignant neoplasm of axillary tail of left female breast	Diagnosis	ICD-10-CM
C50.619	Malignant neoplasm of axillary tail of unspecified female breast	Diagnosis	ICD-10-CM
C50.621	Malignant neoplasm of axillary tail of right male breast	Diagnosis	ICD-10-CM
C50.622	Malignant neoplasm of axillary tail of left male breast	Diagnosis	ICD-10-CM
C50.629	Malignant neoplasm of axillary tail of unspecified male breast	Diagnosis	ICD-10-CM
C50.811	Malignant neoplasm of overlapping sites of right female breast	Diagnosis	ICD-10-CM
C50.812	Malignant neoplasm of overlapping sites of left female breast	Diagnosis	ICD-10-CM
C50.819	Malignant neoplasm of overlapping sites of unspecified female breast	Diagnosis	ICD-10-CM
C50.821	Malignant neoplasm of overlapping sites of right male breast	Diagnosis	ICD-10-CM
C50.822	Malignant neoplasm of overlapping sites of left male breast	Diagnosis	ICD-10-CM
C50.829	Malignant neoplasm of overlapping sites of unspecified male breast	Diagnosis	ICD-10-CM
C50.911	Malignant neoplasm of unspecified site of right female breast	Diagnosis	ICD-10-CM
C50.912	Malignant neoplasm of unspecified site of left female breast	Diagnosis	ICD-10-CM
C50.919	Malignant neoplasm of unspecified site of unspecified female breast	Diagnosis	ICD-10-CM
C50.921	Malignant neoplasm of unspecified site of right male breast	Diagnosis	ICD-10-CM
C50.922	Malignant neoplasm of unspecified site of left male breast	Diagnosis	ICD-10-CM
C50.929	Malignant neoplasm of unspecified site of unspecified male breast	Diagnosis	ICD-10-CM
C51.0	Malignant neoplasm of labium majus	Diagnosis	ICD-10-CM
C51.1	Malignant neoplasm of labium minus	Diagnosis	ICD-10-CM
C51.2	Malignant neoplasm of clitoris	Diagnosis	ICD-10-CM
C51.8	Malignant neoplasm of overlapping sites of vulva	Diagnosis	ICD-10-CM
C51.9	Malignant neoplasm of vulva, unspecified	Diagnosis	ICD-10-CM
C52	Malignant neoplasm of vagina	Diagnosis	ICD-10-CM
C53.0	Malignant neoplasm of endocervix	Diagnosis	ICD-10-CM
C53.1	Malignant neoplasm of exocervix	Diagnosis	ICD-10-CM
C53.8	Malignant neoplasm of overlapping sites of cervix uteri	Diagnosis	ICD-10-CM
C53.9	Malignant neoplasm of cervix uteri, unspecified	Diagnosis	ICD-10-CM
C54.0	Malignant neoplasm of isthmus uteri	Diagnosis	ICD-10-CM
C54.1	Malignant neoplasm of endometrium	Diagnosis	ICD-10-CM
C54.2	Malignant neoplasm of myometrium	Diagnosis	ICD-10-CM
C54.3	Malignant neoplasm of fundus uteri	Diagnosis	ICD-10-CM
C54.8	Malignant neoplasm of overlapping sites of corpus uteri	Diagnosis	ICD-10-CM
C54.9	Malignant neoplasm of corpus uteri, unspecified	Diagnosis	ICD-10-CM
C55	Malignant neoplasm of uterus, part unspecified	Diagnosis	ICD-10-CM
C56.1	Malignant neoplasm of right ovary	Diagnosis	ICD-10-CM
C56.2	Malignant neoplasm of left ovary	Diagnosis	ICD-10-CM
C56.9	Malignant neoplasm of unspecified ovary	Diagnosis	ICD-10-CM
C57.00	Malignant neoplasm of unspecified fallopian tube	Diagnosis	ICD-10-CM
C57.01	Malignant neoplasm of right fallopian tube	Diagnosis	ICD-10-CM
C57.02	Malignant neoplasm of left fallopian tube	Diagnosis	ICD-10-CM
C57.10	Malignant neoplasm of unspecified broad ligament	Diagnosis	ICD-10-CM
C57.11	Malignant neoplasm of right broad ligament	Diagnosis	ICD-10-CM
C57.12	Malignant neoplasm of left broad ligament	Diagnosis	ICD-10-CM
C57.20	Malignant neoplasm of unspecified round ligament	Diagnosis	ICD-10-CM
C57.21	Malignant neoplasm of right round ligament	Diagnosis	ICD-10-CM
C57.22	Malignant neoplasm of left round ligament	Diagnosis	ICD-10-CM
C57.3	Malignant neoplasm of parametrium	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C57.4	Malignant neoplasm of uterine adnexa, unspecified	Diagnosis	ICD-10-CM
C57.7	Malignant neoplasm of other specified female genital organs	Diagnosis	ICD-10-CM
C57.8	Malignant neoplasm of overlapping sites of female genital organs	Diagnosis	ICD-10-CM
C57.9	Malignant neoplasm of female genital organ, unspecified	Diagnosis	ICD-10-CM
C58	Malignant neoplasm of placenta	Diagnosis	ICD-10-CM
C60.0	Malignant neoplasm of prepuce	Diagnosis	ICD-10-CM
C60.1	Malignant neoplasm of glans penis	Diagnosis	ICD-10-CM
C60.2	Malignant neoplasm of body of penis	Diagnosis	ICD-10-CM
C60.8	Malignant neoplasm of overlapping sites of penis	Diagnosis	ICD-10-CM
C60.9	Malignant neoplasm of penis, unspecified	Diagnosis	ICD-10-CM
C61	Malignant neoplasm of prostate	Diagnosis	ICD-10-CM
C62.00	Malignant neoplasm of unspecified undescended testis	Diagnosis	ICD-10-CM
C62.01	Malignant neoplasm of undescended right testis	Diagnosis	ICD-10-CM
C62.02	Malignant neoplasm of undescended left testis	Diagnosis	ICD-10-CM
C62.10	Malignant neoplasm of unspecified descended testis	Diagnosis	ICD-10-CM
C62.11	Malignant neoplasm of descended right testis	Diagnosis	ICD-10-CM
C62.12	Malignant neoplasm of descended left testis	Diagnosis	ICD-10-CM
C62.90	Malignant neoplasm of unspecified testis, unspecified whether descended or undescended	Diagnosis	ICD-10-CM
C62.91	Malignant neoplasm of right testis, unspecified whether descended or undescended	Diagnosis	ICD-10-CM
C62.92	Malignant neoplasm of left testis, unspecified whether descended or undescended	Diagnosis	ICD-10-CM
C63.00	Malignant neoplasm of unspecified epididymis	Diagnosis	ICD-10-CM
C63.01	Malignant neoplasm of right epididymis	Diagnosis	ICD-10-CM
C63.02	Malignant neoplasm of left epididymis	Diagnosis	ICD-10-CM
C63.10	Malignant neoplasm of unspecified spermatic cord	Diagnosis	ICD-10-CM
C63.11	Malignant neoplasm of right spermatic cord	Diagnosis	ICD-10-CM
C63.12	Malignant neoplasm of left spermatic cord	Diagnosis	ICD-10-CM
C63.2	Malignant neoplasm of scrotum	Diagnosis	ICD-10-CM
C63.7	Malignant neoplasm of other specified male genital organs	Diagnosis	ICD-10-CM
C63.8	Malignant neoplasm of overlapping sites of male genital organs	Diagnosis	ICD-10-CM
C63.9	Malignant neoplasm of male genital organ, unspecified	Diagnosis	ICD-10-CM
C64.1	Malignant neoplasm of right kidney, except renal pelvis	Diagnosis	ICD-10-CM
C64.2	Malignant neoplasm of left kidney, except renal pelvis	Diagnosis	ICD-10-CM
C64.9	Malignant neoplasm of unspecified kidney, except renal pelvis	Diagnosis	ICD-10-CM
C65.1	Malignant neoplasm of right renal pelvis	Diagnosis	ICD-10-CM
C65.2	Malignant neoplasm of left renal pelvis	Diagnosis	ICD-10-CM
C65.9	Malignant neoplasm of unspecified renal pelvis	Diagnosis	ICD-10-CM
C66.1	Malignant neoplasm of right ureter	Diagnosis	ICD-10-CM
C66.2	Malignant neoplasm of left ureter	Diagnosis	ICD-10-CM
C66.9	Malignant neoplasm of unspecified ureter	Diagnosis	ICD-10-CM
C67.0	Malignant neoplasm of trigone of bladder	Diagnosis	ICD-10-CM
C67.1	Malignant neoplasm of dome of bladder	Diagnosis	ICD-10-CM
C67.2	Malignant neoplasm of lateral wall of bladder	Diagnosis	ICD-10-CM
C67.3	Malignant neoplasm of anterior wall of bladder	Diagnosis	ICD-10-CM
C67.4	Malignant neoplasm of posterior wall of bladder	Diagnosis	ICD-10-CM
C67.5	Malignant neoplasm of bladder neck	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
C67.6	Malignant neoplasm of ureteric orifice	Diagnosis	ICD-10-CM
C67.7	Malignant neoplasm of urachus	Diagnosis	ICD-10-CM
C67.8	Malignant neoplasm of overlapping sites of bladder	Diagnosis	ICD-10-CM
C67.9	Malignant neoplasm of bladder, unspecified	Diagnosis	ICD-10-CM
C68.0	Malignant neoplasm of urethra	Diagnosis	ICD-10-CM
C68.1	Malignant neoplasm of paraurethral glands	Diagnosis	ICD-10-CM
C68.8	Malignant neoplasm of overlapping sites of urinary organs	Diagnosis	ICD-10-CM
C68.9	Malignant neoplasm of urinary organ, unspecified	Diagnosis	ICD-10-CM
C69.00	Malignant neoplasm of unspecified conjunctiva	Diagnosis	ICD-10-CM
C69.01	Malignant neoplasm of right conjunctiva	Diagnosis	ICD-10-CM
C69.02	Malignant neoplasm of left conjunctiva	Diagnosis	ICD-10-CM
C69.10	Malignant neoplasm of unspecified cornea	Diagnosis	ICD-10-CM
C69.11	Malignant neoplasm of right cornea	Diagnosis	ICD-10-CM
C69.12	Malignant neoplasm of left cornea	Diagnosis	ICD-10-CM
C69.20	Malignant neoplasm of unspecified retina	Diagnosis	ICD-10-CM
C69.21	Malignant neoplasm of right retina	Diagnosis	ICD-10-CM
C69.22	Malignant neoplasm of left retina	Diagnosis	ICD-10-CM
C69.30	Malignant neoplasm of unspecified choroid	Diagnosis	ICD-10-CM
C69.31	Malignant neoplasm of right choroid	Diagnosis	ICD-10-CM
C69.32	Malignant neoplasm of left choroid	Diagnosis	ICD-10-CM
C69.40	Malignant neoplasm of unspecified ciliary body	Diagnosis	ICD-10-CM
C69.41	Malignant neoplasm of right ciliary body	Diagnosis	ICD-10-CM
C69.42	Malignant neoplasm of left ciliary body	Diagnosis	ICD-10-CM
C69.50	Malignant neoplasm of unspecified lacrimal gland and duct	Diagnosis	ICD-10-CM
C69.51	Malignant neoplasm of right lacrimal gland and duct	Diagnosis	ICD-10-CM
C69.52	Malignant neoplasm of left lacrimal gland and duct	Diagnosis	ICD-10-CM
C69.60	Malignant neoplasm of unspecified orbit	Diagnosis	ICD-10-CM
C69.61	Malignant neoplasm of right orbit	Diagnosis	ICD-10-CM
C69.62	Malignant neoplasm of left orbit	Diagnosis	ICD-10-CM
C69.80	Malignant neoplasm of overlapping sites of unspecified eye and adnexa	Diagnosis	ICD-10-CM
C69.81	Malignant neoplasm of overlapping sites of right eye and adnexa	Diagnosis	ICD-10-CM
C69.82	Malignant neoplasm of overlapping sites of left eye and adnexa	Diagnosis	ICD-10-CM
C69.90	Malignant neoplasm of unspecified site of unspecified eye	Diagnosis	ICD-10-CM
C69.91	Malignant neoplasm of unspecified site of right eye	Diagnosis	ICD-10-CM
C69.92	Malignant neoplasm of unspecified site of left eye	Diagnosis	ICD-10-CM
C70.0	Malignant neoplasm of cerebral meninges	Diagnosis	ICD-10-CM
C70.1	Malignant neoplasm of spinal meninges	Diagnosis	ICD-10-CM
C70.9	Malignant neoplasm of meninges, unspecified	Diagnosis	ICD-10-CM
C71.0	Malignant neoplasm of cerebrum, except lobes and ventricles	Diagnosis	ICD-10-CM
C71.1	Malignant neoplasm of frontal lobe	Diagnosis	ICD-10-CM
C71.2	Malignant neoplasm of temporal lobe	Diagnosis	ICD-10-CM
C71.3	Malignant neoplasm of parietal lobe	Diagnosis	ICD-10-CM
C71.4	Malignant neoplasm of occipital lobe	Diagnosis	ICD-10-CM
C71.5	Malignant neoplasm of cerebral ventricle	Diagnosis	ICD-10-CM
C71.6	Malignant neoplasm of cerebellum	Diagnosis	ICD-10-CM
C71.7	Malignant neoplasm of brain stem	Diagnosis	ICD-10-CM
C71.8	Malignant neoplasm of overlapping sites of brain	Diagnosis	ICD-10-CM
C71.9	Malignant neoplasm of brain, unspecified	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C72.0	Malignant neoplasm of spinal cord	Diagnosis	ICD-10-CM
C72.1	Malignant neoplasm of cauda equina	Diagnosis	ICD-10-CM
C72.20	Malignant neoplasm of unspecified olfactory nerve	Diagnosis	ICD-10-CM
C72.21	Malignant neoplasm of right olfactory nerve	Diagnosis	ICD-10-CM
C72.22	Malignant neoplasm of left olfactory nerve	Diagnosis	ICD-10-CM
C72.30	Malignant neoplasm of unspecified optic nerve	Diagnosis	ICD-10-CM
C72.31	Malignant neoplasm of right optic nerve	Diagnosis	ICD-10-CM
C72.32	Malignant neoplasm of left optic nerve	Diagnosis	ICD-10-CM
C72.40	Malignant neoplasm of unspecified acoustic nerve	Diagnosis	ICD-10-CM
C72.41	Malignant neoplasm of right acoustic nerve	Diagnosis	ICD-10-CM
C72.42	Malignant neoplasm of left acoustic nerve	Diagnosis	ICD-10-CM
C72.50	Malignant neoplasm of unspecified cranial nerve	Diagnosis	ICD-10-CM
C72.59	Malignant neoplasm of other cranial nerves	Diagnosis	ICD-10-CM
C72.9	Malignant neoplasm of central nervous system, unspecified	Diagnosis	ICD-10-CM
C73	Malignant neoplasm of thyroid gland	Diagnosis	ICD-10-CM
C74.00	Malignant neoplasm of cortex of unspecified adrenal gland	Diagnosis	ICD-10-CM
C74.01	Malignant neoplasm of cortex of right adrenal gland	Diagnosis	ICD-10-CM
C74.02	Malignant neoplasm of cortex of left adrenal gland	Diagnosis	ICD-10-CM
C74.10	Malignant neoplasm of medulla of unspecified adrenal gland	Diagnosis	ICD-10-CM
C74.11	Malignant neoplasm of medulla of right adrenal gland	Diagnosis	ICD-10-CM
C74.12	Malignant neoplasm of medulla of left adrenal gland	Diagnosis	ICD-10-CM
C74.90	Malignant neoplasm of unspecified part of unspecified adrenal gland	Diagnosis	ICD-10-CM
C74.91	Malignant neoplasm of unspecified part of right adrenal gland	Diagnosis	ICD-10-CM
C74.92	Malignant neoplasm of unspecified part of left adrenal gland	Diagnosis	ICD-10-CM
C75.0	Malignant neoplasm of parathyroid gland	Diagnosis	ICD-10-CM
C75.1	Malignant neoplasm of pituitary gland	Diagnosis	ICD-10-CM
C75.2	Malignant neoplasm of craniopharyngeal duct	Diagnosis	ICD-10-CM
C75.3	Malignant neoplasm of pineal gland	Diagnosis	ICD-10-CM
C75.4	Malignant neoplasm of carotid body	Diagnosis	ICD-10-CM
C75.5	Malignant neoplasm of aortic body and other paraganglia	Diagnosis	ICD-10-CM
C75.8	Malignant neoplasm with pluriglandular involvement, unspecified	Diagnosis	ICD-10-CM
C75.9	Malignant neoplasm of endocrine gland, unspecified	Diagnosis	ICD-10-CM
C76.0	Malignant neoplasm of head, face and neck	Diagnosis	ICD-10-CM
C76.1	Malignant neoplasm of thorax	Diagnosis	ICD-10-CM
C76.2	Malignant neoplasm of abdomen	Diagnosis	ICD-10-CM
C76.3	Malignant neoplasm of pelvis	Diagnosis	ICD-10-CM
C76.40	Malignant neoplasm of unspecified upper limb	Diagnosis	ICD-10-CM
C76.41	Malignant neoplasm of right upper limb	Diagnosis	ICD-10-CM
C76.42	Malignant neoplasm of left upper limb	Diagnosis	ICD-10-CM
C76.50	Malignant neoplasm of unspecified lower limb	Diagnosis	ICD-10-CM
C76.51	Malignant neoplasm of right lower limb	Diagnosis	ICD-10-CM
C76.52	Malignant neoplasm of left lower limb	Diagnosis	ICD-10-CM
C76.8	Malignant neoplasm of other specified ill-defined sites	Diagnosis	ICD-10-CM
C77.0	Secondary and unspecified malignant neoplasm of lymph nodes of head, face and neck	Diagnosis	ICD-10-CM
C77.1	Secondary and unspecified malignant neoplasm of intrathoracic lymph nodes	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C77.2	Secondary and unspecified malignant neoplasm of intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C77.3	Secondary and unspecified malignant neoplasm of axilla and upper limb lymph nodes	Diagnosis	ICD-10-CM
C77.4	Secondary and unspecified malignant neoplasm of inguinal and lower limb lymph nodes	Diagnosis	ICD-10-CM
C77.5	Secondary and unspecified malignant neoplasm of intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C77.8	Secondary and unspecified malignant neoplasm of lymph nodes of multiple regions	Diagnosis	ICD-10-CM
C77.9	Secondary and unspecified malignant neoplasm of lymph node, unspecified	Diagnosis	ICD-10-CM
C78.00	Secondary malignant neoplasm of unspecified lung	Diagnosis	ICD-10-CM
C78.01	Secondary malignant neoplasm of right lung	Diagnosis	ICD-10-CM
C78.02	Secondary malignant neoplasm of left lung	Diagnosis	ICD-10-CM
C78.1	Secondary malignant neoplasm of mediastinum	Diagnosis	ICD-10-CM
C78.2	Secondary malignant neoplasm of pleura	Diagnosis	ICD-10-CM
C78.30	Secondary malignant neoplasm of unspecified respiratory organ	Diagnosis	ICD-10-CM
C78.39	Secondary malignant neoplasm of other respiratory organs	Diagnosis	ICD-10-CM
C78.4	Secondary malignant neoplasm of small intestine	Diagnosis	ICD-10-CM
C78.5	Secondary malignant neoplasm of large intestine and rectum	Diagnosis	ICD-10-CM
C78.6	Secondary malignant neoplasm of retroperitoneum and peritoneum	Diagnosis	ICD-10-CM
C78.7	Secondary malignant neoplasm of liver and intrahepatic bile duct	Diagnosis	ICD-10-CM
C78.80	Secondary malignant neoplasm of unspecified digestive organ	Diagnosis	ICD-10-CM
C78.89	Secondary malignant neoplasm of other digestive organs	Diagnosis	ICD-10-CM
C79.00	Secondary malignant neoplasm of unspecified kidney and renal pelvis	Diagnosis	ICD-10-CM
C79.01	Secondary malignant neoplasm of right kidney and renal pelvis	Diagnosis	ICD-10-CM
C79.02	Secondary malignant neoplasm of left kidney and renal pelvis	Diagnosis	ICD-10-CM
C79.10	Secondary malignant neoplasm of unspecified urinary organs	Diagnosis	ICD-10-CM
C79.11	Secondary malignant neoplasm of bladder	Diagnosis	ICD-10-CM
C79.19	Secondary malignant neoplasm of other urinary organs	Diagnosis	ICD-10-CM
C79.31	Secondary malignant neoplasm of brain	Diagnosis	ICD-10-CM
C79.32	Secondary malignant neoplasm of cerebral meninges	Diagnosis	ICD-10-CM
C79.40	Secondary malignant neoplasm of unspecified part of nervous system	Diagnosis	ICD-10-CM
C79.49	Secondary malignant neoplasm of other parts of nervous system	Diagnosis	ICD-10-CM
C79.51	Secondary malignant neoplasm of bone	Diagnosis	ICD-10-CM
C79.52	Secondary malignant neoplasm of bone marrow	Diagnosis	ICD-10-CM
C79.60	Secondary malignant neoplasm of unspecified ovary	Diagnosis	ICD-10-CM
C79.61	Secondary malignant neoplasm of right ovary	Diagnosis	ICD-10-CM
C79.62	Secondary malignant neoplasm of left ovary	Diagnosis	ICD-10-CM
C79.70	Secondary malignant neoplasm of unspecified adrenal gland	Diagnosis	ICD-10-CM
C79.71	Secondary malignant neoplasm of right adrenal gland	Diagnosis	ICD-10-CM
C79.72	Secondary malignant neoplasm of left adrenal gland	Diagnosis	ICD-10-CM
C79.81	Secondary malignant neoplasm of breast	Diagnosis	ICD-10-CM
C79.82	Secondary malignant neoplasm of genital organs	Diagnosis	ICD-10-CM
C79.89	Secondary malignant neoplasm of other specified sites	Diagnosis	ICD-10-CM
C79.9	Secondary malignant neoplasm of unspecified site	Diagnosis	ICD-10-CM
C7A.00	Malignant carcinoid tumor of unspecified site	Diagnosis	ICD-10-CM
C7A.010	Malignant carcinoid tumor of the duodenum	Diagnosis	ICD-10-CM
C7A.011	Malignant carcinoid tumor of the jejunum	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C7A.012	Malignant carcinoid tumor of the ileum	Diagnosis	ICD-10-CM
C7A.019	Malignant carcinoid tumor of the small intestine, unspecified portion	Diagnosis	ICD-10-CM
C7A.020	Malignant carcinoid tumor of the appendix	Diagnosis	ICD-10-CM
C7A.021	Malignant carcinoid tumor of the cecum	Diagnosis	ICD-10-CM
C7A.022	Malignant carcinoid tumor of the ascending colon	Diagnosis	ICD-10-CM
C7A.023	Malignant carcinoid tumor of the transverse colon	Diagnosis	ICD-10-CM
C7A.024	Malignant carcinoid tumor of the descending colon	Diagnosis	ICD-10-CM
C7A.025	Malignant carcinoid tumor of the sigmoid colon	Diagnosis	ICD-10-CM
C7A.026	Malignant carcinoid tumor of the rectum	Diagnosis	ICD-10-CM
C7A.029	Malignant carcinoid tumor of the large intestine, unspecified portion	Diagnosis	ICD-10-CM
C7A.090	Malignant carcinoid tumor of the bronchus and lung	Diagnosis	ICD-10-CM
C7A.091	Malignant carcinoid tumor of the thymus	Diagnosis	ICD-10-CM
C7A.092	Malignant carcinoid tumor of the stomach	Diagnosis	ICD-10-CM
C7A.093	Malignant carcinoid tumor of the kidney	Diagnosis	ICD-10-CM
C7A.094	Malignant carcinoid tumor of the foregut, unspecified	Diagnosis	ICD-10-CM
C7A.095	Malignant carcinoid tumor of the midgut, unspecified	Diagnosis	ICD-10-CM
C7A.096	Malignant carcinoid tumor of the hindgut, unspecified	Diagnosis	ICD-10-CM
C7A.098	Malignant carcinoid tumors of other sites	Diagnosis	ICD-10-CM
C7A.1	Malignant poorly differentiated neuroendocrine tumors	Diagnosis	ICD-10-CM
C7A.8	Other malignant neuroendocrine tumors	Diagnosis	ICD-10-CM
C7B.00	Secondary carcinoid tumors, unspecified site	Diagnosis	ICD-10-CM
C7B.01	Secondary carcinoid tumors of distant lymph nodes	Diagnosis	ICD-10-CM
C7B.02	Secondary carcinoid tumors of liver	Diagnosis	ICD-10-CM
C7B.03	Secondary carcinoid tumors of bone	Diagnosis	ICD-10-CM
C7B.04	Secondary carcinoid tumors of peritoneum	Diagnosis	ICD-10-CM
C7B.09	Secondary carcinoid tumors of other sites	Diagnosis	ICD-10-CM
C7B.1	Secondary Merkel cell carcinoma	Diagnosis	ICD-10-CM
C7B.8	Other secondary neuroendocrine tumors	Diagnosis	ICD-10-CM
C80.0	Disseminated malignant neoplasm, unspecified	Diagnosis	ICD-10-CM
C80.1	Malignant (primary) neoplasm, unspecified	Diagnosis	ICD-10-CM
C80.2	Malignant neoplasm associated with transplanted organ	Diagnosis	ICD-10-CM
C81.00	Nodular lymphocyte predominant Hodgkin lymphoma, unspecified site	Diagnosis	ICD-10-CM
C81.01	Nodular lymphocyte predominant Hodgkin lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C81.02	Nodular lymphocyte predominant Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.03	Nodular lymphocyte predominant Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.04	Nodular lymphocyte predominant Hodgkin lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C81.05	Nodular lymphocyte predominant Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.06	Nodular lymphocyte predominant Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.07	Nodular lymphocyte predominant Hodgkin lymphoma, spleen	Diagnosis	ICD-10-CM
C81.08	Nodular lymphocyte predominant Hodgkin lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C81.09	Nodular lymphocyte predominant Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C81.10	Nodular sclerosis Hodgkin lymphoma, unspecified site	Diagnosis	ICD-10-CM
C81.11	Nodular sclerosis Hodgkin lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C81.12	Nodular sclerosis Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.13	Nodular sclerosis Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.14	Nodular sclerosis Hodgkin lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C81.15	Nodular sclerosis Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.16	Nodular sclerosis Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.17	Nodular sclerosis Hodgkin lymphoma, spleen	Diagnosis	ICD-10-CM
C81.18	Nodular sclerosis Hodgkin lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C81.19	Nodular sclerosis Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C81.20	Mixed cellularity Hodgkin lymphoma, unspecified site	Diagnosis	ICD-10-CM
C81.21	Mixed cellularity Hodgkin lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C81.22	Mixed cellularity Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.23	Mixed cellularity Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.24	Mixed cellularity Hodgkin lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C81.25	Mixed cellularity Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.26	Mixed cellularity Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.27	Mixed cellularity Hodgkin lymphoma, spleen	Diagnosis	ICD-10-CM
C81.28	Mixed cellularity Hodgkin lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C81.29	Mixed cellularity Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C81.30	Lymphocyte depleted Hodgkin lymphoma, unspecified site	Diagnosis	ICD-10-CM
C81.31	Lymphocyte depleted Hodgkin lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C81.32	Lymphocyte depleted Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.33	Lymphocyte depleted Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.34	Lymphocyte depleted Hodgkin lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C81.35	Lymphocyte depleted Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.36	Lymphocyte depleted Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.37	Lymphocyte depleted Hodgkin lymphoma, spleen	Diagnosis	ICD-10-CM
C81.38	Lymphocyte depleted Hodgkin lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C81.39	Lymphocyte depleted Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C81.40	Lymphocyte-rich Hodgkin lymphoma, unspecified site	Diagnosis	ICD-10-CM
C81.41	Lymphocyte-rich Hodgkin lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C81.42	Lymphocyte-rich Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.43	Lymphocyte-rich Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.44	Lymphocyte-rich Hodgkin lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C81.45	Lymphocyte-rich Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.46	Lymphocyte-rich Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.47	Lymphocyte-rich Hodgkin lymphoma, spleen	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C81.48	Lymphocyte-rich Hodgkin lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C81.49	Lymphocyte-rich Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C81.70	Other Hodgkin lymphoma, unspecified site	Diagnosis	ICD-10-CM
C81.71	Other Hodgkin lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C81.72	Other Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.73	Other Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.74	Other Hodgkin lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C81.75	Other Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.76	Other Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.77	Other Hodgkin lymphoma, spleen	Diagnosis	ICD-10-CM
C81.78	Other Hodgkin lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C81.79	Other Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C81.90	Hodgkin lymphoma, unspecified, unspecified site	Diagnosis	ICD-10-CM
C81.91	Hodgkin lymphoma, unspecified, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C81.92	Hodgkin lymphoma, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.93	Hodgkin lymphoma, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.94	Hodgkin lymphoma, unspecified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C81.95	Hodgkin lymphoma, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.96	Hodgkin lymphoma, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.97	Hodgkin lymphoma, unspecified, spleen	Diagnosis	ICD-10-CM
C81.98	Hodgkin lymphoma, unspecified, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C81.99	Hodgkin lymphoma, unspecified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.00	Follicular lymphoma grade I, unspecified site	Diagnosis	ICD-10-CM
C82.01	Follicular lymphoma grade I, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.02	Follicular lymphoma grade I, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.03	Follicular lymphoma grade I, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.04	Follicular lymphoma grade I, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.05	Follicular lymphoma grade I, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.06	Follicular lymphoma grade I, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.07	Follicular lymphoma grade I, spleen	Diagnosis	ICD-10-CM
C82.08	Follicular lymphoma grade I, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C82.09	Follicular lymphoma grade I, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.10	Follicular lymphoma grade II, unspecified site	Diagnosis	ICD-10-CM
C82.11	Follicular lymphoma grade II, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.12	Follicular lymphoma grade II, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.13	Follicular lymphoma grade II, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.14	Follicular lymphoma grade II, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.15	Follicular lymphoma grade II, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.16	Follicular lymphoma grade II, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.17	Follicular lymphoma grade II, spleen	Diagnosis	ICD-10-CM
C82.18	Follicular lymphoma grade II, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C82.19	Follicular lymphoma grade II, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.20	Follicular lymphoma grade III, unspecified, unspecified site	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C82.21	Follicular lymphoma grade III, unspecified, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.22	Follicular lymphoma grade III, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.23	Follicular lymphoma grade III, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.24	Follicular lymphoma grade III, unspecified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.25	Follicular lymphoma grade III, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.26	Follicular lymphoma grade III, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.27	Follicular lymphoma grade III, unspecified, spleen	Diagnosis	ICD-10-CM
C82.28	Follicular lymphoma grade III, unspecified, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C82.29	Follicular lymphoma grade III, unspecified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.30	Follicular lymphoma grade IIIa, unspecified site	Diagnosis	ICD-10-CM
C82.31	Follicular lymphoma grade IIIa, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.32	Follicular lymphoma grade IIIa, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.33	Follicular lymphoma grade IIIa, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.34	Follicular lymphoma grade IIIa, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.35	Follicular lymphoma grade IIIa, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.36	Follicular lymphoma grade IIIa, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.37	Follicular lymphoma grade IIIa, spleen	Diagnosis	ICD-10-CM
C82.38	Follicular lymphoma grade IIIa, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C82.39	Follicular lymphoma grade IIIa, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.40	Follicular lymphoma grade IIIb, unspecified site	Diagnosis	ICD-10-CM
C82.41	Follicular lymphoma grade IIIb, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.42	Follicular lymphoma grade IIIb, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.43	Follicular lymphoma grade IIIb, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.44	Follicular lymphoma grade IIIb, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.45	Follicular lymphoma grade IIIb, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.46	Follicular lymphoma grade IIIb, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.47	Follicular lymphoma grade IIIb, spleen	Diagnosis	ICD-10-CM
C82.48	Follicular lymphoma grade IIIb, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C82.49	Follicular lymphoma grade IIIb, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.50	Diffuse follicle center lymphoma, unspecified site	Diagnosis	ICD-10-CM
C82.51	Diffuse follicle center lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.52	Diffuse follicle center lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.53	Diffuse follicle center lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.54	Diffuse follicle center lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.55	Diffuse follicle center lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.56	Diffuse follicle center lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.57	Diffuse follicle center lymphoma, spleen	Diagnosis	ICD-10-CM
C82.58	Diffuse follicle center lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C82.59	Diffuse follicle center lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.60	Cutaneous follicle center lymphoma, unspecified site	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C82.61	Cutaneous follicle center lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.62	Cutaneous follicle center lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.63	Cutaneous follicle center lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.64	Cutaneous follicle center lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.65	Cutaneous follicle center lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.66	Cutaneous follicle center lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.67	Cutaneous follicle center lymphoma, spleen	Diagnosis	ICD-10-CM
C82.68	Cutaneous follicle center lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C82.69	Cutaneous follicle center lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.80	Other types of follicular lymphoma, unspecified site	Diagnosis	ICD-10-CM
C82.81	Other types of follicular lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.82	Other types of follicular lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.83	Other types of follicular lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.84	Other types of follicular lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.85	Other types of follicular lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.86	Other types of follicular lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.87	Other types of follicular lymphoma, spleen	Diagnosis	ICD-10-CM
C82.88	Other types of follicular lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C82.89	Other types of follicular lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.90	Follicular lymphoma, unspecified, unspecified site	Diagnosis	ICD-10-CM
C82.91	Follicular lymphoma, unspecified, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.92	Follicular lymphoma, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.93	Follicular lymphoma, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.94	Follicular lymphoma, unspecified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.95	Follicular lymphoma, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.96	Follicular lymphoma, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.97	Follicular lymphoma, unspecified, spleen	Diagnosis	ICD-10-CM
C82.98	Follicular lymphoma, unspecified, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C82.99	Follicular lymphoma, unspecified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C83.00	Small cell B-cell lymphoma, unspecified site	Diagnosis	ICD-10-CM
C83.01	Small cell B-cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.02	Small cell B-cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.03	Small cell B-cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.04	Small cell B-cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C83.05	Small cell B-cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.06	Small cell B-cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.07	Small cell B-cell lymphoma, spleen	Diagnosis	ICD-10-CM
C83.08	Small cell B-cell lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C83.09	Small cell B-cell lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C83.10	Mantle cell lymphoma, unspecified site	Diagnosis	ICD-10-CM
C83.11	Mantle cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.12	Mantle cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.13	Mantle cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.14	Mantle cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C83.15	Mantle cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.16	Mantle cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.17	Mantle cell lymphoma, spleen	Diagnosis	ICD-10-CM
C83.18	Mantle cell lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C83.19	Mantle cell lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C83.30	Diffuse large B-cell lymphoma, unspecified site	Diagnosis	ICD-10-CM
C83.31	Diffuse large B-cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.32	Diffuse large B-cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.33	Diffuse large B-cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.34	Diffuse large B-cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C83.35	Diffuse large B-cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.36	Diffuse large B-cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.37	Diffuse large B-cell lymphoma, spleen	Diagnosis	ICD-10-CM
C83.38	Diffuse large B-cell lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C83.39	Diffuse large B-cell lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C83.50	Lymphoblastic (diffuse) lymphoma, unspecified site	Diagnosis	ICD-10-CM
C83.51	Lymphoblastic (diffuse) lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.52	Lymphoblastic (diffuse) lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.53	Lymphoblastic (diffuse) lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.54	Lymphoblastic (diffuse) lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C83.55	Lymphoblastic (diffuse) lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.56	Lymphoblastic (diffuse) lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.57	Lymphoblastic (diffuse) lymphoma, spleen	Diagnosis	ICD-10-CM
C83.58	Lymphoblastic (diffuse) lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C83.59	Lymphoblastic (diffuse) lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C83.70	Burkitt lymphoma, unspecified site	Diagnosis	ICD-10-CM
C83.71	Burkitt lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.72	Burkitt lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.73	Burkitt lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.74	Burkitt lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C83.75	Burkitt lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.76	Burkitt lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.77	Burkitt lymphoma, spleen	Diagnosis	ICD-10-CM
C83.78	Burkitt lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C83.79	Burkitt lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C83.80	Other non-follicular lymphoma, unspecified site	Diagnosis	ICD-10-CM
C83.81	Other non-follicular lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.82	Other non-follicular lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.83	Other non-follicular lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.84	Other non-follicular lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C83.85	Other non-follicular lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.86	Other non-follicular lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.87	Other non-follicular lymphoma, spleen	Diagnosis	ICD-10-CM
C83.88	Other non-follicular lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C83.89	Other non-follicular lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C83.90	Non-follicular (diffuse) lymphoma, unspecified, unspecified site	Diagnosis	ICD-10-CM
C83.91	Non-follicular (diffuse) lymphoma, unspecified, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.92	Non-follicular (diffuse) lymphoma, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.93	Non-follicular (diffuse) lymphoma, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.94	Non-follicular (diffuse) lymphoma, unspecified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C83.95	Non-follicular (diffuse) lymphoma, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.96	Non-follicular (diffuse) lymphoma, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.97	Non-follicular (diffuse) lymphoma, unspecified, spleen	Diagnosis	ICD-10-CM
C83.98	Non-follicular (diffuse) lymphoma, unspecified, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C83.99	Non-follicular (diffuse) lymphoma, unspecified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.00	Mycosis fungoides, unspecified site	Diagnosis	ICD-10-CM
C84.01	Mycosis fungoides, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.02	Mycosis fungoides, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.03	Mycosis fungoides, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.04	Mycosis fungoides, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.05	Mycosis fungoides, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.06	Mycosis fungoides, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.07	Mycosis fungoides, spleen	Diagnosis	ICD-10-CM
C84.08	Mycosis fungoides, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C84.09	Mycosis fungoides, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.10	Sezary disease, unspecified site	Diagnosis	ICD-10-CM
C84.11	Sezary disease, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.12	Sezary disease, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.13	Sezary disease, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.14	Sezary disease, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.15	Sezary disease, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.16	Sezary disease, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.17	Sezary disease, spleen	Diagnosis	ICD-10-CM
C84.18	Sezary disease, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C84.19	Sezary disease, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.40	Peripheral T-cell lymphoma, not classified, unspecified site	Diagnosis	ICD-10-CM
C84.41	Peripheral T-cell lymphoma, not classified, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.42	Peripheral T-cell lymphoma, not classified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.43	Peripheral T-cell lymphoma, not classified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.44	Peripheral T-cell lymphoma, not classified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.45	Peripheral T-cell lymphoma, not classified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.46	Peripheral T-cell lymphoma, not classified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
C84.47	Peripheral T-cell lymphoma, not classified, spleen	Diagnosis	ICD-10-CM
C84.48	Peripheral T-cell lymphoma, not classified, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C84.49	Peripheral T-cell lymphoma, not classified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.60	Anaplastic large cell lymphoma, ALK-positive, unspecified site	Diagnosis	ICD-10-CM
C84.61	Anaplastic large cell lymphoma, ALK-positive, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.62	Anaplastic large cell lymphoma, ALK-positive, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.63	Anaplastic large cell lymphoma, ALK-positive, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.64	Anaplastic large cell lymphoma, ALK-positive, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.65	Anaplastic large cell lymphoma, ALK-positive, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.66	Anaplastic large cell lymphoma, ALK-positive, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.67	Anaplastic large cell lymphoma, ALK-positive, spleen	Diagnosis	ICD-10-CM
C84.68	Anaplastic large cell lymphoma, ALK-positive, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C84.69	Anaplastic large cell lymphoma, ALK-positive, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.70	Anaplastic large cell lymphoma, ALK-negative, unspecified site	Diagnosis	ICD-10-CM
C84.71	Anaplastic large cell lymphoma, ALK-negative, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.72	Anaplastic large cell lymphoma, ALK-negative, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.73	Anaplastic large cell lymphoma, ALK-negative, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.74	Anaplastic large cell lymphoma, ALK-negative, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.75	Anaplastic large cell lymphoma, ALK-negative, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.76	Anaplastic large cell lymphoma, ALK-negative, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.77	Anaplastic large cell lymphoma, ALK-negative, spleen	Diagnosis	ICD-10-CM
C84.78	Anaplastic large cell lymphoma, ALK-negative, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C84.79	Anaplastic large cell lymphoma, ALK-negative, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.90	Mature T/NK-cell lymphomas, unspecified, unspecified site	Diagnosis	ICD-10-CM
C84.91	Mature T/NK-cell lymphomas, unspecified, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.92	Mature T/NK-cell lymphomas, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.93	Mature T/NK-cell lymphomas, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.94	Mature T/NK-cell lymphomas, unspecified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.95	Mature T/NK-cell lymphomas, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.96	Mature T/NK-cell lymphomas, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.97	Mature T/NK-cell lymphomas, unspecified, spleen	Diagnosis	ICD-10-CM
C84.98	Mature T/NK-cell lymphomas, unspecified, lymph nodes of multiple sites	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C84.99	Mature T/NK-cell lymphomas, unspecified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.A0	Cutaneous T-cell lymphoma, unspecified, unspecified site	Diagnosis	ICD-10-CM
C84.A1	Cutaneous T-cell lymphoma, unspecified lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.A2	Cutaneous T-cell lymphoma, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.A3	Cutaneous T-cell lymphoma, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.A4	Cutaneous T-cell lymphoma, unspecified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.A5	Cutaneous T-cell lymphoma, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.A6	Cutaneous T-cell lymphoma, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.A7	Cutaneous T-cell lymphoma, unspecified, spleen	Diagnosis	ICD-10-CM
C84.A8	Cutaneous T-cell lymphoma, unspecified, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C84.A9	Cutaneous T-cell lymphoma, unspecified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.Z0	Other mature T/NK-cell lymphomas, unspecified site	Diagnosis	ICD-10-CM
C84.Z1	Other mature T/NK-cell lymphomas, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.Z2	Other mature T/NK-cell lymphomas, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.Z3	Other mature T/NK-cell lymphomas, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.Z4	Other mature T/NK-cell lymphomas, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.Z5	Other mature T/NK-cell lymphomas, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.Z6	Other mature T/NK-cell lymphomas, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.Z7	Other mature T/NK-cell lymphomas, spleen	Diagnosis	ICD-10-CM
C84.Z8	Other mature T/NK-cell lymphomas, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C84.Z9	Other mature T/NK-cell lymphomas, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C85.10	Unspecified B-cell lymphoma, unspecified site	Diagnosis	ICD-10-CM
C85.11	Unspecified B-cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C85.12	Unspecified B-cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C85.13	Unspecified B-cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C85.14	Unspecified B-cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C85.15	Unspecified B-cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C85.16	Unspecified B-cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C85.17	Unspecified B-cell lymphoma, spleen	Diagnosis	ICD-10-CM
C85.18	Unspecified B-cell lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C85.19	Unspecified B-cell lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C85.20	Mediastinal (thymic) large B-cell lymphoma, unspecified site	Diagnosis	ICD-10-CM
C85.21	Mediastinal (thymic) large B-cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C85.22	Mediastinal (thymic) large B-cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C85.23	Mediastinal (thymic) large B-cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C85.24	Mediastinal (thymic) large B-cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C85.25	Mediastinal (thymic) large B-cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C85.26	Mediastinal (thymic) large B-cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C85.27	Mediastinal (thymic) large B-cell lymphoma, spleen	Diagnosis	ICD-10-CM
C85.28	Mediastinal (thymic) large B-cell lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C85.29	Mediastinal (thymic) large B-cell lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C85.80	Other specified types of non-Hodgkin lymphoma, unspecified site	Diagnosis	ICD-10-CM
C85.81	Other specified types of non-Hodgkin lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C85.82	Other specified types of non-Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C85.83	Other specified types of non-Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C85.84	Other specified types of non-Hodgkin lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C85.85	Other specified types of non-Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C85.86	Other specified types of non-Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C85.87	Other specified types of non-Hodgkin lymphoma, spleen	Diagnosis	ICD-10-CM
C85.88	Other specified types of non-Hodgkin lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C85.89	Other specified types of non-Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C85.90	Non-Hodgkin lymphoma, unspecified, unspecified site	Diagnosis	ICD-10-CM
C85.91	Non-Hodgkin lymphoma, unspecified, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C85.92	Non-Hodgkin lymphoma, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C85.93	Non-Hodgkin lymphoma, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C85.94	Non-Hodgkin lymphoma, unspecified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C85.95	Non-Hodgkin lymphoma, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C85.96	Non-Hodgkin lymphoma, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C85.97	Non-Hodgkin lymphoma, unspecified, spleen	Diagnosis	ICD-10-CM
C85.98	Non-Hodgkin lymphoma, unspecified, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C85.99	Non-Hodgkin lymphoma, unspecified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C86.0	Extranodal NK/T-cell lymphoma, nasal type	Diagnosis	ICD-10-CM
C86.1	Hepatosplenic T-cell lymphoma	Diagnosis	ICD-10-CM
C86.2	Enteropathy-type (intestinal) T-cell lymphoma	Diagnosis	ICD-10-CM
C86.3	Subcutaneous panniculitis-like T-cell lymphoma	Diagnosis	ICD-10-CM
C86.4	Blastic NK-cell lymphoma	Diagnosis	ICD-10-CM
C86.5	Angioimmunoblastic T-cell lymphoma	Diagnosis	ICD-10-CM
C86.6	Primary cutaneous CD30-positive T-cell proliferations	Diagnosis	ICD-10-CM
C88.2	Heavy chain disease	Diagnosis	ICD-10-CM
C88.3	Immunoproliferative small intestinal disease	Diagnosis	ICD-10-CM
C88.4	Extranodal marginal zone B-cell lymphoma of mucosa-associated lymphoid tissue [MALT-lymphoma]	Diagnosis	ICD-10-CM
C88.8	Other malignant immunoproliferative diseases	Diagnosis	ICD-10-CM
C88.9	Malignant immunoproliferative disease, unspecified	Diagnosis	ICD-10-CM
C90.00	Multiple myeloma not having achieved remission	Diagnosis	ICD-10-CM
C90.01	Multiple myeloma in remission	Diagnosis	ICD-10-CM
C90.02	Multiple myeloma in relapse	Diagnosis	ICD-10-CM
C90.10	Plasma cell leukemia not having achieved remission	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C90.11	Plasma cell leukemia in remission	Diagnosis	ICD-10-CM
C90.12	Plasma cell leukemia in relapse	Diagnosis	ICD-10-CM
C90.20	Extramedullary plasmacytoma not having achieved remission	Diagnosis	ICD-10-CM
C90.21	Extramedullary plasmacytoma in remission	Diagnosis	ICD-10-CM
C90.22	Extramedullary plasmacytoma in relapse	Diagnosis	ICD-10-CM
C90.30	Solitary plasmacytoma not having achieved remission	Diagnosis	ICD-10-CM
C90.31	Solitary plasmacytoma in remission	Diagnosis	ICD-10-CM
C90.32	Solitary plasmacytoma in relapse	Diagnosis	ICD-10-CM
C91.00	Acute lymphoblastic leukemia not having achieved remission	Diagnosis	ICD-10-CM
C91.01	Acute lymphoblastic leukemia, in remission	Diagnosis	ICD-10-CM
C91.02	Acute lymphoblastic leukemia, in relapse	Diagnosis	ICD-10-CM
C91.10	Chronic lymphocytic leukemia of B-cell type not having achieved remission	Diagnosis	ICD-10-CM
C91.11	Chronic lymphocytic leukemia of B-cell type in remission	Diagnosis	ICD-10-CM
C91.12	Chronic lymphocytic leukemia of B-cell type in relapse	Diagnosis	ICD-10-CM
C91.30	Prolymphocytic leukemia of B-cell type not having achieved remission	Diagnosis	ICD-10-CM
C91.31	Prolymphocytic leukemia of B-cell type, in remission	Diagnosis	ICD-10-CM
C91.32	Prolymphocytic leukemia of B-cell type, in relapse	Diagnosis	ICD-10-CM
C91.40	Hairy cell leukemia not having achieved remission	Diagnosis	ICD-10-CM
C91.41	Hairy cell leukemia, in remission	Diagnosis	ICD-10-CM
C91.42	Hairy cell leukemia, in relapse	Diagnosis	ICD-10-CM
C91.50	Adult T-cell lymphoma/leukemia (HTLV-1-associated) not having achieved remission	Diagnosis	ICD-10-CM
C91.51	Adult T-cell lymphoma/leukemia (HTLV-1-associated), in remission	Diagnosis	ICD-10-CM
C91.52	Adult T-cell lymphoma/leukemia (HTLV-1-associated), in relapse	Diagnosis	ICD-10-CM
C91.60	Prolymphocytic leukemia of T-cell type not having achieved remission	Diagnosis	ICD-10-CM
C91.61	Prolymphocytic leukemia of T-cell type, in remission	Diagnosis	ICD-10-CM
C91.62	Prolymphocytic leukemia of T-cell type, in relapse	Diagnosis	ICD-10-CM
C91.90	Lymphoid leukemia, unspecified not having achieved remission	Diagnosis	ICD-10-CM
C91.91	Lymphoid leukemia, unspecified, in remission	Diagnosis	ICD-10-CM
C91.92	Lymphoid leukemia, unspecified, in relapse	Diagnosis	ICD-10-CM
C91.A0	Mature B-cell leukemia Burkitt-type not having achieved remission	Diagnosis	ICD-10-CM
C91.A1	Mature B-cell leukemia Burkitt-type, in remission	Diagnosis	ICD-10-CM
C91.A2	Mature B-cell leukemia Burkitt-type, in relapse	Diagnosis	ICD-10-CM
C91.Z0	Other lymphoid leukemia not having achieved remission	Diagnosis	ICD-10-CM
C91.Z1	Other lymphoid leukemia, in remission	Diagnosis	ICD-10-CM
C91.Z2	Other lymphoid leukemia, in relapse	Diagnosis	ICD-10-CM
C92.00	Acute myeloblastic leukemia, not having achieved remission	Diagnosis	ICD-10-CM
C92.01	Acute myeloblastic leukemia, in remission	Diagnosis	ICD-10-CM
C92.02	Acute myeloblastic leukemia, in relapse	Diagnosis	ICD-10-CM
C92.10	Chronic myeloid leukemia, BCR/ABL-positive, not having achieved remission	Diagnosis	ICD-10-CM
C92.11	Chronic myeloid leukemia, BCR/ABL-positive, in remission	Diagnosis	ICD-10-CM
C92.12	Chronic myeloid leukemia, BCR/ABL-positive, in relapse	Diagnosis	ICD-10-CM
C92.20	Atypical chronic myeloid leukemia, BCR/ABL-negative, not having achieved remission	Diagnosis	ICD-10-CM
C92.21	Atypical chronic myeloid leukemia, BCR/ABL-negative, in remission	Diagnosis	ICD-10-CM
C92.22	Atypical chronic myeloid leukemia, BCR/ABL-negative, in relapse	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C92.30	Myeloid sarcoma, not having achieved remission	Diagnosis	ICD-10-CM
C92.31	Myeloid sarcoma, in remission	Diagnosis	ICD-10-CM
C92.32	Myeloid sarcoma, in relapse	Diagnosis	ICD-10-CM
C92.40	Acute promyelocytic leukemia, not having achieved remission	Diagnosis	ICD-10-CM
C92.41	Acute promyelocytic leukemia, in remission	Diagnosis	ICD-10-CM
C92.42	Acute promyelocytic leukemia, in relapse	Diagnosis	ICD-10-CM
C92.50	Acute myelomonocytic leukemia, not having achieved remission	Diagnosis	ICD-10-CM
C92.51	Acute myelomonocytic leukemia, in remission	Diagnosis	ICD-10-CM
C92.52	Acute myelomonocytic leukemia, in relapse	Diagnosis	ICD-10-CM
C92.60	Acute myeloid leukemia with 11q23-abnormality not having achieved remission	Diagnosis	ICD-10-CM
C92.61	Acute myeloid leukemia with 11q23-abnormality in remission	Diagnosis	ICD-10-CM
C92.62	Acute myeloid leukemia with 11q23-abnormality in relapse	Diagnosis	ICD-10-CM
C92.90	Myeloid leukemia, unspecified, not having achieved remission	Diagnosis	ICD-10-CM
C92.91	Myeloid leukemia, unspecified in remission	Diagnosis	ICD-10-CM
C92.92	Myeloid leukemia, unspecified in relapse	Diagnosis	ICD-10-CM
C92.A0	Acute myeloid leukemia with multilineage dysplasia, not having achieved remission	Diagnosis	ICD-10-CM
C92.A1	Acute myeloid leukemia with multilineage dysplasia, in remission	Diagnosis	ICD-10-CM
C92.A2	Acute myeloid leukemia with multilineage dysplasia, in relapse	Diagnosis	ICD-10-CM
C92.Z0	Other myeloid leukemia not having achieved remission	Diagnosis	ICD-10-CM
C92.Z1	Other myeloid leukemia, in remission	Diagnosis	ICD-10-CM
C92.Z2	Other myeloid leukemia, in relapse	Diagnosis	ICD-10-CM
C93.00	Acute monoblastic/monocytic leukemia, not having achieved remission	Diagnosis	ICD-10-CM
C93.01	Acute monoblastic/monocytic leukemia, in remission	Diagnosis	ICD-10-CM
C93.02	Acute monoblastic/monocytic leukemia, in relapse	Diagnosis	ICD-10-CM
C93.10	Chronic myelomonocytic leukemia not having achieved remission	Diagnosis	ICD-10-CM
C93.11	Chronic myelomonocytic leukemia, in remission	Diagnosis	ICD-10-CM
C93.12	Chronic myelomonocytic leukemia, in relapse	Diagnosis	ICD-10-CM
C93.30	Juvenile myelomonocytic leukemia, not having achieved remission	Diagnosis	ICD-10-CM
C93.31	Juvenile myelomonocytic leukemia, in remission	Diagnosis	ICD-10-CM
C93.32	Juvenile myelomonocytic leukemia, in relapse	Diagnosis	ICD-10-CM
C93.90	Monocytic leukemia, unspecified, not having achieved remission	Diagnosis	ICD-10-CM
C93.91	Monocytic leukemia, unspecified in remission	Diagnosis	ICD-10-CM
C93.92	Monocytic leukemia, unspecified in relapse	Diagnosis	ICD-10-CM
C93.Z0	Other monocytic leukemia, not having achieved remission	Diagnosis	ICD-10-CM
C93.Z1	Other monocytic leukemia, in remission	Diagnosis	ICD-10-CM
C93.Z2	Other monocytic leukemia, in relapse	Diagnosis	ICD-10-CM
C94.00	Acute erythroid leukemia, not having achieved remission	Diagnosis	ICD-10-CM
C94.01	Acute erythroid leukemia, in remission	Diagnosis	ICD-10-CM
C94.02	Acute erythroid leukemia, in relapse	Diagnosis	ICD-10-CM
C94.20	Acute megakaryoblastic leukemia not having achieved remission	Diagnosis	ICD-10-CM
C94.21	Acute megakaryoblastic leukemia, in remission	Diagnosis	ICD-10-CM
C94.22	Acute megakaryoblastic leukemia, in relapse	Diagnosis	ICD-10-CM
C94.30	Mast cell leukemia not having achieved remission	Diagnosis	ICD-10-CM
C94.31	Mast cell leukemia, in remission	Diagnosis	ICD-10-CM
C94.32	Mast cell leukemia, in relapse	Diagnosis	ICD-10-CM
C94.40	Acute panmyelosis with myelofibrosis not having achieved remission	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
C94.41	Acute panmyelosis with myelofibrosis, in remission	Diagnosis	ICD-10-CM
C94.42	Acute panmyelosis with myelofibrosis, in relapse	Diagnosis	ICD-10-CM
C94.6	Myelodysplastic disease, not classified	Diagnosis	ICD-10-CM
C94.80	Other specified leukemias not having achieved remission	Diagnosis	ICD-10-CM
C94.81	Other specified leukemias, in remission	Diagnosis	ICD-10-CM
C94.82	Other specified leukemias, in relapse	Diagnosis	ICD-10-CM
C95.00	Acute leukemia of unspecified cell type not having achieved remission	Diagnosis	ICD-10-CM
C95.01	Acute leukemia of unspecified cell type, in remission	Diagnosis	ICD-10-CM
C95.02	Acute leukemia of unspecified cell type, in relapse	Diagnosis	ICD-10-CM
C95.10	Chronic leukemia of unspecified cell type not having achieved remission	Diagnosis	ICD-10-CM
C95.11	Chronic leukemia of unspecified cell type, in remission	Diagnosis	ICD-10-CM
C95.12	Chronic leukemia of unspecified cell type, in relapse	Diagnosis	ICD-10-CM
C95.90	Leukemia, unspecified not having achieved remission	Diagnosis	ICD-10-CM
C95.91	Leukemia, unspecified, in remission	Diagnosis	ICD-10-CM
C95.92	Leukemia, unspecified, in relapse	Diagnosis	ICD-10-CM
C96.0	Multifocal and multisystemic (disseminated) Langerhans-cell histiocytosis	Diagnosis	ICD-10-CM
C96.20	Malignant mast cell neoplasm, unspecified	Diagnosis	ICD-10-CM
C96.21	Aggressive systemic mastocytosis	Diagnosis	ICD-10-CM
C96.22	Mast cell sarcoma	Diagnosis	ICD-10-CM
C96.29	Other malignant mast cell neoplasm	Diagnosis	ICD-10-CM
C96.4	Sarcoma of dendritic cells (accessory cells)	Diagnosis	ICD-10-CM
C96.9	Malignant neoplasm of lymphoid, hematopoietic and related tissue, unspecified	Diagnosis	ICD-10-CM
C96.A	Histiocytic sarcoma	Diagnosis	ICD-10-CM
C96.Z	Other specified malignant neoplasms of lymphoid, hematopoietic and related tissue	Diagnosis	ICD-10-CM
D00.00	Carcinoma in situ of oral cavity, unspecified site	Diagnosis	ICD-10-CM
D00.01	Carcinoma in situ of labial mucosa and vermilion border	Diagnosis	ICD-10-CM
D00.02	Carcinoma in situ of buccal mucosa	Diagnosis	ICD-10-CM
D00.03	Carcinoma in situ of gingiva and edentulous alveolar ridge	Diagnosis	ICD-10-CM
D00.04	Carcinoma in situ of soft palate	Diagnosis	ICD-10-CM
D00.05	Carcinoma in situ of hard palate	Diagnosis	ICD-10-CM
D00.06	Carcinoma in situ of floor of mouth	Diagnosis	ICD-10-CM
D00.07	Carcinoma in situ of tongue	Diagnosis	ICD-10-CM
D00.08	Carcinoma in situ of pharynx	Diagnosis	ICD-10-CM
D00.1	Carcinoma in situ of esophagus	Diagnosis	ICD-10-CM
D00.2	Carcinoma in situ of stomach	Diagnosis	ICD-10-CM
D01.0	Carcinoma in situ of colon	Diagnosis	ICD-10-CM
D01.1	Carcinoma in situ of rectosigmoid junction	Diagnosis	ICD-10-CM
D01.2	Carcinoma in situ of rectum	Diagnosis	ICD-10-CM
D01.3	Carcinoma in situ of anus and anal canal	Diagnosis	ICD-10-CM
D01.40	Carcinoma in situ of unspecified part of intestine	Diagnosis	ICD-10-CM
D01.49	Carcinoma in situ of other parts of intestine	Diagnosis	ICD-10-CM
D01.5	Carcinoma in situ of liver, gallbladder and bile ducts	Diagnosis	ICD-10-CM
D01.7	Carcinoma in situ of other specified digestive organs	Diagnosis	ICD-10-CM
D01.9	Carcinoma in situ of digestive organ, unspecified	Diagnosis	ICD-10-CM
D02.0	Carcinoma in situ of larynx	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
D02.1	Carcinoma in situ of trachea	Diagnosis	ICD-10-CM
D02.20	Carcinoma in situ of unspecified bronchus and lung	Diagnosis	ICD-10-CM
D02.21	Carcinoma in situ of right bronchus and lung	Diagnosis	ICD-10-CM
D02.22	Carcinoma in situ of left bronchus and lung	Diagnosis	ICD-10-CM
D02.3	Carcinoma in situ of other parts of respiratory system	Diagnosis	ICD-10-CM
D02.4	Carcinoma in situ of respiratory system, unspecified	Diagnosis	ICD-10-CM
D03.0	Melanoma in situ of lip	Diagnosis	ICD-10-CM
D03.10	Melanoma in situ of unspecified eyelid, including canthus	Diagnosis	ICD-10-CM
D03.11	Melanoma in situ of right eyelid, including canthus	Diagnosis	ICD-10-CM
D03.12	Melanoma in situ of left eyelid, including canthus	Diagnosis	ICD-10-CM
D03.20	Melanoma in situ of unspecified ear and external auricular canal	Diagnosis	ICD-10-CM
D03.21	Melanoma in situ of right ear and external auricular canal	Diagnosis	ICD-10-CM
D03.22	Melanoma in situ of left ear and external auricular canal	Diagnosis	ICD-10-CM
D03.30	Melanoma in situ of unspecified part of face	Diagnosis	ICD-10-CM
D03.39	Melanoma in situ of other parts of face	Diagnosis	ICD-10-CM
D03.4	Melanoma in situ of scalp and neck	Diagnosis	ICD-10-CM
D03.59	Melanoma in situ of other part of trunk	Diagnosis	ICD-10-CM
D03.60	Melanoma in situ of unspecified upper limb, including shoulder	Diagnosis	ICD-10-CM
D03.61	Melanoma in situ of right upper limb, including shoulder	Diagnosis	ICD-10-CM
D03.62	Melanoma in situ of left upper limb, including shoulder	Diagnosis	ICD-10-CM
D03.70	Melanoma in situ of unspecified lower limb, including hip	Diagnosis	ICD-10-CM
D03.71	Melanoma in situ of right lower limb, including hip	Diagnosis	ICD-10-CM
D03.72	Melanoma in situ of left lower limb, including hip	Diagnosis	ICD-10-CM
D03.8	Melanoma in situ of other sites	Diagnosis	ICD-10-CM
D03.9	Melanoma in situ, unspecified	Diagnosis	ICD-10-CM
D05.00	Lobular carcinoma in situ of unspecified breast	Diagnosis	ICD-10-CM
D05.01	Lobular carcinoma in situ of right breast	Diagnosis	ICD-10-CM
D05.02	Lobular carcinoma in situ of left breast	Diagnosis	ICD-10-CM
D05.10	Intraductal carcinoma in situ of unspecified breast	Diagnosis	ICD-10-CM
D05.11	Intraductal carcinoma in situ of right breast	Diagnosis	ICD-10-CM
D05.12	Intraductal carcinoma in situ of left breast	Diagnosis	ICD-10-CM
D05.80	Other specified type of carcinoma in situ of unspecified breast	Diagnosis	ICD-10-CM
D05.81	Other specified type of carcinoma in situ of right breast	Diagnosis	ICD-10-CM
D05.82	Other specified type of carcinoma in situ of left breast	Diagnosis	ICD-10-CM
D05.90	Unspecified type of carcinoma in situ of unspecified breast	Diagnosis	ICD-10-CM
D05.91	Unspecified type of carcinoma in situ of right breast	Diagnosis	ICD-10-CM
D05.92	Unspecified type of carcinoma in situ of left breast	Diagnosis	ICD-10-CM
D06.0	Carcinoma in situ of endocervix	Diagnosis	ICD-10-CM
D06.1	Carcinoma in situ of exocervix	Diagnosis	ICD-10-CM
D06.7	Carcinoma in situ of other parts of cervix	Diagnosis	ICD-10-CM
D06.9	Carcinoma in situ of cervix, unspecified	Diagnosis	ICD-10-CM
D07.0	Carcinoma in situ of endometrium	Diagnosis	ICD-10-CM
D07.1	Carcinoma in situ of vulva	Diagnosis	ICD-10-CM
D07.2	Carcinoma in situ of vagina	Diagnosis	ICD-10-CM
D07.30	Carcinoma in situ of unspecified female genital organs	Diagnosis	ICD-10-CM
D07.39	Carcinoma in situ of other female genital organs	Diagnosis	ICD-10-CM
D07.4	Carcinoma in situ of penis	Diagnosis	ICD-10-CM
D07.5	Carcinoma in situ of prostate	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
D07.60	Carcinoma in situ of unspecified male genital organs	Diagnosis	ICD-10-CM
D07.61	Carcinoma in situ of scrotum	Diagnosis	ICD-10-CM
D07.69	Carcinoma in situ of other male genital organs	Diagnosis	ICD-10-CM
D09.0	Carcinoma in situ of bladder	Diagnosis	ICD-10-CM
D09.10	Carcinoma in situ of unspecified urinary organ	Diagnosis	ICD-10-CM
D09.19	Carcinoma in situ of other urinary organs	Diagnosis	ICD-10-CM
D09.20	Carcinoma in situ of unspecified eye	Diagnosis	ICD-10-CM
D09.21	Carcinoma in situ of right eye	Diagnosis	ICD-10-CM
D09.22	Carcinoma in situ of left eye	Diagnosis	ICD-10-CM
D09.3	Carcinoma in situ of thyroid and other endocrine glands	Diagnosis	ICD-10-CM
D09.8	Carcinoma in situ of other specified sites	Diagnosis	ICD-10-CM
D09.9	Carcinoma in situ, unspecified	Diagnosis	ICD-10-CM
D25.0	Submucous leiomyoma of uterus	Diagnosis	ICD-10-CM
D25.1	Intramural leiomyoma of uterus	Diagnosis	ICD-10-CM
D25.2	Subserosal leiomyoma of uterus	Diagnosis	ICD-10-CM
D25.9	Leiomyoma of uterus, unspecified	Diagnosis	ICD-10-CM
D37.01	Neoplasm of uncertain behavior of lip	Diagnosis	ICD-10-CM
D37.02	Neoplasm of uncertain behavior of tongue	Diagnosis	ICD-10-CM
D37.030	Neoplasm of uncertain behavior of the parotid salivary glands	Diagnosis	ICD-10-CM
D37.031	Neoplasm of uncertain behavior of the sublingual salivary glands	Diagnosis	ICD-10-CM
D37.032	Neoplasm of uncertain behavior of the submandibular salivary glands	Diagnosis	ICD-10-CM
D37.039	Neoplasm of uncertain behavior of the major salivary glands, unspecified	Diagnosis	ICD-10-CM
D37.04	Neoplasm of uncertain behavior of the minor salivary glands	Diagnosis	ICD-10-CM
D37.05	Neoplasm of uncertain behavior of pharynx	Diagnosis	ICD-10-CM
D37.09	Neoplasm of uncertain behavior of other specified sites of the oral cavity	Diagnosis	ICD-10-CM
D37.1	Neoplasm of uncertain behavior of stomach	Diagnosis	ICD-10-CM
D37.2	Neoplasm of uncertain behavior of small intestine	Diagnosis	ICD-10-CM
D37.3	Neoplasm of uncertain behavior of appendix	Diagnosis	ICD-10-CM
D37.4	Neoplasm of uncertain behavior of colon	Diagnosis	ICD-10-CM
D37.5	Neoplasm of uncertain behavior of rectum	Diagnosis	ICD-10-CM
D37.6	Neoplasm of uncertain behavior of liver, gallbladder and bile ducts	Diagnosis	ICD-10-CM
D37.8	Neoplasm of uncertain behavior of other specified digestive organs	Diagnosis	ICD-10-CM
D37.9	Neoplasm of uncertain behavior of digestive organ, unspecified	Diagnosis	ICD-10-CM
D38.0	Neoplasm of uncertain behavior of larynx	Diagnosis	ICD-10-CM
D38.1	Neoplasm of uncertain behavior of trachea, bronchus and lung	Diagnosis	ICD-10-CM
D38.2	Neoplasm of uncertain behavior of pleura	Diagnosis	ICD-10-CM
D38.3	Neoplasm of uncertain behavior of mediastinum	Diagnosis	ICD-10-CM
D38.4	Neoplasm of uncertain behavior of thymus	Diagnosis	ICD-10-CM
D38.5	Neoplasm of uncertain behavior of other respiratory organs	Diagnosis	ICD-10-CM
D38.6	Neoplasm of uncertain behavior of respiratory organ, unspecified	Diagnosis	ICD-10-CM
D39.0	Neoplasm of uncertain behavior of uterus	Diagnosis	ICD-10-CM
D39.10	Neoplasm of uncertain behavior of unspecified ovary	Diagnosis	ICD-10-CM
D39.11	Neoplasm of uncertain behavior of right ovary	Diagnosis	ICD-10-CM
D39.12	Neoplasm of uncertain behavior of left ovary	Diagnosis	ICD-10-CM
D39.2	Neoplasm of uncertain behavior of placenta	Diagnosis	ICD-10-CM
D39.8	Neoplasm of uncertain behavior of other specified female genital organs	Diagnosis	ICD-10-CM
D39.9	Neoplasm of uncertain behavior of female genital organ, unspecified	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
D3A.00	Benign carcinoid tumor of unspecified site	Diagnosis	ICD-10-CM
D3A.010	Benign carcinoid tumor of the duodenum	Diagnosis	ICD-10-CM
D3A.011	Benign carcinoid tumor of the jejunum	Diagnosis	ICD-10-CM
D3A.012	Benign carcinoid tumor of the ileum	Diagnosis	ICD-10-CM
D3A.019	Benign carcinoid tumor of the small intestine, unspecified portion	Diagnosis	ICD-10-CM
D3A.020	Benign carcinoid tumor of the appendix	Diagnosis	ICD-10-CM
D3A.021	Benign carcinoid tumor of the cecum	Diagnosis	ICD-10-CM
D3A.022	Benign carcinoid tumor of the ascending colon	Diagnosis	ICD-10-CM
D3A.023	Benign carcinoid tumor of the transverse colon	Diagnosis	ICD-10-CM
D3A.024	Benign carcinoid tumor of the descending colon	Diagnosis	ICD-10-CM
D3A.025	Benign carcinoid tumor of the sigmoid colon	Diagnosis	ICD-10-CM
D3A.026	Benign carcinoid tumor of the rectum	Diagnosis	ICD-10-CM
D3A.029	Benign carcinoid tumor of the large intestine, unspecified portion	Diagnosis	ICD-10-CM
D3A.090	Benign carcinoid tumor of the bronchus and lung	Diagnosis	ICD-10-CM
D3A.091	Benign carcinoid tumor of the thymus	Diagnosis	ICD-10-CM
D3A.092	Benign carcinoid tumor of the stomach	Diagnosis	ICD-10-CM
D3A.093	Benign carcinoid tumor of the kidney	Diagnosis	ICD-10-CM
D3A.094	Benign carcinoid tumor of the foregut, unspecified	Diagnosis	ICD-10-CM
D3A.095	Benign carcinoid tumor of the midgut, unspecified	Diagnosis	ICD-10-CM
D3A.096	Benign carcinoid tumor of the hindgut, unspecified	Diagnosis	ICD-10-CM
D3A.098	Benign carcinoid tumors of other sites	Diagnosis	ICD-10-CM
D3A.8	Other benign neuroendocrine tumors	Diagnosis	ICD-10-CM
D40.0	Neoplasm of uncertain behavior of prostate	Diagnosis	ICD-10-CM
D40.10	Neoplasm of uncertain behavior of unspecified testis	Diagnosis	ICD-10-CM
D40.11	Neoplasm of uncertain behavior of right testis	Diagnosis	ICD-10-CM
D40.12	Neoplasm of uncertain behavior of left testis	Diagnosis	ICD-10-CM
D40.8	Neoplasm of uncertain behavior of other specified male genital organs	Diagnosis	ICD-10-CM
D40.9	Neoplasm of uncertain behavior of male genital organ, unspecified	Diagnosis	ICD-10-CM
D41.00	Neoplasm of uncertain behavior of unspecified kidney	Diagnosis	ICD-10-CM
D41.01	Neoplasm of uncertain behavior of right kidney	Diagnosis	ICD-10-CM
D41.02	Neoplasm of uncertain behavior of left kidney	Diagnosis	ICD-10-CM
D41.10	Neoplasm of uncertain behavior of unspecified renal pelvis	Diagnosis	ICD-10-CM
D41.11	Neoplasm of uncertain behavior of right renal pelvis	Diagnosis	ICD-10-CM
D41.12	Neoplasm of uncertain behavior of left renal pelvis	Diagnosis	ICD-10-CM
D41.20	Neoplasm of uncertain behavior of unspecified ureter	Diagnosis	ICD-10-CM
D41.21	Neoplasm of uncertain behavior of right ureter	Diagnosis	ICD-10-CM
D41.22	Neoplasm of uncertain behavior of left ureter	Diagnosis	ICD-10-CM
D41.3	Neoplasm of uncertain behavior of urethra	Diagnosis	ICD-10-CM
D41.4	Neoplasm of uncertain behavior of bladder	Diagnosis	ICD-10-CM
D41.8	Neoplasm of uncertain behavior of other specified urinary organs	Diagnosis	ICD-10-CM
D41.9	Neoplasm of uncertain behavior of unspecified urinary organ	Diagnosis	ICD-10-CM
D42.0	Neoplasm of uncertain behavior of cerebral meninges	Diagnosis	ICD-10-CM
D42.1	Neoplasm of uncertain behavior of spinal meninges	Diagnosis	ICD-10-CM
D42.9	Neoplasm of uncertain behavior of meninges, unspecified	Diagnosis	ICD-10-CM
D43.0	Neoplasm of uncertain behavior of brain, supratentorial	Diagnosis	ICD-10-CM
D43.1	Neoplasm of uncertain behavior of brain, infratentorial	Diagnosis	ICD-10-CM
D43.2	Neoplasm of uncertain behavior of brain, unspecified	Diagnosis	ICD-10-CM
D43.3	Neoplasm of uncertain behavior of cranial nerves	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
D43.4	Neoplasm of uncertain behavior of spinal cord	Diagnosis	ICD-10-CM
D43.8	Neoplasm of uncertain behavior of other specified parts of central nervous system	Diagnosis	ICD-10-CM
D43.9	Neoplasm of uncertain behavior of central nervous system, unspecified	Diagnosis	ICD-10-CM
D44.0	Neoplasm of uncertain behavior of thyroid gland	Diagnosis	ICD-10-CM
D44.10	Neoplasm of uncertain behavior of unspecified adrenal gland	Diagnosis	ICD-10-CM
D44.11	Neoplasm of uncertain behavior of right adrenal gland	Diagnosis	ICD-10-CM
D44.12	Neoplasm of uncertain behavior of left adrenal gland	Diagnosis	ICD-10-CM
D44.2	Neoplasm of uncertain behavior of parathyroid gland	Diagnosis	ICD-10-CM
D44.3	Neoplasm of uncertain behavior of pituitary gland	Diagnosis	ICD-10-CM
D44.4	Neoplasm of uncertain behavior of craniopharyngeal duct	Diagnosis	ICD-10-CM
D44.5	Neoplasm of uncertain behavior of pineal gland	Diagnosis	ICD-10-CM
D44.6	Neoplasm of uncertain behavior of carotid body	Diagnosis	ICD-10-CM
D44.7	Neoplasm of uncertain behavior of aortic body and other paraganglia	Diagnosis	ICD-10-CM
D44.9	Neoplasm of uncertain behavior of unspecified endocrine gland	Diagnosis	ICD-10-CM
D45	Polycythemia vera	Diagnosis	ICD-10-CM
D46.0	Refractory anemia without ring sideroblasts, so stated	Diagnosis	ICD-10-CM
D46.1	Refractory anemia with ring sideroblasts	Diagnosis	ICD-10-CM
D46.20	Refractory anemia with excess of blasts, unspecified	Diagnosis	ICD-10-CM
D46.21	Refractory anemia with excess of blasts 1	Diagnosis	ICD-10-CM
D46.22	Refractory anemia with excess of blasts 2	Diagnosis	ICD-10-CM
D46.4	Refractory anemia, unspecified	Diagnosis	ICD-10-CM
D46.9	Myelodysplastic syndrome, unspecified	Diagnosis	ICD-10-CM
D46.A	Refractory cytopenia with multilineage dysplasia	Diagnosis	ICD-10-CM
D46.B	Refractory cytopenia with multilineage dysplasia and ring sideroblasts	Diagnosis	ICD-10-CM
D46.C	Myelodysplastic syndrome with isolated del(5q) chromosomal abnormality	Diagnosis	ICD-10-CM
D46.Z	Other myelodysplastic syndromes	Diagnosis	ICD-10-CM
D47.01	Cutaneous mastocytosis	Diagnosis	ICD-10-CM
D47.02	Systemic mastocytosis	Diagnosis	ICD-10-CM
D47.09	Other mast cell neoplasms of uncertain behavior	Diagnosis	ICD-10-CM
D47.1	Chronic myeloproliferative disease	Diagnosis	ICD-10-CM
D47.3	Essential (hemorrhagic) thrombocythemia	Diagnosis	ICD-10-CM
D47.9	Neoplasm of uncertain behavior of lymphoid, hematopoietic and related tissue, unspecified	Diagnosis	ICD-10-CM
D47.Z1	Post-transplant lymphoproliferative disorder (PTLD)	Diagnosis	ICD-10-CM
D47.Z2	Castleman disease	Diagnosis	ICD-10-CM
D47.Z9	Other specified neoplasms of uncertain behavior of lymphoid, hematopoietic and related tissue	Diagnosis	ICD-10-CM
D48.0	Neoplasm of uncertain behavior of bone and articular cartilage	Diagnosis	ICD-10-CM
D48.1	Neoplasm of uncertain behavior of connective and other soft tissue	Diagnosis	ICD-10-CM
D48.2	Neoplasm of uncertain behavior of peripheral nerves and autonomic nervous system	Diagnosis	ICD-10-CM
D48.3	Neoplasm of uncertain behavior of retroperitoneum	Diagnosis	ICD-10-CM
D48.4	Neoplasm of uncertain behavior of peritoneum	Diagnosis	ICD-10-CM
D48.60	Neoplasm of uncertain behavior of unspecified breast	Diagnosis	ICD-10-CM
D48.61	Neoplasm of uncertain behavior of right breast	Diagnosis	ICD-10-CM
D48.62	Neoplasm of uncertain behavior of left breast	Diagnosis	ICD-10-CM
D48.7	Neoplasm of uncertain behavior of other specified sites	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
D48.9	Neoplasm of uncertain behavior, unspecified	Diagnosis	ICD-10-CM
D49.0	Neoplasm of unspecified behavior of digestive system	Diagnosis	ICD-10-CM
D49.1	Neoplasm of unspecified behavior of respiratory system	Diagnosis	ICD-10-CM
D49.3	Neoplasm of unspecified behavior of breast	Diagnosis	ICD-10-CM
D49.4	Neoplasm of unspecified behavior of bladder	Diagnosis	ICD-10-CM
D49.511	Neoplasm of unspecified behavior of right kidney	Diagnosis	ICD-10-CM
D49.512	Neoplasm of unspecified behavior of left kidney	Diagnosis	ICD-10-CM
D49.519	Neoplasm of unspecified behavior of unspecified kidney	Diagnosis	ICD-10-CM
D49.59	Neoplasm of unspecified behavior of other genitourinary organ	Diagnosis	ICD-10-CM
D49.6	Neoplasm of unspecified behavior of brain	Diagnosis	ICD-10-CM
D49.7	Neoplasm of unspecified behavior of endocrine glands and other parts of nervous system	Diagnosis	ICD-10-CM
D49.81	Neoplasm of unspecified behavior of retina and choroid	Diagnosis	ICD-10-CM
D49.89	Neoplasm of unspecified behavior of other specified sites	Diagnosis	ICD-10-CM
D49.9	Neoplasm of unspecified behavior of unspecified site	Diagnosis	ICD-10-CM
Q85.00	Neurofibromatosis, unspecified	Diagnosis	ICD-10-CM
Q85.01	Neurofibromatosis, type 1	Diagnosis	ICD-10-CM
Q85.02	Neurofibromatosis, type 2	Diagnosis	ICD-10-CM
Q85.03	Schwannomatosis	Diagnosis	ICD-10-CM
Q85.09	Other neurofibromatosis	Diagnosis	ICD-10-CM
<b>Chronic Kidney Disease</b>			
A18.11	Tuberculosis of kidney and ureter	Diagnosis	ICD-10-CM
A52.75	Syphilis of kidney and ureter	Diagnosis	ICD-10-CM
B52.0	Plasmodium malariae malaria with nephropathy	Diagnosis	ICD-10-CM
C64.1	Malignant neoplasm of right kidney, except renal pelvis	Diagnosis	ICD-10-CM
C64.2	Malignant neoplasm of left kidney, except renal pelvis	Diagnosis	ICD-10-CM
C64.9	Malignant neoplasm of unspecified kidney, except renal pelvis	Diagnosis	ICD-10-CM
C68.9	Malignant neoplasm of urinary organ, unspecified	Diagnosis	ICD-10-CM
D30.00	Benign neoplasm of unspecified kidney	Diagnosis	ICD-10-CM
D30.01	Benign neoplasm of right kidney	Diagnosis	ICD-10-CM
D30.02	Benign neoplasm of left kidney	Diagnosis	ICD-10-CM
D41.00	Neoplasm of uncertain behavior of unspecified kidney	Diagnosis	ICD-10-CM
D41.01	Neoplasm of uncertain behavior of right kidney	Diagnosis	ICD-10-CM
D41.02	Neoplasm of uncertain behavior of left kidney	Diagnosis	ICD-10-CM
D41.10	Neoplasm of uncertain behavior of unspecified renal pelvis	Diagnosis	ICD-10-CM
D41.11	Neoplasm of uncertain behavior of right renal pelvis	Diagnosis	ICD-10-CM
D41.12	Neoplasm of uncertain behavior of left renal pelvis	Diagnosis	ICD-10-CM
D41.20	Neoplasm of uncertain behavior of unspecified ureter	Diagnosis	ICD-10-CM
D41.21	Neoplasm of uncertain behavior of right ureter	Diagnosis	ICD-10-CM
D41.22	Neoplasm of uncertain behavior of left ureter	Diagnosis	ICD-10-CM
D59.3	Hemolytic-uremic syndrome	Diagnosis	ICD-10-CM
E08.21	Diabetes mellitus due to underlying condition with diabetic nephropathy	Diagnosis	ICD-10-CM
E08.22	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication	Diagnosis	ICD-10-CM
E08.65	Diabetes mellitus due to underlying condition with hyperglycemia	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
E09.21	Drug or chemical induced diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E09.22	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E10.65	Type 1 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E13.21	Other specified diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E74.8	Other specified disorders of carbohydrate metabolism	Diagnosis	ICD-10-CM
I12	Hypertensive chronic kidney disease	Diagnosis	ICD-10-CM
I12.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease	Diagnosis	ICD-10-CM
I12.9	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13	Hypertensive heart and chronic kidney disease	Diagnosis	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.1	Hypertensive heart and chronic kidney disease without heart failure	Diagnosis	ICD-10-CM
I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I70.1	Atherosclerosis of renal artery	Diagnosis	ICD-10-CM
I72.2	Aneurysm of renal artery	Diagnosis	ICD-10-CM
K76.7	Hepatorenal syndrome	Diagnosis	ICD-10-CM
M10.30	Gout due to renal impairment, unspecified site	Diagnosis	ICD-10-CM
M10.311	Gout due to renal impairment, right shoulder	Diagnosis	ICD-10-CM
M10.312	Gout due to renal impairment, left shoulder	Diagnosis	ICD-10-CM
M10.319	Gout due to renal impairment, unspecified shoulder	Diagnosis	ICD-10-CM
M10.321	Gout due to renal impairment, right elbow	Diagnosis	ICD-10-CM
M10.322	Gout due to renal impairment, left elbow	Diagnosis	ICD-10-CM
M10.329	Gout due to renal impairment, unspecified elbow	Diagnosis	ICD-10-CM
M10.331	Gout due to renal impairment, right wrist	Diagnosis	ICD-10-CM
M10.332	Gout due to renal impairment, left wrist	Diagnosis	ICD-10-CM
M10.339	Gout due to renal impairment, unspecified wrist	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
M10.341	Gout due to renal impairment, right hand	Diagnosis	ICD-10-CM
M10.342	Gout due to renal impairment, left hand	Diagnosis	ICD-10-CM
M10.349	Gout due to renal impairment, unspecified hand	Diagnosis	ICD-10-CM
M10.351	Gout due to renal impairment, right hip	Diagnosis	ICD-10-CM
M10.352	Gout due to renal impairment, left hip	Diagnosis	ICD-10-CM
M10.359	Gout due to renal impairment, unspecified hip	Diagnosis	ICD-10-CM
M10.361	Gout due to renal impairment, right knee	Diagnosis	ICD-10-CM
M10.362	Gout due to renal impairment, left knee	Diagnosis	ICD-10-CM
M10.369	Gout due to renal impairment, unspecified knee	Diagnosis	ICD-10-CM
M10.371	Gout due to renal impairment, right ankle and foot	Diagnosis	ICD-10-CM
M10.372	Gout due to renal impairment, left ankle and foot	Diagnosis	ICD-10-CM
M10.379	Gout due to renal impairment, unspecified ankle and foot	Diagnosis	ICD-10-CM
M10.38	Gout due to renal impairment, vertebrae	Diagnosis	ICD-10-CM
M10.39	Gout due to renal impairment, multiple sites	Diagnosis	ICD-10-CM
M32.14	Glomerular disease in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M32.15	Tubulo-interstitial nephropathy in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M35.04	Sjogren syndrome with tubulo-interstitial nephropathy	Diagnosis	ICD-10-CM
N00.0	Acute nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N00.1	Acute nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N00.2	Acute nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N00.3	Acute nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N00.4	Acute nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N00.5	Acute nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N00.6	Acute nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N00.7	Acute nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N00.8	Acute nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N00.9	Acute nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N00.A	Acute nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N01.0	Rapidly progressive nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N01.1	Rapidly progressive nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N01.2	Rapidly progressive nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N01.3	Rapidly progressive nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N01.4	Rapidly progressive nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N01.5	Rapidly progressive nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N01.6	Rapidly progressive nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N01.7	Rapidly progressive nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N01.8	Rapidly progressive nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
N01.9	Rapidly progressive nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N01.A	Rapidly progressive nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N02.0	Recurrent and persistent hematuria with minor glomerular abnormality	Diagnosis	ICD-10-CM
N02.1	Recurrent and persistent hematuria with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N02.2	Recurrent and persistent hematuria with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N02.3	Recurrent and persistent hematuria with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.4	Recurrent and persistent hematuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.5	Recurrent and persistent hematuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N02.6	Recurrent and persistent hematuria with dense deposit disease	Diagnosis	ICD-10-CM
N02.7	Recurrent and persistent hematuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N02.8	Recurrent and persistent hematuria with other morphologic changes	Diagnosis	ICD-10-CM
N02.9	Recurrent and persistent hematuria with unspecified morphologic changes	Diagnosis	ICD-10-CM
N02.A	Recurrent and persistent hematuria with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N03.0	Chronic nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N03.1	Chronic nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N03.2	Chronic nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N03.3	Chronic nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.4	Chronic nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.5	Chronic nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N03.6	Chronic nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N03.7	Chronic nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N03.8	Chronic nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N03.9	Chronic nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N03.A	Chronic nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N04.0	Nephrotic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N04.1	Nephrotic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N04.2	Nephrotic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N04.3	Nephrotic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.4	Nephrotic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.5	Nephrotic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N04.6	Nephrotic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N04.7	Nephrotic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N04.8	Nephrotic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N04.9	Nephrotic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N04.A	Nephrotic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
N05.0	Unspecified nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N05.1	Unspecified nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N05.2	Unspecified nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N05.3	Unspecified nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N05.4	Unspecified nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N05.5	Unspecified nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N05.6	Unspecified nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N05.7	Unspecified nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N05.8	Unspecified nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N05.9	Unspecified nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N05.A	Unspecified nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N06.0	Isolated proteinuria with minor glomerular abnormality	Diagnosis	ICD-10-CM
N06.1	Isolated proteinuria with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N06.2	Isolated proteinuria with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N06.3	Isolated proteinuria with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N06.4	Isolated proteinuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N06.5	Isolated proteinuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N06.6	Isolated proteinuria with dense deposit disease	Diagnosis	ICD-10-CM
N06.7	Isolated proteinuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N06.8	Isolated proteinuria with other morphologic lesion	Diagnosis	ICD-10-CM
N06.9	Isolated proteinuria with unspecified morphologic lesion	Diagnosis	ICD-10-CM
N06.A	Isolated proteinuria with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N07.0	Hereditary nephropathy, not elsewhere classified with minor glomerular abnormality	Diagnosis	ICD-10-CM
N07.1	Hereditary nephropathy, not elsewhere classified with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N07.2	Hereditary nephropathy, not elsewhere classified with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N07.3	Hereditary nephropathy, not elsewhere classified with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N07.4	Hereditary nephropathy, not elsewhere classified with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N07.5	Hereditary nephropathy, not elsewhere classified with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N07.6	Hereditary nephropathy, not elsewhere classified with dense deposit disease	Diagnosis	ICD-10-CM
N07.7	Hereditary nephropathy, not elsewhere classified with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N07.8	Hereditary nephropathy, not elsewhere classified with other morphologic lesions	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
N07.9	Hereditary nephropathy, not elsewhere classified with unspecified morphologic lesions	Diagnosis	ICD-10-CM
N07.A	Hereditary nephropathy, not elsewhere classified with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N08	Glomerular disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N13.1	Hydronephrosis with ureteral stricture, not elsewhere classified	Diagnosis	ICD-10-CM
N13.2	Hydronephrosis with renal and ureteral calculous obstruction	Diagnosis	ICD-10-CM
N13.30	Unspecified hydronephrosis	Diagnosis	ICD-10-CM
N13.39	Other hydronephrosis	Diagnosis	ICD-10-CM
N14.0	Analgesic nephropathy	Diagnosis	ICD-10-CM
N14.1	Nephropathy induced by other drugs, medicaments and biological substances	Diagnosis	ICD-10-CM
N14.2	Nephropathy induced by unspecified drug, medicament or biological substance	Diagnosis	ICD-10-CM
N14.3	Nephropathy induced by heavy metals	Diagnosis	ICD-10-CM
N14.4	Toxic nephropathy, not elsewhere classified	Diagnosis	ICD-10-CM
N15.0	Balkan nephropathy	Diagnosis	ICD-10-CM
N15.8	Other specified renal tubulo-interstitial diseases	Diagnosis	ICD-10-CM
N15.9	Renal tubulo-interstitial disease, unspecified	Diagnosis	ICD-10-CM
N16	Renal tubulo-interstitial disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N17	Acute kidney failure	Diagnosis	ICD-10-CM
N17.0	Acute kidney failure with tubular necrosis	Diagnosis	ICD-10-CM
N17.1	Acute kidney failure with acute cortical necrosis	Diagnosis	ICD-10-CM
N17.2	Acute kidney failure with medullary necrosis	Diagnosis	ICD-10-CM
N17.8	Other acute kidney failure	Diagnosis	ICD-10-CM
N17.9	Acute kidney failure, unspecified	Diagnosis	ICD-10-CM
N18	Chronic kidney disease (CKD)	Diagnosis	ICD-10-CM
N18.1	Chronic kidney disease, stage 1	Diagnosis	ICD-10-CM
N18.2	Chronic kidney disease, stage 2 (mild)	Diagnosis	ICD-10-CM
N18.3	Chronic kidney disease, stage 3 (moderate)	Diagnosis	ICD-10-CM
N18.30	Chronic kidney disease, stage 3 unspecified	Diagnosis	ICD-10-CM
N18.31	Chronic kidney disease, stage 3a	Diagnosis	ICD-10-CM
N18.32	Chronic kidney disease, stage 3b	Diagnosis	ICD-10-CM
N18.4	Chronic kidney disease, stage 4 (severe)	Diagnosis	ICD-10-CM
N18.5	Chronic kidney disease, stage 5	Diagnosis	ICD-10-CM
N18.6	End stage renal disease	Diagnosis	ICD-10-CM
N18.9	Chronic kidney disease, unspecified	Diagnosis	ICD-10-CM
N19	Unspecified kidney failure	Diagnosis	ICD-10-CM
N25.0	Renal osteodystrophy	Diagnosis	ICD-10-CM
N25.1	Nephrogenic diabetes insipidus	Diagnosis	ICD-10-CM
N25.81	Secondary hyperparathyroidism of renal origin	Diagnosis	ICD-10-CM
N25.89	Other disorders resulting from impaired renal tubular function	Diagnosis	ICD-10-CM
N25.9	Disorder resulting from impaired renal tubular function, unspecified	Diagnosis	ICD-10-CM
N26.1	Atrophy of kidney (terminal)	Diagnosis	ICD-10-CM
N26.9	Renal sclerosis, unspecified	Diagnosis	ICD-10-CM
Q61.02	Congenital multiple renal cysts	Diagnosis	ICD-10-CM
Q61.11	Cystic dilatation of collecting ducts	Diagnosis	ICD-10-CM
Q61.19	Other polycystic kidney, infantile type	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
Q61.2	Polycystic kidney, adult type	Diagnosis	ICD-10-CM
Q61.3	Polycystic kidney, unspecified	Diagnosis	ICD-10-CM
Q61.4	Renal dysplasia	Diagnosis	ICD-10-CM
Q61.5	Medullary cystic kidney	Diagnosis	ICD-10-CM
Q61.8	Other cystic kidney diseases	Diagnosis	ICD-10-CM
Q62.0	Congenital hydronephrosis	Diagnosis	ICD-10-CM
Q62.10	Congenital occlusion of ureter, unspecified	Diagnosis	ICD-10-CM
Q62.11	Congenital occlusion of ureteropelvic junction	Diagnosis	ICD-10-CM
Q62.12	Congenital occlusion of ureterovesical orifice	Diagnosis	ICD-10-CM
Q62.2	Congenital megaureter	Diagnosis	ICD-10-CM
Q62.31	Congenital ureterocele, orthotopic	Diagnosis	ICD-10-CM
Q62.32	Cecoureterocele	Diagnosis	ICD-10-CM
Q62.39	Other obstructive defects of renal pelvis and ureter	Diagnosis	ICD-10-CM
R94.4	Abnormal results of kidney function studies	Diagnosis	ICD-10-CM
<b>Hyperlipidemia</b>			
E78.0	Elevated Lipoprotein(a)	Diagnosis	ICD-10-CM
E78.00	Pure hypercholesterolemia, unspecified	Diagnosis	ICD-10-CM
E78.01	Familial hypercholesterolemia	Diagnosis	ICD-10-CM
E78.1	Pure hyperglyceridemia	Diagnosis	ICD-10-CM
E78.2	Mixed hyperlipidemia	Diagnosis	ICD-10-CM
E78.3	Hyperchylomicronemia	Diagnosis	ICD-10-CM
E78.4	Other hyperlipidemia	Diagnosis	ICD-10-CM
E78.41	Other hyperlipidemia	Diagnosis	ICD-10-CM
E78.49	Pure hypercholesterolemia	Diagnosis	ICD-10-CM
E78.5	Hyperlipidemia, unspecified	Diagnosis	ICD-10-CM
<b>Psychosis or psychotic disorder</b>			
F06.0	Psychotic disorder with hallucinations due to known physiological condition	Diagnosis	ICD-10-CM
F06.1	Catatonic disorder due to known physiological condition	Diagnosis	ICD-10-CM
F062	Psychotic disorder with delusions due to known physiological condition	Diagnosis	ICD-10-CM
F10.150	Alcohol abuse with alcohol-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F10.151	Alcohol abuse with alcohol-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F10.159	Alcohol abuse with alcohol-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F10.250	Alcohol dependence with alcohol-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F10.251	Alcohol dependence with alcohol-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F10.259	Alcohol dependence with alcohol-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F10.950	Alcohol use, unspecified with alcohol-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F10.951	Alcohol use, unspecified with alcohol-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F10.959	Alcohol use, unspecified with alcohol-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F11.150	Opioid abuse with opioid-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F11.151	Opioid abuse with opioid-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F11.159	Opioid abuse with opioid-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
F11.250	Opioid dependence with opioid-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F11.251	Opioid dependence with opioid-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F11.259	Opioid dependence with opioid-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F11.950	Opioid use, unspecified with opioid-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F11.951	Opioid use, unspecified with opioid-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F11.959	Opioid use, unspecified with opioid-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F12.150	Cannabis abuse with psychotic disorder with delusions	Diagnosis	ICD-10-CM
F12.151	Cannabis abuse with psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F12.159	Cannabis abuse with psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F12.250	Cannabis dependence with psychotic disorder with delusions	Diagnosis	ICD-10-CM
F12.251	Cannabis dependence with psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F12.259	Cannabis dependence with psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F12.950	Cannabis use, unspecified with psychotic disorder with delusions	Diagnosis	ICD-10-CM
F12.951	Cannabis use, unspecified with psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F12.959	Cannabis use, unspecified with psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F13.150	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F13.151	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F13.159	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F13.250	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F13.251	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F13.259	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F13.950	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F13.951	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F13.959	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F14.150	Cocaine abuse with cocaine-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F14.151	Cocaine abuse with cocaine-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F14.159	Cocaine abuse with cocaine-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F14.250	Cocaine dependence with cocaine-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F14.251	Cocaine dependence with cocaine-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F14.259	Cocaine dependence with cocaine-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
F14.950	Cocaine use, unspecified with cocaine-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F14.951	Cocaine use, unspecified with cocaine-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F14.959	Cocaine use, unspecified with cocaine-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F15.150	Other stimulant abuse with stimulant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F15.151	Other stimulant abuse with stimulant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F15.159	Other stimulant abuse with stimulant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F15.250	Other stimulant dependence with stimulant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F15.251	Other stimulant dependence with stimulant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F15.259	Other stimulant dependence with stimulant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F15.950	Other stimulant use, unspecified with stimulant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F15.951	Other stimulant use, unspecified with stimulant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F15.959	Other stimulant use, unspecified with stimulant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F16.150	Hallucinogen abuse with hallucinogen-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F16.151	Hallucinogen abuse with hallucinogen-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F16.159	Hallucinogen abuse with hallucinogen-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F16.250	Hallucinogen dependence with hallucinogen-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F16.251	Hallucinogen dependence with hallucinogen-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F16.259	Hallucinogen dependence with hallucinogen-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F16.950	Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F16.951	Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F16.959	Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F18.150	Inhalant abuse with inhalant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F18.151	Inhalant abuse with inhalant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F18.159	Inhalant abuse with inhalant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F18.250	Inhalant dependence with inhalant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
F18.251	Inhalant dependence with inhalant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F18.259	Inhalant dependence with inhalant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F18.950	Inhalant use, unspecified with inhalant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F18.951	Inhalant use, unspecified with inhalant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F18.959	Inhalant use, unspecified with inhalant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F19.150	Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F19.151	Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F19.159	Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F19.250	Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F19.251	Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F19.259	Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F19.950	Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F19.951	Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F19.959	Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F20.0	Paranoid schizophrenia	Diagnosis	ICD-10-CM
F20.1	Disorganized schizophrenia	Diagnosis	ICD-10-CM
F20.2	Catatonic schizophrenia	Diagnosis	ICD-10-CM
F20.3	Undifferentiated schizophrenia	Diagnosis	ICD-10-CM
F20.5	Residual schizophrenia	Diagnosis	ICD-10-CM
F20.81	Schizophreniform disorder	Diagnosis	ICD-10-CM
F20.89	Other schizophrenia	Diagnosis	ICD-10-CM
F20.9	Schizophrenia, unspecified	Diagnosis	ICD-10-CM
F21	Schizotypal disorder	Diagnosis	ICD-10-CM
F22	Delusional disorders	Diagnosis	ICD-10-CM
F23	Brief psychotic disorder	Diagnosis	ICD-10-CM
F24	Shared psychotic disorder	Diagnosis	ICD-10-CM
F25.0	Schizoaffective disorder, bipolar type	Diagnosis	ICD-10-CM
F25.1	Schizoaffective disorder, depressive type	Diagnosis	ICD-10-CM
F25.8	Other schizoaffective disorders	Diagnosis	ICD-10-CM
F25.9	Schizoaffective disorder, unspecified	Diagnosis	ICD-10-CM
F28	Other psychotic disorder not due to a substance or known physiological condition	Diagnosis	ICD-10-CM
F29	Unspecified psychosis not due to a substance or known physiological condition	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
F30.2	Manic episode, severe with psychotic symptoms	Diagnosis	ICD-10-CM
F31.2	Bipolar disorder, current episode manic severe with psychotic features	Diagnosis	ICD-10-CM
F31.5	Bipolar disorder, current episode depressed, severe, with psychotic features	Diagnosis	ICD-10-CM
F31.64	Bipolar disorder, current episode mixed, severe, with psychotic features	Diagnosis	ICD-10-CM
F32.3	Major depressive disorder, single episode, severe with psychotic features	Diagnosis	ICD-10-CM
R44.0	Auditory hallucinations	Diagnosis	ICD-10-CM
R44.2	Other hallucinations	Diagnosis	ICD-10-CM
R44.3	Hallucinations, unspecified	Diagnosis	ICD-10-CM
<b>Rheumatic and Inflammatory Disease</b>			
D860	Sarcoidosis of lung	Diagnosis	ICD-10-CM
D861	Sarcoidosis of lymph nodes	Diagnosis	ICD-10-CM
D862	Sarcoidosis of lung with sarcoidosis of lymph nodes	Diagnosis	ICD-10-CM
D863	Sarcoidosis of skin	Diagnosis	ICD-10-CM
D8681	Sarcoid meningitis	Diagnosis	ICD-10-CM
D8682	Multiple cranial nerve palsies in sarcoidosis	Diagnosis	ICD-10-CM
D8683	Sarcoid iridocyclitis	Diagnosis	ICD-10-CM
D8684	Sarcoid pyelonephritis	Diagnosis	ICD-10-CM
D8685	Sarcoid myocarditis	Diagnosis	ICD-10-CM
D8686	Sarcoid arthropathy	Diagnosis	ICD-10-CM
D8687	Sarcoid myositis	Diagnosis	ICD-10-CM
D8689	Sarcoidosis of other sites	Diagnosis	ICD-10-CM
D869	Sarcoidosis, unspecified	Diagnosis	ICD-10-CM
E850	Non-neuropathic heredofamilial amyloidosis	Diagnosis	ICD-10-CM
E851	Neuropathic heredofamilial amyloidosis	Diagnosis	ICD-10-CM
E852	Heredofamilial amyloidosis, unspecified	Diagnosis	ICD-10-CM
E853	Secondary systemic amyloidosis	Diagnosis	ICD-10-CM
E854	Organ-limited amyloidosis	Diagnosis	ICD-10-CM
E8581	Light chain (AL) amyloidosis	Diagnosis	ICD-10-CM
E8582	Wild-type transthyretin-related (ATTR) amyloidosis	Diagnosis	ICD-10-CM
E8589	Other amyloidosis	Diagnosis	ICD-10-CM
E859	Amyloidosis, unspecified	Diagnosis	ICD-10-CM
G35	Multiple sclerosis	Diagnosis	ICD-10-CM
G360	Neuromyelitis optica [Devic]	Diagnosis	ICD-10-CM
G370	Diffuse sclerosis of central nervous system	Diagnosis	ICD-10-CM
G371	Central demyelination of corpus callosum	Diagnosis	ICD-10-CM
G372	Central pontine myelinolysis	Diagnosis	ICD-10-CM
G373	Acute transverse myelitis in demyelinating disease of central nervous system	Diagnosis	ICD-10-CM
G374	Subacute necrotizing myelitis of central nervous system	Diagnosis	ICD-10-CM
G375	Concentric sclerosis [Balo] of central nervous system	Diagnosis	ICD-10-CM
G378	Other specified demyelinating diseases of central nervous system	Diagnosis	ICD-10-CM
G6181	Chronic inflammatory demyelinating polyneuritis	Diagnosis	ICD-10-CM
G6182	Multifocal motor neuropathies (inflammatory)	Diagnosis	ICD-10-CM
G6189	Other inflammatory polyneuropathies	Diagnosis	ICD-10-CM
G619	Inflammatory polyneuropathy, unspecified	Diagnosis	ICD-10-CM
G622	Polyneuropathy due to other toxic agents	Diagnosis	ICD-10-CM
G6281	Critical illness polyneuropathy	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
G63	Polyneuropathy in diseases classified elsewhere	Diagnosis	ICD-10-CM
I408	Other acute myocarditis	Diagnosis	ICD-10-CM
I409	Acute myocarditis, unspecified	Diagnosis	ICD-10-CM
I41	Myocarditis in diseases classified elsewhere	Diagnosis	ICD-10-CM
J679	Hypersensitivity pneumonitis due to unspecified organic dust	Diagnosis	ICD-10-CM
J8401	Alveolar proteinosis	Diagnosis	ICD-10-CM
J8402	Pulmonary alveolar microlithiasis	Diagnosis	ICD-10-CM
J8409	Other alveolar and parieto-alveolar conditions	Diagnosis	ICD-10-CM
J84111	Idiopathic interstitial pneumonia, not otherwise specified	Diagnosis	ICD-10-CM
J84112	Idiopathic pulmonary fibrosis	Diagnosis	ICD-10-CM
J84113	Idiopathic non-specific interstitial pneumonitis	Diagnosis	ICD-10-CM
J84114	Acute interstitial pneumonitis	Diagnosis	ICD-10-CM
J84115	Respiratory bronchiolitis interstitial lung disease	Diagnosis	ICD-10-CM
J84116	Cryptogenic organizing pneumonia	Diagnosis	ICD-10-CM
J84117	Desquamative interstitial pneumonia	Diagnosis	ICD-10-CM
J842	Lymphoid interstitial pneumonia	Diagnosis	ICD-10-CM
J8481	Lymphangioleiomyomatosis	Diagnosis	ICD-10-CM
J8482	Adult pulmonary Langerhans cell histiocytosis	Diagnosis	ICD-10-CM
J8483	Surfactant mutations of the lung	Diagnosis	ICD-10-CM
J84841	Neuroendocrine cell hyperplasia of infancy	Diagnosis	ICD-10-CM
J84842	Pulmonary interstitial glycogenosis	Diagnosis	ICD-10-CM
J84843	Alveolar capillary dysplasia with vein misalignment	Diagnosis	ICD-10-CM
J84848	Other interstitial lung diseases of childhood	Diagnosis	ICD-10-CM
K5000	Crohn's disease of small intestine without complications	Diagnosis	ICD-10-CM
K50011	Crohn's disease of small intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50012	Crohn's disease of small intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50013	Crohn's disease of small intestine with fistula	Diagnosis	ICD-10-CM
K50014	Crohn's disease of small intestine with abscess	Diagnosis	ICD-10-CM
K50018	Crohn's disease of small intestine with other complication	Diagnosis	ICD-10-CM
K50019	Crohn's disease of small intestine with unspecified complications	Diagnosis	ICD-10-CM
K5010	Crohn's disease of large intestine without complications	Diagnosis	ICD-10-CM
K50111	Crohn's disease of large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50112	Crohn's disease of large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50113	Crohn's disease of large intestine with fistula	Diagnosis	ICD-10-CM
K50114	Crohn's disease of large intestine with abscess	Diagnosis	ICD-10-CM
K50118	Crohn's disease of large intestine with other complication	Diagnosis	ICD-10-CM
K50119	Crohn's disease of large intestine with unspecified complications	Diagnosis	ICD-10-CM
K5080	Crohn's disease of both small and large intestine without complications	Diagnosis	ICD-10-CM
K50811	Crohn's disease of both small and large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50812	Crohn's disease of both small and large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50813	Crohn's disease of both small and large intestine with fistula	Diagnosis	ICD-10-CM
K50814	Crohn's disease of both small and large intestine with abscess	Diagnosis	ICD-10-CM
K50818	Crohn's disease of both small and large intestine with other complication	Diagnosis	ICD-10-CM
K50819	Crohn's disease of both small and large intestine with unspecified complications	Diagnosis	ICD-10-CM
K5090	Crohn's disease, unspecified, without complications	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
K50911	Crohn's disease, unspecified, with rectal bleeding	Diagnosis	ICD-10-CM
K50912	Crohn's disease, unspecified, with intestinal obstruction	Diagnosis	ICD-10-CM
K50913	Crohn's disease, unspecified, with fistula	Diagnosis	ICD-10-CM
K50914	Crohn's disease, unspecified, with abscess	Diagnosis	ICD-10-CM
K50918	Crohn's disease, unspecified, with other complication	Diagnosis	ICD-10-CM
K50919	Crohn's disease, unspecified, with unspecified complications	Diagnosis	ICD-10-CM
K5100	Ulcerative (chronic) pancolitis without complications	Diagnosis	ICD-10-CM
K51011	Ulcerative (chronic) pancolitis with rectal bleeding	Diagnosis	ICD-10-CM
K51012	Ulcerative (chronic) pancolitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51013	Ulcerative (chronic) pancolitis with fistula	Diagnosis	ICD-10-CM
K51014	Ulcerative (chronic) pancolitis with abscess	Diagnosis	ICD-10-CM
K51018	Ulcerative (chronic) pancolitis with other complication	Diagnosis	ICD-10-CM
K51019	Ulcerative (chronic) pancolitis with unspecified complications	Diagnosis	ICD-10-CM
K5120	Ulcerative (chronic) proctitis without complications	Diagnosis	ICD-10-CM
K51211	Ulcerative (chronic) proctitis with rectal bleeding	Diagnosis	ICD-10-CM
K51212	Ulcerative (chronic) proctitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51213	Ulcerative (chronic) proctitis with fistula	Diagnosis	ICD-10-CM
K51214	Ulcerative (chronic) proctitis with abscess	Diagnosis	ICD-10-CM
K51218	Ulcerative (chronic) proctitis with other complication	Diagnosis	ICD-10-CM
K51219	Ulcerative (chronic) proctitis with unspecified complications	Diagnosis	ICD-10-CM
K5130	Ulcerative (chronic) rectosigmoiditis without complications	Diagnosis	ICD-10-CM
K51311	Ulcerative (chronic) rectosigmoiditis with rectal bleeding	Diagnosis	ICD-10-CM
K51312	Ulcerative (chronic) rectosigmoiditis with intestinal obstruction	Diagnosis	ICD-10-CM
K51313	Ulcerative (chronic) rectosigmoiditis with fistula	Diagnosis	ICD-10-CM
K51314	Ulcerative (chronic) rectosigmoiditis with abscess	Diagnosis	ICD-10-CM
K51318	Ulcerative (chronic) rectosigmoiditis with other complication	Diagnosis	ICD-10-CM
K51319	Ulcerative (chronic) rectosigmoiditis with unspecified complications	Diagnosis	ICD-10-CM
K5140	Inflammatory polyps of colon without complications	Diagnosis	ICD-10-CM
K51411	Inflammatory polyps of colon with rectal bleeding	Diagnosis	ICD-10-CM
K51412	Inflammatory polyps of colon with intestinal obstruction	Diagnosis	ICD-10-CM
K51413	Inflammatory polyps of colon with fistula	Diagnosis	ICD-10-CM
K51414	Inflammatory polyps of colon with abscess	Diagnosis	ICD-10-CM
K51418	Inflammatory polyps of colon with other complication	Diagnosis	ICD-10-CM
K51419	Inflammatory polyps of colon with unspecified complications	Diagnosis	ICD-10-CM
K5150	Left sided colitis without complications	Diagnosis	ICD-10-CM
K51511	Left sided colitis with rectal bleeding	Diagnosis	ICD-10-CM
K51512	Left sided colitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51513	Left sided colitis with fistula	Diagnosis	ICD-10-CM
K51514	Left sided colitis with abscess	Diagnosis	ICD-10-CM
K51518	Left sided colitis with other complication	Diagnosis	ICD-10-CM
K51519	Left sided colitis with unspecified complications	Diagnosis	ICD-10-CM
K5180	Other ulcerative colitis without complications	Diagnosis	ICD-10-CM
K51811	Other ulcerative colitis with rectal bleeding	Diagnosis	ICD-10-CM
K51812	Other ulcerative colitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51813	Other ulcerative colitis with fistula	Diagnosis	ICD-10-CM
K51814	Other ulcerative colitis with abscess	Diagnosis	ICD-10-CM
K51818	Other ulcerative colitis with other complication	Diagnosis	ICD-10-CM
K51819	Other ulcerative colitis with unspecified complications	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
K5190	Ulcerative colitis, unspecified, without complications	Diagnosis	ICD-10-CM
K51911	Ulcerative colitis, unspecified with rectal bleeding	Diagnosis	ICD-10-CM
K51912	Ulcerative colitis, unspecified with intestinal obstruction	Diagnosis	ICD-10-CM
K51913	Ulcerative colitis, unspecified with fistula	Diagnosis	ICD-10-CM
K51914	Ulcerative colitis, unspecified with abscess	Diagnosis	ICD-10-CM
K51918	Ulcerative colitis, unspecified with other complication	Diagnosis	ICD-10-CM
K51919	Ulcerative colitis, unspecified with unspecified complications	Diagnosis	ICD-10-CM
K520	Gastroenteritis and colitis due to radiation	Diagnosis	ICD-10-CM
K521	Toxic gastroenteritis and colitis	Diagnosis	ICD-10-CM
K5221	Allergic and dietetic gastroenteritis and colitis ,Food protein-induced enterocolitis syndrome	Diagnosis	ICD-10-CM
K5222	Allergic and dietetic gastroenteritis and colitis,Food protein-induced enteropathy	Diagnosis	ICD-10-CM
K5229	Allergic and dietetic gastroenteritis and colitis,Other allergic and dietetic gastroenteritis and colitis	Diagnosis	ICD-10-CM
K5281	Eosinophilic gastritis or gastroenteritis	Diagnosis	ICD-10-CM
K5282	Eosinophilic colitis	Diagnosis	ICD-10-CM
K5289	Other specified noninfective gastroenteritis and colitis	Diagnosis	ICD-10-CM
K529	Noninfective gastroenteritis and colitis, unspecified	Diagnosis	ICD-10-CM
K55011	Acute (reversible) ischemia of small intestine,Focal (segmental) acute (reversible) ischemia of small intestine	Diagnosis	ICD-10-CM
K55012	Acute (reversible) ischemia of small intestine,Diffuse acute (reversible) ischemia of small intestine	Diagnosis	ICD-10-CM
K55019	Acute (reversible) ischemia of small intestine,extent unspecified	Diagnosis	ICD-10-CM
K551	Chronic vascular disorders of intestine	Diagnosis	ICD-10-CM
K559	Vascular disorder of intestine, unspecified	Diagnosis	ICD-10-CM
L930	Discoid lupus erythematosus	Diagnosis	ICD-10-CM
L931	Subacute cutaneous lupus erythematosus	Diagnosis	ICD-10-CM
L932	Other local lupus erythematosus	Diagnosis	ICD-10-CM
M02	Postinfective and reactive arthropathies	Diagnosis	ICD-10-CM
M020	Arthropathy following intestinal bypass	Diagnosis	ICD-10-CM
M0200	Arthropathy following intestinal bypass, unspecified site	Diagnosis	ICD-10-CM
M0201	Arthropathy following intestinal bypass, shoulder	Diagnosis	ICD-10-CM
M02011	Arthropathy following intestinal bypass, right shoulder	Diagnosis	ICD-10-CM
M02012	Arthropathy following intestinal bypass, left shoulder	Diagnosis	ICD-10-CM
M02019	Arthropathy following intestinal bypass, unspecified shoulder	Diagnosis	ICD-10-CM
M0202	Arthropathy following intestinal bypass, elbow	Diagnosis	ICD-10-CM
M02021	Arthropathy following intestinal bypass, right elbow	Diagnosis	ICD-10-CM
M02022	Arthropathy following intestinal bypass, left elbow	Diagnosis	ICD-10-CM
M02029	Arthropathy following intestinal bypass, unspecified elbow	Diagnosis	ICD-10-CM
M0203	Arthropathy following intestinal bypass, wrist	Diagnosis	ICD-10-CM
M02031	Arthropathy following intestinal bypass, right wrist	Diagnosis	ICD-10-CM
M02032	Arthropathy following intestinal bypass, left wrist	Diagnosis	ICD-10-CM
M02039	Arthropathy following intestinal bypass, unspecified wrist	Diagnosis	ICD-10-CM
M0204	Arthropathy following intestinal bypass, hand	Diagnosis	ICD-10-CM
M02041	Arthropathy following intestinal bypass, right hand	Diagnosis	ICD-10-CM
M02042	Arthropathy following intestinal bypass, left hand	Diagnosis	ICD-10-CM
M02049	Arthropathy following intestinal bypass, unspecified hand	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
M0205	Arthropathy following intestinal bypass, hip	Diagnosis	ICD-10-CM
M02051	Arthropathy following intestinal bypass, right hip	Diagnosis	ICD-10-CM
M02052	Arthropathy following intestinal bypass, left hip	Diagnosis	ICD-10-CM
M02059	Arthropathy following intestinal bypass, unspecified hip	Diagnosis	ICD-10-CM
M0206	Arthropathy following intestinal bypass, knee	Diagnosis	ICD-10-CM
M02061	Arthropathy following intestinal bypass, right knee	Diagnosis	ICD-10-CM
M02062	Arthropathy following intestinal bypass, left knee	Diagnosis	ICD-10-CM
M02069	Arthropathy following intestinal bypass, unspecified knee	Diagnosis	ICD-10-CM
M0207	Arthropathy following intestinal bypass, ankle and foot	Diagnosis	ICD-10-CM
M02071	Arthropathy following intestinal bypass, right ankle and foot	Diagnosis	ICD-10-CM
M02072	Arthropathy following intestinal bypass, left ankle and foot	Diagnosis	ICD-10-CM
M02079	Arthropathy following intestinal bypass, unspecified ankle and foot	Diagnosis	ICD-10-CM
M0208	Arthropathy following intestinal bypass, vertebrae	Diagnosis	ICD-10-CM
M0209	Arthropathy following intestinal bypass, multiple sites	Diagnosis	ICD-10-CM
M021	Postdysenteric arthropathy	Diagnosis	ICD-10-CM
M0210	Postdysenteric arthropathy, unspecified site	Diagnosis	ICD-10-CM
M0211	Postdysenteric arthropathy, shoulder	Diagnosis	ICD-10-CM
M02111	Postdysenteric arthropathy, right shoulder	Diagnosis	ICD-10-CM
M02112	Postdysenteric arthropathy, left shoulder	Diagnosis	ICD-10-CM
M02119	Postdysenteric arthropathy, unspecified shoulder	Diagnosis	ICD-10-CM
M0212	Postdysenteric arthropathy, elbow	Diagnosis	ICD-10-CM
M02121	Postdysenteric arthropathy, right elbow	Diagnosis	ICD-10-CM
M02122	Postdysenteric arthropathy, left elbow	Diagnosis	ICD-10-CM
M02129	Postdysenteric arthropathy, unspecified elbow	Diagnosis	ICD-10-CM
M0213	Postdysenteric arthropathy, wrist	Diagnosis	ICD-10-CM
M02131	Postdysenteric arthropathy, right wrist	Diagnosis	ICD-10-CM
M02132	Postdysenteric arthropathy, left wrist	Diagnosis	ICD-10-CM
M02139	Postdysenteric arthropathy, unspecified wrist	Diagnosis	ICD-10-CM
M0214	Postdysenteric arthropathy, hand	Diagnosis	ICD-10-CM
M02141	Postdysenteric arthropathy, right hand	Diagnosis	ICD-10-CM
M02142	Postdysenteric arthropathy, left hand	Diagnosis	ICD-10-CM
M02149	Postdysenteric arthropathy, unspecified hand	Diagnosis	ICD-10-CM
M0215	Postdysenteric arthropathy, hip	Diagnosis	ICD-10-CM
M02151	Postdysenteric arthropathy, right hip	Diagnosis	ICD-10-CM
M02152	Postdysenteric arthropathy, left hip	Diagnosis	ICD-10-CM
M02159	Postdysenteric arthropathy, unspecified hip	Diagnosis	ICD-10-CM
M0216	Postdysenteric arthropathy, knee	Diagnosis	ICD-10-CM
M02161	Postdysenteric arthropathy, right knee	Diagnosis	ICD-10-CM
M02162	Postdysenteric arthropathy, left knee	Diagnosis	ICD-10-CM
M02169	Postdysenteric arthropathy, unspecified knee	Diagnosis	ICD-10-CM
M0217	Postdysenteric arthropathy, ankle and foot	Diagnosis	ICD-10-CM
M02171	Postdysenteric arthropathy, right ankle and foot	Diagnosis	ICD-10-CM
M02172	Postdysenteric arthropathy, left ankle and foot	Diagnosis	ICD-10-CM
M02179	Postdysenteric arthropathy, unspecified ankle and foot	Diagnosis	ICD-10-CM
M0218	Postdysenteric arthropathy, vertebrae	Diagnosis	ICD-10-CM
M0219	Postdysenteric arthropathy, multiple sites	Diagnosis	ICD-10-CM
M022	Postimmunization arthropathy	Diagnosis	ICD-10-CM
M0220	Postimmunization arthropathy, unspecified site	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
M0221	Postimmunization arthropathy, shoulder	Diagnosis	ICD-10-CM
M02211	Postimmunization arthropathy, right shoulder	Diagnosis	ICD-10-CM
M02212	Postimmunization arthropathy, left shoulder	Diagnosis	ICD-10-CM
M02219	Postimmunization arthropathy, unspecified shoulder	Diagnosis	ICD-10-CM
M0222	Postimmunization arthropathy, elbow	Diagnosis	ICD-10-CM
M02221	Postimmunization arthropathy, right elbow	Diagnosis	ICD-10-CM
M02222	Postimmunization arthropathy, left elbow	Diagnosis	ICD-10-CM
M02229	Postimmunization arthropathy, unspecified elbow	Diagnosis	ICD-10-CM
M0223	Postimmunization arthropathy, wrist	Diagnosis	ICD-10-CM
M02231	Postimmunization arthropathy, right wrist	Diagnosis	ICD-10-CM
M02232	Postimmunization arthropathy, left wrist	Diagnosis	ICD-10-CM
M02239	Postimmunization arthropathy, unspecified wrist	Diagnosis	ICD-10-CM
M0224	Postimmunization arthropathy, hand	Diagnosis	ICD-10-CM
M02241	Postimmunization arthropathy, right hand	Diagnosis	ICD-10-CM
M02242	Postimmunization arthropathy, left hand	Diagnosis	ICD-10-CM
M02249	Postimmunization arthropathy, unspecified hand	Diagnosis	ICD-10-CM
M0225	Postimmunization arthropathy, hip	Diagnosis	ICD-10-CM
M02251	Postimmunization arthropathy, right hip	Diagnosis	ICD-10-CM
M02252	Postimmunization arthropathy, left hip	Diagnosis	ICD-10-CM
M02259	Postimmunization arthropathy, unspecified hip	Diagnosis	ICD-10-CM
M0226	Postimmunization arthropathy, knee	Diagnosis	ICD-10-CM
M02261	Postimmunization arthropathy, right knee	Diagnosis	ICD-10-CM
M02262	Postimmunization arthropathy, left knee	Diagnosis	ICD-10-CM
M02269	Postimmunization arthropathy, unspecified knee	Diagnosis	ICD-10-CM
M0227	Postimmunization arthropathy, ankle and foot	Diagnosis	ICD-10-CM
M02271	Postimmunization arthropathy, right ankle and foot	Diagnosis	ICD-10-CM
M02272	Postimmunization arthropathy, left ankle and foot	Diagnosis	ICD-10-CM
M02279	Postimmunization arthropathy, unspecified ankle and foot	Diagnosis	ICD-10-CM
M0228	Postimmunization arthropathy, vertebrae	Diagnosis	ICD-10-CM
M0229	Postimmunization arthropathy, multiple sites	Diagnosis	ICD-10-CM
M023	Reiter's disease	Diagnosis	ICD-10-CM
M0230	Reiter's disease, unspecified site	Diagnosis	ICD-10-CM
M0231	Reiter's disease, shoulder	Diagnosis	ICD-10-CM
M02311	Reiter's disease, right shoulder	Diagnosis	ICD-10-CM
M02312	Reiter's disease, left shoulder	Diagnosis	ICD-10-CM
M02319	Reiter's disease, unspecified shoulder	Diagnosis	ICD-10-CM
M0232	Reiter's disease, elbow	Diagnosis	ICD-10-CM
M02321	Reiter's disease, right elbow	Diagnosis	ICD-10-CM
M02322	Reiter's disease, left elbow	Diagnosis	ICD-10-CM
M02329	Reiter's disease, unspecified elbow	Diagnosis	ICD-10-CM
M0233	Reiter's disease, wrist	Diagnosis	ICD-10-CM
M02331	Reiter's disease, right wrist	Diagnosis	ICD-10-CM
M02332	Reiter's disease, left wrist	Diagnosis	ICD-10-CM
M02339	Reiter's disease, unspecified wrist	Diagnosis	ICD-10-CM
M0234	Reiter's disease, hand	Diagnosis	ICD-10-CM
M02341	Reiter's disease, right hand	Diagnosis	ICD-10-CM
M02342	Reiter's disease, left hand	Diagnosis	ICD-10-CM
M02349	Reiter's disease, unspecified hand	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
M0235	Reiter's disease, hip	Diagnosis	ICD-10-CM
M02351	Reiter's disease, right hip	Diagnosis	ICD-10-CM
M02352	Reiter's disease, left hip	Diagnosis	ICD-10-CM
M02359	Reiter's disease, unspecified hip	Diagnosis	ICD-10-CM
M0236	Reiter's disease, knee	Diagnosis	ICD-10-CM
M02361	Reiter's disease, right knee	Diagnosis	ICD-10-CM
M02362	Reiter's disease, left knee	Diagnosis	ICD-10-CM
M02369	Reiter's disease, unspecified knee	Diagnosis	ICD-10-CM
M0237	Reiter's disease, ankle and foot	Diagnosis	ICD-10-CM
M02371	Reiter's disease, right ankle and foot	Diagnosis	ICD-10-CM
M02372	Reiter's disease, left ankle and foot	Diagnosis	ICD-10-CM
M02379	Reiter's disease, unspecified ankle and foot	Diagnosis	ICD-10-CM
M0238	Reiter's disease, vertebrae	Diagnosis	ICD-10-CM
M0239	Reiter's disease, multiple sites	Diagnosis	ICD-10-CM
M028	Other reactive arthropathies	Diagnosis	ICD-10-CM
M0280	Other reactive arthropathies, unspecified site	Diagnosis	ICD-10-CM
M0281	Other reactive arthropathies, shoulder	Diagnosis	ICD-10-CM
M02811	Other reactive arthropathies, right shoulder	Diagnosis	ICD-10-CM
M02812	Other reactive arthropathies, left shoulder	Diagnosis	ICD-10-CM
M02819	Other reactive arthropathies, unspecified shoulder	Diagnosis	ICD-10-CM
M0282	Other reactive arthropathies, elbow	Diagnosis	ICD-10-CM
M02821	Other reactive arthropathies, right elbow	Diagnosis	ICD-10-CM
M02822	Other reactive arthropathies, left elbow	Diagnosis	ICD-10-CM
M02829	Other reactive arthropathies, unspecified elbow	Diagnosis	ICD-10-CM
M0283	Other reactive arthropathies, wrist	Diagnosis	ICD-10-CM
M02831	Other reactive arthropathies, right wrist	Diagnosis	ICD-10-CM
M02832	Other reactive arthropathies, left wrist	Diagnosis	ICD-10-CM
M02839	Other reactive arthropathies, unspecified wrist	Diagnosis	ICD-10-CM
M0284	Other reactive arthropathies, hand	Diagnosis	ICD-10-CM
M02841	Other reactive arthropathies, right hand	Diagnosis	ICD-10-CM
M02842	Other reactive arthropathies, left hand	Diagnosis	ICD-10-CM
M02849	Other reactive arthropathies, unspecified hand	Diagnosis	ICD-10-CM
M0285	Other reactive arthropathies, hip	Diagnosis	ICD-10-CM
M02851	Other reactive arthropathies, right hip	Diagnosis	ICD-10-CM
M02852	Other reactive arthropathies, left hip	Diagnosis	ICD-10-CM
M02859	Other reactive arthropathies, unspecified hip	Diagnosis	ICD-10-CM
M0286	Other reactive arthropathies, knee	Diagnosis	ICD-10-CM
M02861	Other reactive arthropathies, right knee	Diagnosis	ICD-10-CM
M02862	Other reactive arthropathies, left knee	Diagnosis	ICD-10-CM
M02869	Other reactive arthropathies, unspecified knee	Diagnosis	ICD-10-CM
M0287	Other reactive arthropathies, ankle and foot	Diagnosis	ICD-10-CM
M02871	Other reactive arthropathies, right ankle and foot	Diagnosis	ICD-10-CM
M02872	Other reactive arthropathies, left ankle and foot	Diagnosis	ICD-10-CM
M02879	Other reactive arthropathies, unspecified ankle and foot	Diagnosis	ICD-10-CM
M0288	Other reactive arthropathies, vertebrae	Diagnosis	ICD-10-CM
M0289	Other reactive arthropathies, multiple sites	Diagnosis	ICD-10-CM
M029	Reactive arthropathy, unspecified	Diagnosis	ICD-10-CM
M04	Autoinflammatory syndromes	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
M041	Periodic fever syndromes	Diagnosis	ICD-10-CM
M042	Cryopyrin-associated periodic syndromes	Diagnosis	ICD-10-CM
M048	Other autoinflammatory syndromes	Diagnosis	ICD-10-CM
M049	Autoinflammatory syndrome, unspecified	Diagnosis	ICD-10-CM
M05	Rheumatoid arthritis with rheumatoid factor	Diagnosis	ICD-10-CM
M050	Felty's syndrome	Diagnosis	ICD-10-CM
M0500	Felty's syndrome, unspecified site	Diagnosis	ICD-10-CM
M0501	Felty's syndrome, shoulder	Diagnosis	ICD-10-CM
M05011	Felty's syndrome, right shoulder	Diagnosis	ICD-10-CM
M05012	Felty's syndrome, left shoulder	Diagnosis	ICD-10-CM
M05019	Felty's syndrome, unspecified shoulder	Diagnosis	ICD-10-CM
M0502	Felty's syndrome, elbow	Diagnosis	ICD-10-CM
M05021	Felty's syndrome, right elbow	Diagnosis	ICD-10-CM
M05022	Felty's syndrome, left elbow	Diagnosis	ICD-10-CM
M05029	Felty's syndrome, unspecified elbow	Diagnosis	ICD-10-CM
M0503	Felty's syndrome, wrist	Diagnosis	ICD-10-CM
M05031	Felty's syndrome, right wrist	Diagnosis	ICD-10-CM
M05032	Felty's syndrome, left wrist	Diagnosis	ICD-10-CM
M05039	Felty's syndrome, unspecified wrist	Diagnosis	ICD-10-CM
M0504	Felty's syndrome, hand	Diagnosis	ICD-10-CM
M05041	Felty's syndrome, right hand	Diagnosis	ICD-10-CM
M05042	Felty's syndrome, left hand	Diagnosis	ICD-10-CM
M05049	Felty's syndrome, unspecified hand	Diagnosis	ICD-10-CM
M0505	Felty's syndrome, hip	Diagnosis	ICD-10-CM
M05051	Felty's syndrome, right hip	Diagnosis	ICD-10-CM
M05052	Felty's syndrome, left hip	Diagnosis	ICD-10-CM
M05059	Felty's syndrome, unspecified hip	Diagnosis	ICD-10-CM
M0506	Felty's syndrome, knee	Diagnosis	ICD-10-CM
M05061	Felty's syndrome, right knee	Diagnosis	ICD-10-CM
M05062	Felty's syndrome, left knee	Diagnosis	ICD-10-CM
M05069	Felty's syndrome, unspecified knee	Diagnosis	ICD-10-CM
M0507	Felty's syndrome, ankle and foot	Diagnosis	ICD-10-CM
M05071	Felty's syndrome, right ankle and foot	Diagnosis	ICD-10-CM
M05072	Felty's syndrome, left ankle and foot	Diagnosis	ICD-10-CM
M05079	Felty's syndrome, unspecified ankle and foot	Diagnosis	ICD-10-CM
M0509	Felty's syndrome, multiple sites	Diagnosis	ICD-10-CM
M051	Rheumatoid lung disease with rheumatoid arthritis	Diagnosis	ICD-10-CM
M0510	Rheumatoid lung disease with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M0511	Rheumatoid lung disease with rheumatoid arthritis of shoulder	Diagnosis	ICD-10-CM
M05111	Rheumatoid lung disease with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05112	Rheumatoid lung disease with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05119	Rheumatoid lung disease with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M0512	Rheumatoid lung disease with rheumatoid arthritis of elbow	Diagnosis	ICD-10-CM
M05121	Rheumatoid lung disease with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05122	Rheumatoid lung disease with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05129	Rheumatoid lung disease with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M0513	Rheumatoid lung disease with rheumatoid arthritis of wrist	Diagnosis	ICD-10-CM
M05131	Rheumatoid lung disease with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
M05132	Rheumatoid lung disease with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05139	Rheumatoid lung disease with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M0514	Rheumatoid lung disease with rheumatoid arthritis of hand	Diagnosis	ICD-10-CM
M05141	Rheumatoid lung disease with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05142	Rheumatoid lung disease with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05149	Rheumatoid lung disease with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M0515	Rheumatoid lung disease with rheumatoid arthritis of hip	Diagnosis	ICD-10-CM
M05151	Rheumatoid lung disease with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05152	Rheumatoid lung disease with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05159	Rheumatoid lung disease with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M0516	Rheumatoid lung disease with rheumatoid arthritis of knee	Diagnosis	ICD-10-CM
M05161	Rheumatoid lung disease with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05162	Rheumatoid lung disease with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05169	Rheumatoid lung disease with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M0517	Rheumatoid lung disease with rheumatoid arthritis of ankle and foot	Diagnosis	ICD-10-CM
M05171	Rheumatoid lung disease with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05172	Rheumatoid lung disease with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05179	Rheumatoid lung disease with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M0519	Rheumatoid lung disease with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M052	Rheumatoid vasculitis with rheumatoid arthritis	Diagnosis	ICD-10-CM
M0520	Rheumatoid vasculitis with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M0521	Rheumatoid vasculitis with rheumatoid arthritis of shoulder	Diagnosis	ICD-10-CM
M05211	Rheumatoid vasculitis with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05212	Rheumatoid vasculitis with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05219	Rheumatoid vasculitis with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M0522	Rheumatoid vasculitis with rheumatoid arthritis of elbow	Diagnosis	ICD-10-CM
M05221	Rheumatoid vasculitis with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05222	Rheumatoid vasculitis with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05229	Rheumatoid vasculitis with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M0523	Rheumatoid vasculitis with rheumatoid arthritis of wrist	Diagnosis	ICD-10-CM
M05231	Rheumatoid vasculitis with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05232	Rheumatoid vasculitis with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05239	Rheumatoid vasculitis with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M0524	Rheumatoid vasculitis with rheumatoid arthritis of hand	Diagnosis	ICD-10-CM
M05241	Rheumatoid vasculitis with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05242	Rheumatoid vasculitis with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05249	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M0525	Rheumatoid vasculitis with rheumatoid arthritis of hip	Diagnosis	ICD-10-CM
M05251	Rheumatoid vasculitis with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05252	Rheumatoid vasculitis with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05259	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M0526	Rheumatoid vasculitis with rheumatoid arthritis of knee	Diagnosis	ICD-10-CM
M05261	Rheumatoid vasculitis with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05262	Rheumatoid vasculitis with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05269	Rheumatoid vasculitis with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M0527	Rheumatoid vasculitis with rheumatoid arthritis of ankle and foot	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
M05271	Rheumatoid vasculitis with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05272	Rheumatoid vasculitis with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05279	Rheumatoid vasculitis with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M0529	Rheumatoid vasculitis with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M053	Rheumatoid heart disease with rheumatoid arthritis	Diagnosis	ICD-10-CM
M0530	Rheumatoid heart disease with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M0531	Rheumatoid heart disease with rheumatoid arthritis of shoulder	Diagnosis	ICD-10-CM
M05311	Rheumatoid heart disease with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05312	Rheumatoid heart disease with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05319	Rheumatoid heart disease with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M0532	Rheumatoid heart disease with rheumatoid arthritis of elbow	Diagnosis	ICD-10-CM
M05321	Rheumatoid heart disease with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05322	Rheumatoid heart disease with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05329	Rheumatoid heart disease with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M0533	Rheumatoid heart disease with rheumatoid arthritis of wrist	Diagnosis	ICD-10-CM
M05331	Rheumatoid heart disease with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05332	Rheumatoid heart disease with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05339	Rheumatoid heart disease with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M0534	Rheumatoid heart disease with rheumatoid arthritis of hand	Diagnosis	ICD-10-CM
M05341	Rheumatoid heart disease with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05342	Rheumatoid heart disease with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05349	Rheumatoid heart disease with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M0535	Rheumatoid heart disease with rheumatoid arthritis of hip	Diagnosis	ICD-10-CM
M05351	Rheumatoid heart disease with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05352	Rheumatoid heart disease with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05359	Rheumatoid heart disease with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M0536	Rheumatoid heart disease with rheumatoid arthritis of knee	Diagnosis	ICD-10-CM
M05361	Rheumatoid heart disease with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05362	Rheumatoid heart disease with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05369	Rheumatoid heart disease with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M0537	Rheumatoid heart disease with rheumatoid arthritis of ankle and foot	Diagnosis	ICD-10-CM
M05371	Rheumatoid heart disease with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05372	Rheumatoid heart disease with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05379	Rheumatoid heart disease with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M0539	Rheumatoid heart disease with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M054	Rheumatoid myopathy with rheumatoid arthritis	Diagnosis	ICD-10-CM
M0540	Rheumatoid myopathy with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M0541	Rheumatoid myopathy with rheumatoid arthritis of shoulder	Diagnosis	ICD-10-CM
M05411	Rheumatoid myopathy with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05412	Rheumatoid myopathy with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05419	Rheumatoid myopathy with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M0542	Rheumatoid myopathy with rheumatoid arthritis of elbow	Diagnosis	ICD-10-CM
M05421	Rheumatoid myopathy with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
M05422	Rheumatoid myopathy with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05429	Rheumatoid myopathy with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M0543	Rheumatoid myopathy with rheumatoid arthritis of wrist	Diagnosis	ICD-10-CM
M05431	Rheumatoid myopathy with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05432	Rheumatoid myopathy with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05439	Rheumatoid myopathy with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M0544	Rheumatoid myopathy with rheumatoid arthritis of hand	Diagnosis	ICD-10-CM
M05441	Rheumatoid myopathy with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05442	Rheumatoid myopathy with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05449	Rheumatoid myopathy with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M0545	Rheumatoid myopathy with rheumatoid arthritis of hip	Diagnosis	ICD-10-CM
M05451	Rheumatoid myopathy with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05452	Rheumatoid myopathy with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05459	Rheumatoid myopathy with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M0546	Rheumatoid myopathy with rheumatoid arthritis of knee	Diagnosis	ICD-10-CM
M05461	Rheumatoid myopathy with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05462	Rheumatoid myopathy with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05469	Rheumatoid myopathy with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M0547	Rheumatoid myopathy with rheumatoid arthritis of ankle and foot	Diagnosis	ICD-10-CM
M05471	Rheumatoid myopathy with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05472	Rheumatoid myopathy with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05479	Rheumatoid myopathy with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M0549	Rheumatoid myopathy with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M055	Rheumatoid polyneuropathy with rheumatoid arthritis	Diagnosis	ICD-10-CM
M0550	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M0551	Rheumatoid polyneuropathy with rheumatoid arthritis of shoulder	Diagnosis	ICD-10-CM
M05511	Rheumatoid polyneuropathy with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05512	Rheumatoid polyneuropathy with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05519	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M0552	Rheumatoid polyneuropathy with rheumatoid arthritis of elbow	Diagnosis	ICD-10-CM
M05521	Rheumatoid polyneuropathy with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05522	Rheumatoid polyneuropathy with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05529	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M0553	Rheumatoid polyneuropathy with rheumatoid arthritis of wrist	Diagnosis	ICD-10-CM
M05531	Rheumatoid polyneuropathy with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05532	Rheumatoid polyneuropathy with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05539	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M0554	Rheumatoid polyneuropathy with rheumatoid arthritis of hand	Diagnosis	ICD-10-CM
M05541	Rheumatoid polyneuropathy with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05542	Rheumatoid polyneuropathy with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05549	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M0555	Rheumatoid polyneuropathy with rheumatoid arthritis of hip	Diagnosis	ICD-10-CM
M05551	Rheumatoid polyneuropathy with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05552	Rheumatoid polyneuropathy with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
M05559	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M0556	Rheumatoid polyneuropathy with rheumatoid arthritis of knee	Diagnosis	ICD-10-CM
M05561	Rheumatoid polyneuropathy with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05562	Rheumatoid polyneuropathy with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05569	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M0557	Rheumatoid polyneuropathy with rheumatoid arthritis of ankle and foot	Diagnosis	ICD-10-CM
M05571	Rheumatoid polyneuropathy with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05572	Rheumatoid polyneuropathy with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05579	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M0559	Rheumatoid polyneuropathy with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M056	Rheumatoid arthritis with involvement of other organs and systems	Diagnosis	ICD-10-CM
M0560	Rheumatoid arthritis of unspecified site with involvement of other organs and systems	Diagnosis	ICD-10-CM
M0561	Rheumatoid arthritis of shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05611	Rheumatoid arthritis of right shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05612	Rheumatoid arthritis of left shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05619	Rheumatoid arthritis of unspecified shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M0562	Rheumatoid arthritis of elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05621	Rheumatoid arthritis of right elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05622	Rheumatoid arthritis of left elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05629	Rheumatoid arthritis of unspecified elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M0563	Rheumatoid arthritis of wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05631	Rheumatoid arthritis of right wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05632	Rheumatoid arthritis of left wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05639	Rheumatoid arthritis of unspecified wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M0564	Rheumatoid arthritis of hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05641	Rheumatoid arthritis of right hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05642	Rheumatoid arthritis of left hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05649	Rheumatoid arthritis of unspecified hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M0565	Rheumatoid arthritis of hip with involvement of other organs and systems	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
M05651	Rheumatoid arthritis of right hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05652	Rheumatoid arthritis of left hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05659	Rheumatoid arthritis of unspecified hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M0566	Rheumatoid arthritis of knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05661	Rheumatoid arthritis of right knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05662	Rheumatoid arthritis of left knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05669	Rheumatoid arthritis of unspecified knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M0567	Rheumatoid arthritis of ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05671	Rheumatoid arthritis of right ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05672	Rheumatoid arthritis of left ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05679	Rheumatoid arthritis of unspecified ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M0569	Rheumatoid arthritis of multiple sites with involvement of other organs and systems	Diagnosis	ICD-10-CM
M057	Rheumatoid arthritis with rheumatoid factor without organ or systems involvement	Diagnosis	ICD-10-CM
M0570	Rheumatoid arthritis with rheumatoid factor of unspecified site without organ or systems involvement	Diagnosis	ICD-10-CM
M0571	Rheumatoid arthritis with rheumatoid factor of shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05711	Rheumatoid arthritis with rheumatoid factor of right shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05712	Rheumatoid arthritis with rheumatoid factor of left shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05719	Rheumatoid arthritis with rheumatoid factor of unspecified shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M0572	Rheumatoid arthritis with rheumatoid factor of elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M05721	Rheumatoid arthritis with rheumatoid factor of right elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M05722	Rheumatoid arthritis with rheumatoid factor of left elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M05729	Rheumatoid arthritis with rheumatoid factor of unspecified elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M0573	Rheumatoid arthritis with rheumatoid factor of wrist without organ or systems involvement	Diagnosis	ICD-10-CM
M05731	Rheumatoid arthritis with rheumatoid factor of right wrist without organ or systems involvement	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
M05732	Rheumatoid arthritis with rheumatoid factor of left wrist without organ or systems involvement	Diagnosis	ICD-10-CM
M05739	Rheumatoid arthritis with rheumatoid factor of unspecified wrist without organ or systems involvement	Diagnosis	ICD-10-CM
M0574	Rheumatoid arthritis with rheumatoid factor of hand without organ or systems involvement	Diagnosis	ICD-10-CM
M05741	Rheumatoid arthritis with rheumatoid factor of right hand without organ or systems involvement	Diagnosis	ICD-10-CM
M05742	Rheumatoid arthritis with rheumatoid factor of left hand without organ or systems involvement	Diagnosis	ICD-10-CM
M05749	Rheumatoid arthritis with rheumatoid factor of unspecified hand without organ or systems involvement	Diagnosis	ICD-10-CM
M0575	Rheumatoid arthritis with rheumatoid factor of hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05751	Rheumatoid arthritis with rheumatoid factor of right hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05752	Rheumatoid arthritis with rheumatoid factor of left hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05759	Rheumatoid arthritis with rheumatoid factor of unspecified hip without organ or systems involvement	Diagnosis	ICD-10-CM
M0576	Rheumatoid arthritis with rheumatoid factor of knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05761	Rheumatoid arthritis with rheumatoid factor of right knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05762	Rheumatoid arthritis with rheumatoid factor of left knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05769	Rheumatoid arthritis with rheumatoid factor of unspecified knee without organ or systems involvement	Diagnosis	ICD-10-CM
M0577	Rheumatoid arthritis with rheumatoid factor of ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05771	Rheumatoid arthritis with rheumatoid factor of right ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05772	Rheumatoid arthritis with rheumatoid factor of left ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05779	Rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M0579	Rheumatoid arthritis with rheumatoid factor of multiple sites without organ or systems involvement	Diagnosis	ICD-10-CM
M058	Other rheumatoid arthritis with rheumatoid factor	Diagnosis	ICD-10-CM
M0580	Other rheumatoid arthritis with rheumatoid factor of unspecified site	Diagnosis	ICD-10-CM
M0581	Other rheumatoid arthritis with rheumatoid factor of shoulder	Diagnosis	ICD-10-CM
M05811	Other rheumatoid arthritis with rheumatoid factor of right shoulder	Diagnosis	ICD-10-CM
M05812	Other rheumatoid arthritis with rheumatoid factor of left shoulder	Diagnosis	ICD-10-CM
M05819	Other rheumatoid arthritis with rheumatoid factor of unspecified shoulder	Diagnosis	ICD-10-CM
M0582	Other rheumatoid arthritis with rheumatoid factor of elbow	Diagnosis	ICD-10-CM
M05821	Other rheumatoid arthritis with rheumatoid factor of right elbow	Diagnosis	ICD-10-CM
M05822	Other rheumatoid arthritis with rheumatoid factor of left elbow	Diagnosis	ICD-10-CM
M05829	Other rheumatoid arthritis with rheumatoid factor of unspecified elbow	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
M0583	Other rheumatoid arthritis with rheumatoid factor of wrist	Diagnosis	ICD-10-CM
M05831	Other rheumatoid arthritis with rheumatoid factor of right wrist	Diagnosis	ICD-10-CM
M05832	Other rheumatoid arthritis with rheumatoid factor of left wrist	Diagnosis	ICD-10-CM
M05839	Other rheumatoid arthritis with rheumatoid factor of unspecified wrist	Diagnosis	ICD-10-CM
M0584	Other rheumatoid arthritis with rheumatoid factor of hand	Diagnosis	ICD-10-CM
M05841	Other rheumatoid arthritis with rheumatoid factor of right hand	Diagnosis	ICD-10-CM
M05842	Other rheumatoid arthritis with rheumatoid factor of left hand	Diagnosis	ICD-10-CM
M05849	Other rheumatoid arthritis with rheumatoid factor of unspecified hand	Diagnosis	ICD-10-CM
M0585	Other rheumatoid arthritis with rheumatoid factor of hip	Diagnosis	ICD-10-CM
M05851	Other rheumatoid arthritis with rheumatoid factor of right hip	Diagnosis	ICD-10-CM
M05852	Other rheumatoid arthritis with rheumatoid factor of left hip	Diagnosis	ICD-10-CM
M05859	Other rheumatoid arthritis with rheumatoid factor of unspecified hip	Diagnosis	ICD-10-CM
M0586	Other rheumatoid arthritis with rheumatoid factor of knee	Diagnosis	ICD-10-CM
M05861	Other rheumatoid arthritis with rheumatoid factor of right knee	Diagnosis	ICD-10-CM
M05862	Other rheumatoid arthritis with rheumatoid factor of left knee	Diagnosis	ICD-10-CM
M05869	Other rheumatoid arthritis with rheumatoid factor of unspecified knee	Diagnosis	ICD-10-CM
M0587	Other rheumatoid arthritis with rheumatoid factor of ankle and foot	Diagnosis	ICD-10-CM
M05871	Other rheumatoid arthritis with rheumatoid factor of right ankle and foot	Diagnosis	ICD-10-CM
M05872	Other rheumatoid arthritis with rheumatoid factor of left ankle and foot	Diagnosis	ICD-10-CM
M05879	Other rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot	Diagnosis	ICD-10-CM
M0589	Other rheumatoid arthritis with rheumatoid factor of multiple sites	Diagnosis	ICD-10-CM
M059	Rheumatoid arthritis with rheumatoid factor, unspecified	Diagnosis	ICD-10-CM
M060	Rheumatoid arthritis without rheumatoid factor	Diagnosis	ICD-10-CM
M0600	Rheumatoid arthritis without rheumatoid factor, unspecified site	Diagnosis	ICD-10-CM
M0601	Rheumatoid arthritis without rheumatoid factor, shoulder	Diagnosis	ICD-10-CM
M06011	Rheumatoid arthritis without rheumatoid factor, right shoulder	Diagnosis	ICD-10-CM
M06012	Rheumatoid arthritis without rheumatoid factor, left shoulder	Diagnosis	ICD-10-CM
M06019	Rheumatoid arthritis without rheumatoid factor, unspecified shoulder	Diagnosis	ICD-10-CM
M0602	Rheumatoid arthritis without rheumatoid factor, elbow	Diagnosis	ICD-10-CM
M06021	Rheumatoid arthritis without rheumatoid factor, right elbow	Diagnosis	ICD-10-CM
M06022	Rheumatoid arthritis without rheumatoid factor, left elbow	Diagnosis	ICD-10-CM
M06029	Rheumatoid arthritis without rheumatoid factor, unspecified elbow	Diagnosis	ICD-10-CM
M0603	Rheumatoid arthritis without rheumatoid factor, wrist	Diagnosis	ICD-10-CM
M06031	Rheumatoid arthritis without rheumatoid factor, right wrist	Diagnosis	ICD-10-CM
M06032	Rheumatoid arthritis without rheumatoid factor, left wrist	Diagnosis	ICD-10-CM
M06039	Rheumatoid arthritis without rheumatoid factor, unspecified wrist	Diagnosis	ICD-10-CM
M0604	Rheumatoid arthritis without rheumatoid factor, hand	Diagnosis	ICD-10-CM
M06041	Rheumatoid arthritis without rheumatoid factor, right hand	Diagnosis	ICD-10-CM
M06042	Rheumatoid arthritis without rheumatoid factor, left hand	Diagnosis	ICD-10-CM
M06049	Rheumatoid arthritis without rheumatoid factor, unspecified hand	Diagnosis	ICD-10-CM
M0605	Rheumatoid arthritis without rheumatoid factor, hip	Diagnosis	ICD-10-CM
M06051	Rheumatoid arthritis without rheumatoid factor, right hip	Diagnosis	ICD-10-CM
M06052	Rheumatoid arthritis without rheumatoid factor, left hip	Diagnosis	ICD-10-CM
M06059	Rheumatoid arthritis without rheumatoid factor, unspecified hip	Diagnosis	ICD-10-CM
M0606	Rheumatoid arthritis without rheumatoid factor, knee	Diagnosis	ICD-10-CM
M06061	Rheumatoid arthritis without rheumatoid factor, right knee	Diagnosis	ICD-10-CM
M06062	Rheumatoid arthritis without rheumatoid factor, left knee	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
M06069	Rheumatoid arthritis without rheumatoid factor, unspecified knee	Diagnosis	ICD-10-CM
M0607	Rheumatoid arthritis without rheumatoid factor, ankle and foot	Diagnosis	ICD-10-CM
M06071	Rheumatoid arthritis without rheumatoid factor, right ankle and foot	Diagnosis	ICD-10-CM
M06072	Rheumatoid arthritis without rheumatoid factor, left ankle and foot	Diagnosis	ICD-10-CM
M06079	Rheumatoid arthritis without rheumatoid factor, unspecified ankle and foot	Diagnosis	ICD-10-CM
M0608	Rheumatoid arthritis without rheumatoid factor, vertebrae	Diagnosis	ICD-10-CM
M0609	Rheumatoid arthritis without rheumatoid factor, multiple sites	Diagnosis	ICD-10-CM
M061	Adult-onset Still's disease	Diagnosis	ICD-10-CM
M062	Rheumatoid bursitis	Diagnosis	ICD-10-CM
M0620	Rheumatoid bursitis, unspecified site	Diagnosis	ICD-10-CM
M0621	Rheumatoid bursitis, shoulder	Diagnosis	ICD-10-CM
M06211	Rheumatoid bursitis, right shoulder	Diagnosis	ICD-10-CM
M06212	Rheumatoid bursitis, left shoulder	Diagnosis	ICD-10-CM
M06219	Rheumatoid bursitis, unspecified shoulder	Diagnosis	ICD-10-CM
M0622	Rheumatoid bursitis, elbow	Diagnosis	ICD-10-CM
M06221	Rheumatoid bursitis, right elbow	Diagnosis	ICD-10-CM
M06222	Rheumatoid bursitis, left elbow	Diagnosis	ICD-10-CM
M06229	Rheumatoid bursitis, unspecified elbow	Diagnosis	ICD-10-CM
M0623	Rheumatoid bursitis, wrist	Diagnosis	ICD-10-CM
M06231	Rheumatoid bursitis, right wrist	Diagnosis	ICD-10-CM
M06232	Rheumatoid bursitis, left wrist	Diagnosis	ICD-10-CM
M06239	Rheumatoid bursitis, unspecified wrist	Diagnosis	ICD-10-CM
M0624	Rheumatoid bursitis, hand	Diagnosis	ICD-10-CM
M06241	Rheumatoid bursitis, right hand	Diagnosis	ICD-10-CM
M06242	Rheumatoid bursitis, left hand	Diagnosis	ICD-10-CM
M06249	Rheumatoid bursitis, unspecified hand	Diagnosis	ICD-10-CM
M0625	Rheumatoid bursitis, hip	Diagnosis	ICD-10-CM
M06251	Rheumatoid bursitis, right hip	Diagnosis	ICD-10-CM
M06252	Rheumatoid bursitis, left hip	Diagnosis	ICD-10-CM
M06259	Rheumatoid bursitis, unspecified hip	Diagnosis	ICD-10-CM
M0626	Rheumatoid bursitis, knee	Diagnosis	ICD-10-CM
M06261	Rheumatoid bursitis, right knee	Diagnosis	ICD-10-CM
M06262	Rheumatoid bursitis, left knee	Diagnosis	ICD-10-CM
M06269	Rheumatoid bursitis, unspecified knee	Diagnosis	ICD-10-CM
M0627	Rheumatoid bursitis, ankle and foot	Diagnosis	ICD-10-CM
M06271	Rheumatoid bursitis, right ankle and foot	Diagnosis	ICD-10-CM
M06272	Rheumatoid bursitis, left ankle and foot	Diagnosis	ICD-10-CM
M06279	Rheumatoid bursitis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M0628	Rheumatoid bursitis, vertebrae	Diagnosis	ICD-10-CM
M0629	Rheumatoid bursitis, multiple sites	Diagnosis	ICD-10-CM
M063	Rheumatoid nodule	Diagnosis	ICD-10-CM
M0630	Rheumatoid nodule, unspecified site	Diagnosis	ICD-10-CM
M0631	Rheumatoid nodule, shoulder	Diagnosis	ICD-10-CM
M06311	Rheumatoid nodule, right shoulder	Diagnosis	ICD-10-CM
M06312	Rheumatoid nodule, left shoulder	Diagnosis	ICD-10-CM
M06319	Rheumatoid nodule, unspecified shoulder	Diagnosis	ICD-10-CM
M0632	Rheumatoid nodule, elbow	Diagnosis	ICD-10-CM
M06321	Rheumatoid nodule, right elbow	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
M06322	Rheumatoid nodule, left elbow	Diagnosis	ICD-10-CM
M06329	Rheumatoid nodule, unspecified elbow	Diagnosis	ICD-10-CM
M0633	Rheumatoid nodule, wrist	Diagnosis	ICD-10-CM
M06331	Rheumatoid nodule, right wrist	Diagnosis	ICD-10-CM
M06332	Rheumatoid nodule, left wrist	Diagnosis	ICD-10-CM
M06339	Rheumatoid nodule, unspecified wrist	Diagnosis	ICD-10-CM
M0634	Rheumatoid nodule, hand	Diagnosis	ICD-10-CM
M06341	Rheumatoid nodule, right hand	Diagnosis	ICD-10-CM
M06342	Rheumatoid nodule, left hand	Diagnosis	ICD-10-CM
M06349	Rheumatoid nodule, unspecified hand	Diagnosis	ICD-10-CM
M0635	Rheumatoid nodule, hip	Diagnosis	ICD-10-CM
M06351	Rheumatoid nodule, right hip	Diagnosis	ICD-10-CM
M06352	Rheumatoid nodule, left hip	Diagnosis	ICD-10-CM
M06359	Rheumatoid nodule, unspecified hip	Diagnosis	ICD-10-CM
M0636	Rheumatoid nodule, knee	Diagnosis	ICD-10-CM
M06361	Rheumatoid nodule, right knee	Diagnosis	ICD-10-CM
M06362	Rheumatoid nodule, left knee	Diagnosis	ICD-10-CM
M06369	Rheumatoid nodule, unspecified knee	Diagnosis	ICD-10-CM
M0637	Rheumatoid nodule, ankle and foot	Diagnosis	ICD-10-CM
M06371	Rheumatoid nodule, right ankle and foot	Diagnosis	ICD-10-CM
M06372	Rheumatoid nodule, left ankle and foot	Diagnosis	ICD-10-CM
M06379	Rheumatoid nodule, unspecified ankle and foot	Diagnosis	ICD-10-CM
M0638	Rheumatoid nodule, vertebrae	Diagnosis	ICD-10-CM
M0639	Rheumatoid nodule, multiple sites	Diagnosis	ICD-10-CM
M064	Inflammatory polyarthropathy	Diagnosis	ICD-10-CM
M068	Other specified rheumatoid arthritis	Diagnosis	ICD-10-CM
M0680	Other specified rheumatoid arthritis, unspecified site	Diagnosis	ICD-10-CM
M0681	Other specified rheumatoid arthritis, shoulder	Diagnosis	ICD-10-CM
M06811	Other specified rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M06812	Other specified rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M06819	Other specified rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M0682	Other specified rheumatoid arthritis, elbow	Diagnosis	ICD-10-CM
M06821	Other specified rheumatoid arthritis, right elbow	Diagnosis	ICD-10-CM
M06822	Other specified rheumatoid arthritis, left elbow	Diagnosis	ICD-10-CM
M06829	Other specified rheumatoid arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M0683	Other specified rheumatoid arthritis, wrist	Diagnosis	ICD-10-CM
M06831	Other specified rheumatoid arthritis, right wrist	Diagnosis	ICD-10-CM
M06832	Other specified rheumatoid arthritis, left wrist	Diagnosis	ICD-10-CM
M06839	Other specified rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M0684	Other specified rheumatoid arthritis, hand	Diagnosis	ICD-10-CM
M06841	Other specified rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM
M06842	Other specified rheumatoid arthritis, left hand	Diagnosis	ICD-10-CM
M06849	Other specified rheumatoid arthritis, unspecified hand	Diagnosis	ICD-10-CM
M0685	Other specified rheumatoid arthritis, hip	Diagnosis	ICD-10-CM
M06851	Other specified rheumatoid arthritis, right hip	Diagnosis	ICD-10-CM
M06852	Other specified rheumatoid arthritis, left hip	Diagnosis	ICD-10-CM
M06859	Other specified rheumatoid arthritis, unspecified hip	Diagnosis	ICD-10-CM
M0686	Other specified rheumatoid arthritis, knee	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
M06861	Other specified rheumatoid arthritis, right knee	Diagnosis	ICD-10-CM
M06862	Other specified rheumatoid arthritis, left knee	Diagnosis	ICD-10-CM
M06869	Other specified rheumatoid arthritis, unspecified knee	Diagnosis	ICD-10-CM
M0687	Other specified rheumatoid arthritis, ankle and foot	Diagnosis	ICD-10-CM
M06871	Other specified rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M06872	Other specified rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M06879	Other specified rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M0688	Other specified rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M0689	Other specified rheumatoid arthritis, multiple sites	Diagnosis	ICD-10-CM
M069	Rheumatoid arthritis, unspecified	Diagnosis	ICD-10-CM
M083	Juvenile rheumatoid polyarthritis (seronegative)	Diagnosis	ICD-10-CM
M0840	Pauciarticular juvenile rheumatoid arthritis, unspecified site	Diagnosis	ICD-10-CM
M1200	Chronic postrheumatic arthropathy [Jaccoud], unspecified site	Diagnosis	ICD-10-CM
M300	Polyarteritis nodosa	Diagnosis	ICD-10-CM
M301	Polyarteritis with lung involvement [Churg-Strauss]	Diagnosis	ICD-10-CM
M302	Juvenile polyarteritis	Diagnosis	ICD-10-CM
M303	Mucocutaneous lymph node syndrome [Kawasaki]	Diagnosis	ICD-10-CM
M308	Other conditions related to polyarteritis nodosa	Diagnosis	ICD-10-CM
M310	Hypersensitivity angiitis	Diagnosis	ICD-10-CM
M311	Thrombotic microangiopathy	Diagnosis	ICD-10-CM
M312	Lethal midline granuloma	Diagnosis	ICD-10-CM
M3130	Wegener's granulomatosis without renal involvement	Diagnosis	ICD-10-CM
M3131	Wegener's granulomatosis with renal involvement	Diagnosis	ICD-10-CM
M314	Aortic arch syndrome [Takayasu]	Diagnosis	ICD-10-CM
M315	Giant cell arteritis with polymyalgia rheumatica	Diagnosis	ICD-10-CM
M316	Other giant cell arteritis	Diagnosis	ICD-10-CM
M317	Microscopic polyangiitis	Diagnosis	ICD-10-CM
M318	Other specified necrotizing vasculopathies	Diagnosis	ICD-10-CM
M319	Necrotizing vasculopathy, unspecified	Diagnosis	ICD-10-CM
M320	Drug-induced systemic lupus erythematosus	Diagnosis	ICD-10-CM
M3210	Systemic lupus erythematosus, organ or system involvement unspecified	Diagnosis	ICD-10-CM
M3211	Endocarditis in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M3212	Pericarditis in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M3213	Lung involvement in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M3214	Glomerular disease in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M3215	Tubulo-interstitial nephropathy in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M3219	Other organ or system involvement in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M328	Other forms of systemic lupus erythematosus	Diagnosis	ICD-10-CM
M329	Systemic lupus erythematosus, unspecified	Diagnosis	ICD-10-CM
M3300	Juvenile dermatomyositis, organ involvement unspecified	Diagnosis	ICD-10-CM
M3301	Juvenile dermatomyositis with respiratory involvement	Diagnosis	ICD-10-CM
M3302	Juvenile dermatomyositis with myopathy	Diagnosis	ICD-10-CM
M3309	Juvenile dermatomyositis with other organ involvement	Diagnosis	ICD-10-CM
M3310	Other dermatomyositis, organ involvement unspecified	Diagnosis	ICD-10-CM
M3311	Other dermatomyositis with respiratory involvement	Diagnosis	ICD-10-CM
M3312	Other dermatomyositis with myopathy	Diagnosis	ICD-10-CM
M3313	Other dermatomyositis without myopathy	Diagnosis	ICD-10-CM
M3319	Other dermatomyositis with other organ involvement	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
M3320	Polymyositis, organ involvement unspecified	Diagnosis	ICD-10-CM
M3321	Polymyositis with respiratory involvement	Diagnosis	ICD-10-CM
M3322	Polymyositis with myopathy	Diagnosis	ICD-10-CM
M3329	Polymyositis with other organ involvement	Diagnosis	ICD-10-CM
M3390	Dermatopolymyositis, unspecified, organ involvement unspecified	Diagnosis	ICD-10-CM
M3391	Dermatopolymyositis, unspecified with respiratory involvement	Diagnosis	ICD-10-CM
M3392	Dermatopolymyositis, unspecified with myopathy	Diagnosis	ICD-10-CM
M3393	Dermatopolymyositis, unspecified without myopathy	Diagnosis	ICD-10-CM
M3399	Dermatopolymyositis, unspecified with other organ involvement	Diagnosis	ICD-10-CM
M340	Systemic sclerosis [scleroderma], Progressive systemic sclerosis	Diagnosis	ICD-10-CM
M341	Systemic sclerosis [scleroderma] , CR(E)ST syndrome	Diagnosis	ICD-10-CM
M342	Systemic sclerosis induced by drug and chemical	Diagnosis	ICD-10-CM
M3481	Systemic sclerosis with lung involvement	Diagnosis	ICD-10-CM
M3482	Systemic sclerosis with myopathy	Diagnosis	ICD-10-CM
M3483	Systemic sclerosis with polyneuropathy	Diagnosis	ICD-10-CM
M3489	Other systemic sclerosis	Diagnosis	ICD-10-CM
M349	Systemic sclerosis, unspecified	Diagnosis	ICD-10-CM
M3500	Sicca syndrome, unspecified	Diagnosis	ICD-10-CM
M3501	Sicca syndrome with keratoconjunctivitis	Diagnosis	ICD-10-CM
M3502	Sicca syndrome with lung involvement	Diagnosis	ICD-10-CM
M3503	Sicca syndrome with myopathy	Diagnosis	ICD-10-CM
M3504	Sicca syndrome with tubulo-interstitial nephropathy	Diagnosis	ICD-10-CM
M3509	Sicca syndrome with other organ involvement	Diagnosis	ICD-10-CM
M351	Other overlap syndromes	Diagnosis	ICD-10-CM
M352	Behcet's disease	Diagnosis	ICD-10-CM
M353	Polymyalgia rheumatica	Diagnosis	ICD-10-CM
M354	Diffuse (eosinophilic) fasciitis	Diagnosis	ICD-10-CM
M355	Multifocal fibrosclerosis	Diagnosis	ICD-10-CM
M356	Relapsing panniculitis [weber-christian]	Diagnosis	ICD-10-CM
M358	Other specified systemic involvement of connective tissue	Diagnosis	ICD-10-CM
M359	Systemic involvement of connective tissue, unspecified	Diagnosis	ICD-10-CM
M360	Dermato(poly)myositis in neoplastic disease	Diagnosis	ICD-10-CM
M368	Systemic disorders of connective tissue in other diseases classified elsewhere	Diagnosis	ICD-10-CM
M4600	Spinal enthesopathy, site unspecified	Diagnosis	ICD-10-CM
M4601	Spinal enthesopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M4602	Spinal enthesopathy, cervical region	Diagnosis	ICD-10-CM
M4603	Spinal enthesopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M4604	Spinal enthesopathy, thoracic region	Diagnosis	ICD-10-CM
M4605	Spinal enthesopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M4606	Spinal enthesopathy, lumbar region	Diagnosis	ICD-10-CM
M4607	Spinal enthesopathy, lumbosacral region	Diagnosis	ICD-10-CM
M4608	Spinal enthesopathy, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M4609	Spinal enthesopathy, multiple sites in spine	Diagnosis	ICD-10-CM
M461	Sacroiliitis, not elsewhere classified	Diagnosis	ICD-10-CM
I400	Infective myocarditis	Diagnosis	ICD-10-CM
I401	Isolated myocarditis	Diagnosis	ICD-10-CM

**Chronic Liver Disease**

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
K700	Alcoholic fatty liver	Diagnosis	ICD-10-CM
K7010	Alcoholic hepatitis without ascites	Diagnosis	ICD-10-CM
K7011	Alcoholic hepatitis with ascites	Diagnosis	ICD-10-CM
K702	Alcoholic fibrosis and sclerosis of liver	Diagnosis	ICD-10-CM
K7030	Alcoholic cirrhosis of liver without ascites	Diagnosis	ICD-10-CM
K7031	Alcoholic cirrhosis of liver with ascites	Diagnosis	ICD-10-CM
K7040	Alcoholic hepatic failure without coma	Diagnosis	ICD-10-CM
K7041	Alcoholic hepatic failure with coma	Diagnosis	ICD-10-CM
K709	Alcoholic liver disease, unspecified	Diagnosis	ICD-10-CM
K7110	Toxic liver disease with hepatic necrosis, without coma	Diagnosis	ICD-10-CM
K7111	Toxic liver disease with hepatic necrosis, with coma	Diagnosis	ICD-10-CM
K713	Toxic liver disease with chronic persistent hepatitis	Diagnosis	ICD-10-CM
K714	Toxic liver disease with chronic lobular hepatitis	Diagnosis	ICD-10-CM
K715	Toxic liver disease with chronic active hepatitis	Diagnosis	ICD-10-CM
K7150	Toxic liver disease with chronic active hepatitis without ascites	Diagnosis	ICD-10-CM
K7151	Toxic liver disease with chronic active hepatitis with ascites	Diagnosis	ICD-10-CM
K716	Toxic liver disease with hepatitis, not elsewhere classified	Diagnosis	ICD-10-CM
K717	Toxic liver disease with fibrosis and cirrhosis of liver	Diagnosis	ICD-10-CM
K718	Toxic liver disease with other disorders of liver	Diagnosis	ICD-10-CM
K719	Toxic liver disease, unspecified	Diagnosis	ICD-10-CM
K721	Chronic hepatic failure	Diagnosis	ICD-10-CM
K7210	Chronic hepatic failure without coma	Diagnosis	ICD-10-CM
K7211	Chronic hepatic failure with coma	Diagnosis	ICD-10-CM
K7290	Hepatic failure, unspecified without coma	Diagnosis	ICD-10-CM
K7291	Hepatic failure, unspecified with coma	Diagnosis	ICD-10-CM
K730	Chronic persistent hepatitis, not elsewhere classified	Diagnosis	ICD-10-CM
K731	Chronic lobular hepatitis, not elsewhere classified	Diagnosis	ICD-10-CM
K732	Chronic active hepatitis, not elsewhere classified	Diagnosis	ICD-10-CM
K738	Other chronic hepatitis, not elsewhere classified	Diagnosis	ICD-10-CM
K739	Chronic hepatitis, unspecified	Diagnosis	ICD-10-CM
K740	Hepatic fibrosis	Diagnosis	ICD-10-CM
K741	Hepatic sclerosis	Diagnosis	ICD-10-CM
K742	Hepatic fibrosis with hepatic sclerosis	Diagnosis	ICD-10-CM
K743	Primary biliary cirrhosis	Diagnosis	ICD-10-CM
K744	Secondary biliary cirrhosis	Diagnosis	ICD-10-CM
K745	Biliary cirrhosis, unspecified	Diagnosis	ICD-10-CM
K7460	Unspecified cirrhosis of liver	Diagnosis	ICD-10-CM
K7469	Other cirrhosis of liver	Diagnosis	ICD-10-CM
K753	Granulomatous hepatitis, not elsewhere classified	Diagnosis	ICD-10-CM
K754	Autoimmune hepatitis	Diagnosis	ICD-10-CM
K758	Other specified inflammatory liver diseases	Diagnosis	ICD-10-CM
K7581	Nonalcoholic steatohepatitis (NASH)	Diagnosis	ICD-10-CM
K7589	Other specified inflammatory liver diseases	Diagnosis	ICD-10-CM
K759	Inflammatory liver disease, unspecified	Diagnosis	ICD-10-CM
K760	Fatty (change of) liver, not elsewhere classified	Diagnosis	ICD-10-CM
<b>Coronary Artery Disease</b>			
I20	Angina pectoris	Diagnosis	ICD-10-CM
I20.0	Unstable angina	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I20.1	Angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I20.8	Other forms of angina pectoris	Diagnosis	ICD-10-CM
I20.9	Angina pectoris, unspecified	Diagnosis	ICD-10-CM
I23.7	Postinfarction angina	Diagnosis	ICD-10-CM
I24	Other acute ischemic heart diseases	Diagnosis	ICD-10-CM
I24.0	Acute coronary thrombosis not resulting in myocardial infarction	Diagnosis	ICD-10-CM
I24.8	Other forms of acute ischemic heart disease	Diagnosis	ICD-10-CM
I24.9	Acute ischemic heart disease, unspecified	Diagnosis	ICD-10-CM
I25.1	Atherosclerotic heart disease of native coronary artery	Diagnosis	ICD-10-CM
I25.10	Atherosclerotic heart disease of native coronary artery without angina pectoris	Diagnosis	ICD-10-CM
I25.11	Atherosclerotic heart disease of native coronary artery with angina pectoris	Diagnosis	ICD-10-CM
I25.110	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.112	Atherosclerotic heart disease of native coronary artery with refractory angina pectoris	Diagnosis	ICD-10-CM
I25.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.2	Old myocardial infarction	Diagnosis	ICD-10-CM
I25.5	Ischemic cardiomyopathy	Diagnosis	ICD-10-CM
I25.6	Silent myocardial ischemia	Diagnosis	ICD-10-CM
I25.7	Atherosclerosis of coronary artery bypass graft(s) and coronary artery of transplanted heart with angina pectoris	Diagnosis	ICD-10-CM
I25.70	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris	Diagnosis	ICD-10-CM
I25.700	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.702	Atherosclerosis of coronary artery bypass graft(s), unspecified, with refractory angina pectoris	Diagnosis	ICD-10-CM
I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.709	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.71	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris	Diagnosis	ICD-10-CM
I25.710	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.711	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.712	Atherosclerosis of autologous vein coronary artery bypass graft(s) with refractory angina pectoris	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.72	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris	Diagnosis	ICD-10-CM
I25.720	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.721	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.722	Atherosclerosis of autologous artery coronary artery bypass graft(s) with refractory angina pectoris	Diagnosis	ICD-10-CM
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.729	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.73	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris	Diagnosis	ICD-10-CM
I25.730	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.732	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with refractory angina pectoris	Diagnosis	ICD-10-CM
I25.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.739	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.75	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris	Diagnosis	ICD-10-CM
I25.750	Atherosclerosis of native coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
I25.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.752	Atherosclerosis of native coronary artery of transplanted heart with refractory angina pectoris	Diagnosis	ICD-10-CM
I25.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.76	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris	Diagnosis	ICD-10-CM
I25.760	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
I25.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.762	Atherosclerosis of bypass graft of coronary artery of transplanted heart with refractory angina pectoris	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.79	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris	Diagnosis	ICD-10-CM
I25.790	Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.792	Atherosclerosis of other coronary artery bypass graft(s) with refractory angina pectoris	Diagnosis	ICD-10-CM
I25.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.8	Other forms of chronic ischemic heart disease	Diagnosis	ICD-10-CM
I25.81	Atherosclerosis of other coronary vessels without angina pectoris	Diagnosis	ICD-10-CM
I25.810	Atherosclerosis of coronary artery bypass graft(s) without angina pectoris	Diagnosis	ICD-10-CM
I25.811	Atherosclerosis of native coronary artery of transplanted heart without angina pectoris	Diagnosis	ICD-10-CM
I25.812	Atherosclerosis of bypass graft of coronary artery of transplanted heart without angina pectoris	Diagnosis	ICD-10-CM
I25.82	Chronic total occlusion of coronary artery	Diagnosis	ICD-10-CM
I25.83	Coronary atherosclerosis due to lipid rich plaque	Diagnosis	ICD-10-CM
I25.84	Coronary atherosclerosis due to calcified coronary lesion	Diagnosis	ICD-10-CM
I25.89	Other forms of chronic ischemic heart disease	Diagnosis	ICD-10-CM
I25.9	Chronic ischemic heart disease, unspecified	Diagnosis	ICD-10-CM
I46.2	Cardiac arrest due to underlying cardiac condition	Diagnosis	ICD-10-CM
I46.8	Cardiac arrest due to other underlying condition	Diagnosis	ICD-10-CM
I46.9	Cardiac arrest, cause unspecified	Diagnosis	ICD-10-CM
I47.0	Re-entry ventricular arrhythmia	Diagnosis	ICD-10-CM
I47.2	Ventricular tachycardia	Diagnosis	ICD-10-CM
Z95.1	Presence of aortocoronary bypass graft	Diagnosis	ICD-10-CM
Z95.5	Presence of coronary angioplasty implant and graft	Diagnosis	ICD-10-CM
<b>Cerebrovascular Disease</b>			
G46	Vascular syndromes of brain in cerebrovascular diseases	Diagnosis	ICD-10-CM
G46.8	Other vascular syndromes of brain in cerebrovascular diseases	Diagnosis	ICD-10-CM
I60	Nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I60.0	Nontraumatic subarachnoid hemorrhage from carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.1	Nontraumatic subarachnoid hemorrhage from middle cerebral artery	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I60.10	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I60.11	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery	Diagnosis	ICD-10-CM
I60.12	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery	Diagnosis	ICD-10-CM
I60.2	Nontraumatic subarachnoid hemorrhage from anterior communicating artery	Diagnosis	ICD-10-CM
I60.3	Nontraumatic subarachnoid hemorrhage from posterior communicating artery	Diagnosis	ICD-10-CM
I60.30	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery	Diagnosis	ICD-10-CM
I60.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery	Diagnosis	ICD-10-CM
I60.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery	Diagnosis	ICD-10-CM
I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery	Diagnosis	ICD-10-CM
I60.5	Nontraumatic subarachnoid hemorrhage from vertebral artery	Diagnosis	ICD-10-CM
I60.50	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery	Diagnosis	ICD-10-CM
I60.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery	Diagnosis	ICD-10-CM
I60.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery	Diagnosis	ICD-10-CM
I60.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries	Diagnosis	ICD-10-CM
I60.7	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery	Diagnosis	ICD-10-CM
I60.8	Other nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I60.9	Nontraumatic subarachnoid hemorrhage, unspecified	Diagnosis	ICD-10-CM
I61	Nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I61.0	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical	Diagnosis	ICD-10-CM
I61.1	Nontraumatic intracerebral hemorrhage in hemisphere, cortical	Diagnosis	ICD-10-CM
I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified	Diagnosis	ICD-10-CM
I61.3	Nontraumatic intracerebral hemorrhage in brain stem	Diagnosis	ICD-10-CM
I61.4	Nontraumatic intracerebral hemorrhage in cerebellum	Diagnosis	ICD-10-CM
I61.5	Nontraumatic intracerebral hemorrhage, intraventricular	Diagnosis	ICD-10-CM
I61.6	Nontraumatic intracerebral hemorrhage, multiple localized	Diagnosis	ICD-10-CM
I61.8	Other nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I61.9	Nontraumatic intracerebral hemorrhage, unspecified	Diagnosis	ICD-10-CM
I62	Other and unspecified nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I62.0	Nontraumatic subdural hemorrhage	Diagnosis	ICD-10-CM
I62.00	Nontraumatic subdural hemorrhage, unspecified	Diagnosis	ICD-10-CM
I62.01	Nontraumatic acute subdural hemorrhage	Diagnosis	ICD-10-CM
I62.02	Nontraumatic subacute subdural hemorrhage	Diagnosis	ICD-10-CM
I62.03	Nontraumatic chronic subdural hemorrhage	Diagnosis	ICD-10-CM
I62.1	Nontraumatic extradural hemorrhage	Diagnosis	ICD-10-CM
I62.9	Nontraumatic intracranial hemorrhage, unspecified	Diagnosis	ICD-10-CM
I63	Cerebral infarction	Diagnosis	ICD-10-CM
I63.0	Cerebral infarction due to thrombosis of precerebral arteries	Diagnosis	ICD-10-CM
I63.00	Cerebral infarction due to thrombosis of unspecified precerebral artery	Diagnosis	ICD-10-CM
I63.01	Cerebral infarction due to thrombosis of vertebral artery	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I63.011	Cerebral infarction due to thrombosis of right vertebral artery	Diagnosis	ICD-10-CM
I63.012	Cerebral infarction due to thrombosis of left vertebral artery	Diagnosis	ICD-10-CM
I63.013	Cerebral infarction due to thrombosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.019	Cerebral infarction due to thrombosis of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.02	Cerebral infarction due to thrombosis of basilar artery	Diagnosis	ICD-10-CM
I63.03	Cerebral infarction due to thrombosis of carotid artery	Diagnosis	ICD-10-CM
I63.031	Cerebral infarction due to thrombosis of right carotid artery	Diagnosis	ICD-10-CM
I63.032	Cerebral infarction due to thrombosis of left carotid artery	Diagnosis	ICD-10-CM
I63.033	Cerebral infarction due to thrombosis of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.039	Cerebral infarction due to thrombosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.09	Cerebral infarction due to thrombosis of other precerebral artery	Diagnosis	ICD-10-CM
I63.1	Cerebral infarction due to embolism of precerebral arteries	Diagnosis	ICD-10-CM
I63.10	Cerebral infarction due to embolism of unspecified precerebral artery	Diagnosis	ICD-10-CM
I63.11	Cerebral infarction due to embolism of vertebral artery	Diagnosis	ICD-10-CM
I63.111	Cerebral infarction due to embolism of right vertebral artery	Diagnosis	ICD-10-CM
I63.112	Cerebral infarction due to embolism of left vertebral artery	Diagnosis	ICD-10-CM
I63.113	Cerebral infarction due to embolism of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.119	Cerebral infarction due to embolism of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.12	Cerebral infarction due to embolism of basilar artery	Diagnosis	ICD-10-CM
I63.13	Cerebral infarction due to embolism of carotid artery	Diagnosis	ICD-10-CM
I63.131	Cerebral infarction due to embolism of right carotid artery	Diagnosis	ICD-10-CM
I63.132	Cerebral infarction due to embolism of left carotid artery	Diagnosis	ICD-10-CM
I63.133	Cerebral infarction due to embolism of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.139	Cerebral infarction due to embolism of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.19	Cerebral infarction due to embolism of other precerebral artery	Diagnosis	ICD-10-CM
I63.2	Cerebral infarction due to unspecified occlusion or stenosis of precerebral arteries	Diagnosis	ICD-10-CM
I63.20	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries	Diagnosis	ICD-10-CM
I63.21	Cerebral infarction due to unspecified occlusion or stenosis of vertebral arteries	Diagnosis	ICD-10-CM
I63.211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral artery	Diagnosis	ICD-10-CM
I63.212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral artery	Diagnosis	ICD-10-CM
I63.213	Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.22	Cerebral infarction due to unspecified occlusion or stenosis of basilar artery	Diagnosis	ICD-10-CM
I63.23	Cerebral infarction due to unspecified occlusion or stenosis of carotid arteries	Diagnosis	ICD-10-CM
I63.231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries	Diagnosis	ICD-10-CM
I63.232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I63.233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.29	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries	Diagnosis	ICD-10-CM
I63.3	Cerebral infarction due to thrombosis of cerebral arteries	Diagnosis	ICD-10-CM
I63.30	Cerebral infarction due to thrombosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.31	Cerebral infarction due to thrombosis of middle cerebral artery	Diagnosis	ICD-10-CM
I63.311	Cerebral infarction due to thrombosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.312	Cerebral infarction due to thrombosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.313	Cerebral infarction due to thrombosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.32	Cerebral infarction due to thrombosis of anterior cerebral artery	Diagnosis	ICD-10-CM
I63.321	Cerebral infarction due to thrombosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.322	Cerebral infarction due to thrombosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.323	Cerebral infarction due to thrombosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.33	Cerebral infarction due to thrombosis of posterior cerebral artery	Diagnosis	ICD-10-CM
I63.331	Cerebral infarction due to thrombosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.332	Cerebral infarction due to thrombosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.333	Cerebral infarction due to thrombosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.34	Cerebral infarction due to thrombosis of cerebellar artery	Diagnosis	ICD-10-CM
I63.341	Cerebral infarction due to thrombosis of right cerebellar artery	Diagnosis	ICD-10-CM
I63.342	Cerebral infarction due to thrombosis of left cerebellar artery	Diagnosis	ICD-10-CM
I63.343	Cerebral infarction due to thrombosis of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.349	Cerebral infarction due to thrombosis of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.39	Cerebral infarction due to thrombosis of other cerebral artery	Diagnosis	ICD-10-CM
I63.4	Cerebral infarction due to embolism of cerebral arteries	Diagnosis	ICD-10-CM
I63.40	Cerebral infarction due to embolism of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.41	Cerebral infarction due to embolism of middle cerebral artery	Diagnosis	ICD-10-CM
I63.411	Cerebral infarction due to embolism of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.412	Cerebral infarction due to embolism of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.413	Cerebral infarction due to embolism of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.419	Cerebral infarction due to embolism of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.42	Cerebral infarction due to embolism of anterior cerebral artery	Diagnosis	ICD-10-CM
I63.421	Cerebral infarction due to embolism of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.422	Cerebral infarction due to embolism of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.423	Cerebral infarction due to embolism of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.429	Cerebral infarction due to embolism of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.43	Cerebral infarction due to embolism of posterior cerebral artery	Diagnosis	ICD-10-CM
I63.431	Cerebral infarction due to embolism of right posterior cerebral artery	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I63.432	Cerebral infarction due to embolism of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.433	Cerebral infarction due to embolism of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.439	Cerebral infarction due to embolism of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.44	Cerebral infarction due to embolism of cerebellar artery	Diagnosis	ICD-10-CM
I63.441	Cerebral infarction due to embolism of right cerebellar artery	Diagnosis	ICD-10-CM
I63.442	Cerebral infarction due to embolism of left cerebellar artery	Diagnosis	ICD-10-CM
I63.443	Cerebral infarction due to embolism of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.449	Cerebral infarction due to embolism of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.49	Cerebral infarction due to embolism of other cerebral artery	Diagnosis	ICD-10-CM
I63.5	Cerebral infarction due to unspecified occlusion or stenosis of cerebral arteries	Diagnosis	ICD-10-CM
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.51	Cerebral infarction due to unspecified occlusion or stenosis of middle cerebral artery	Diagnosis	ICD-10-CM
I63.511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.513	Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.519	Cerebral infarction due to unspecified occlusion or stenosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.52	Cerebral infarction due to unspecified occlusion or stenosis of anterior cerebral artery	Diagnosis	ICD-10-CM
I63.521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.523	Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.529	Cerebral infarction due to unspecified occlusion or stenosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.53	Cerebral infarction due to unspecified occlusion or stenosis of posterior cerebral artery	Diagnosis	ICD-10-CM
I63.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.54	Cerebral infarction due to unspecified occlusion or stenosis of cerebellar artery	Diagnosis	ICD-10-CM
I63.541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I63.542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery	Diagnosis	ICD-10-CM
I63.543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery	Diagnosis	ICD-10-CM
I63.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic	Diagnosis	ICD-10-CM
I63.8	Other cerebral infarction	Diagnosis	ICD-10-CM
I63.81	Other cerebral infarction due to occlusion or stenosis of small artery	Diagnosis	ICD-10-CM
I63.89	Other cerebral infarction	Diagnosis	ICD-10-CM
I63.9	Cerebral infarction, unspecified	Diagnosis	ICD-10-CM
I65	Occlusion and stenosis of precerebral arteries, not resulting in cerebral infarction	Diagnosis	ICD-10-CM
I65.0	Occlusion and stenosis of vertebral artery	Diagnosis	ICD-10-CM
I65.01	Occlusion and stenosis of right vertebral artery	Diagnosis	ICD-10-CM
I65.02	Occlusion and stenosis of left vertebral artery	Diagnosis	ICD-10-CM
I65.03	Occlusion and stenosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I65.09	Occlusion and stenosis of unspecified vertebral artery	Diagnosis	ICD-10-CM
I65.1	Occlusion and stenosis of basilar artery	Diagnosis	ICD-10-CM
I65.2	Occlusion and stenosis of carotid artery	Diagnosis	ICD-10-CM
I65.21	Occlusion and stenosis of right carotid artery	Diagnosis	ICD-10-CM
I65.22	Occlusion and stenosis of left carotid artery	Diagnosis	ICD-10-CM
I65.23	Occlusion and stenosis of bilateral carotid arteries	Diagnosis	ICD-10-CM
I65.29	Occlusion and stenosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I65.8	Occlusion and stenosis of other precerebral arteries	Diagnosis	ICD-10-CM
I65.9	Occlusion and stenosis of unspecified precerebral artery	Diagnosis	ICD-10-CM
I66	Occlusion and stenosis of cerebral arteries, not resulting in cerebral infarction	Diagnosis	ICD-10-CM
I66.0	Occlusion and stenosis of middle cerebral artery	Diagnosis	ICD-10-CM
I66.01	Occlusion and stenosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I66.02	Occlusion and stenosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I66.03	Occlusion and stenosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I66.09	Occlusion and stenosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I66.1	Occlusion and stenosis of anterior cerebral artery	Diagnosis	ICD-10-CM
I66.11	Occlusion and stenosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I66.12	Occlusion and stenosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I66.13	Occlusion and stenosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I66.19	Occlusion and stenosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I66.2	Occlusion and stenosis of posterior cerebral artery	Diagnosis	ICD-10-CM
I66.21	Occlusion and stenosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I66.22	Occlusion and stenosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I66.23	Occlusion and stenosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I66.29	Occlusion and stenosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I66.3	Occlusion and stenosis of cerebellar arteries	Diagnosis	ICD-10-CM
I66.8	Occlusion and stenosis of other cerebral arteries	Diagnosis	ICD-10-CM
I66.9	Occlusion and stenosis of unspecified cerebral artery	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I67	Other cerebrovascular diseases	Diagnosis	ICD-10-CM
I67.0	Dissection of cerebral arteries, nonruptured	Diagnosis	ICD-10-CM
I67.1	Cerebral aneurysm, nonruptured	Diagnosis	ICD-10-CM
I67.2	Cerebral atherosclerosis	Diagnosis	ICD-10-CM
I67.4	Hypertensive encephalopathy	Diagnosis	ICD-10-CM
I67.5	Moyamoya disease	Diagnosis	ICD-10-CM
I67.6	Nonpyogenic thrombosis of intracranial venous system	Diagnosis	ICD-10-CM
I67.7	Cerebral arteritis, not elsewhere classified	Diagnosis	ICD-10-CM
I67.8	Other specified cerebrovascular diseases	Diagnosis	ICD-10-CM
I67.81	Acute cerebrovascular insufficiency	Diagnosis	ICD-10-CM
I67.82	Cerebral ischemia	Diagnosis	ICD-10-CM
I67.83	Posterior reversible encephalopathy syndrome	Diagnosis	ICD-10-CM
I67.84	Cerebral vasospasm and vasoconstriction	Diagnosis	ICD-10-CM
I67.841	Reversible cerebrovascular vasoconstriction syndrome	Diagnosis	ICD-10-CM
I67.848	Other cerebrovascular vasospasm and vasoconstriction	Diagnosis	ICD-10-CM
I67.85	Hereditary cerebrovascular diseases	Diagnosis	ICD-10-CM
I67.850	Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy	Diagnosis	ICD-10-CM
I67.858	Other hereditary cerebrovascular disease	Diagnosis	ICD-10-CM
I67.89	Other cerebrovascular disease	Diagnosis	ICD-10-CM
I67.9	Cerebrovascular disease, unspecified	Diagnosis	ICD-10-CM
I68	Cerebrovascular disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
I68.0	Cerebral amyloid angiopathy	Diagnosis	ICD-10-CM
I68.2	Cerebral arteritis in other diseases classified elsewhere	Diagnosis	ICD-10-CM
I68.8	Other cerebrovascular disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
I69	Sequelae of cerebrovascular disease	Diagnosis	ICD-10-CM
I69.0	Sequelae of nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.00	Unspecified sequelae of nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.01	Cognitive deficits following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.010	Attention and concentration deficit following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.011	Memory deficit following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.012	Visuospatial deficit and spatial neglect following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.013	Psychomotor deficit following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.014	Frontal lobe and executive function deficit following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.015	Cognitive social or emotional deficit following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.018	Other symptoms and signs involving cognitive functions following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.019	Unspecified symptoms and signs involving cognitive functions following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.02	Speech and language deficits following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.020	Aphasia following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.021	Dysphasia following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.022	Dysarthria following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
I69.023	Fluency disorder following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.028	Other speech and language deficits following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.03	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.031	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.032	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.033	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.034	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.039	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.04	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.041	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.042	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.043	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.044	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.049	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.05	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.051	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.052	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.053	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.054	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.059	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.06	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.061	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.062	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.063	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I69.064	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.065	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage, bilateral	Diagnosis	ICD-10-CM
I69.069	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.09	Other sequelae of nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.090	Apraxia following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.091	Dysphagia following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.092	Facial weakness following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.093	Ataxia following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.098	Other sequelae following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.1	Sequelae of nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.10	Unspecified sequelae of nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.11	Cognitive deficits following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.110	Attention and concentration deficit following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.111	Memory deficit following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.112	Visuospatial deficit and spatial neglect following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.113	Psychomotor deficit following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.114	Frontal lobe and executive function deficit following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.115	Cognitive social or emotional deficit following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.118	Other symptoms and signs involving cognitive functions following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.119	Unspecified symptoms and signs involving cognitive functions following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.12	Speech and language deficits following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.120	Aphasia following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.121	Dysphasia following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.122	Dysarthria following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.123	Fluency disorder following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.128	Other speech and language deficits following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.13	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.131	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.132	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.133	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.134	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
I69.139	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.14	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.141	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.142	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.143	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.144	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.149	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.15	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.151	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.152	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.153	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.154	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.159	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.16	Other paralytic syndrome following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.161	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.162	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.163	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.164	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.165	Other paralytic syndrome following nontraumatic intracerebral hemorrhage, bilateral	Diagnosis	ICD-10-CM
I69.169	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.19	Other sequelae of nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.190	Apraxia following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.191	Dysphagia following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.192	Facial weakness following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.193	Ataxia following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.198	Other sequelae of nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.2	Sequelae of other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.20	Unspecified sequelae of other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
I69.21	Cognitive deficits following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.210	Attention and concentration deficit following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.211	Memory deficit following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.212	Visuospatial deficit and spatial neglect following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.213	Psychomotor deficit following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.214	Frontal lobe and executive function deficit following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.215	Cognitive social or emotional deficit following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.218	Other symptoms and signs involving cognitive functions following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.219	Unspecified symptoms and signs involving cognitive functions following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.22	Speech and language deficits following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.220	Aphasia following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.221	Dysphasia following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.222	Dysarthria following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.223	Fluency disorder following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.228	Other speech and language deficits following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.23	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.231	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.232	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.233	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.234	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.239	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.24	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.241	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.242	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.243	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.244	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.249	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I69.25	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.251	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.252	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.253	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.254	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.259	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.26	Other paralytic syndrome following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.261	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.262	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.263	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.264	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.265	Other paralytic syndrome following other nontraumatic intracranial hemorrhage, bilateral	Diagnosis	ICD-10-CM
I69.269	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.29	Other sequelae of other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.290	Apraxia following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.291	Dysphagia following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.292	Facial weakness following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.293	Ataxia following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.298	Other sequelae of other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.3	Sequelae of cerebral infarction	Diagnosis	ICD-10-CM
I69.30	Unspecified sequelae of cerebral infarction	Diagnosis	ICD-10-CM
I69.31	Cognitive deficits following cerebral infarction	Diagnosis	ICD-10-CM
I69.310	Attention and concentration deficit following cerebral infarction	Diagnosis	ICD-10-CM
I69.311	Memory deficit following cerebral infarction	Diagnosis	ICD-10-CM
I69.312	Visuospatial deficit and spatial neglect following cerebral infarction	Diagnosis	ICD-10-CM
I69.313	Psychomotor deficit following cerebral infarction	Diagnosis	ICD-10-CM
I69.314	Frontal lobe and executive function deficit following cerebral infarction	Diagnosis	ICD-10-CM
I69.315	Cognitive social or emotional deficit following cerebral infarction	Diagnosis	ICD-10-CM
I69.318	Other symptoms and signs involving cognitive functions following cerebral infarction	Diagnosis	ICD-10-CM
I69.319	Unspecified symptoms and signs involving cognitive functions following cerebral infarction	Diagnosis	ICD-10-CM
I69.32	Speech and language deficits following cerebral infarction	Diagnosis	ICD-10-CM
I69.320	Aphasia following cerebral infarction	Diagnosis	ICD-10-CM
I69.321	Dysphasia following cerebral infarction	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I69.322	Dysarthria following cerebral infarction	Diagnosis	ICD-10-CM
I69.323	Fluency disorder following cerebral infarction	Diagnosis	ICD-10-CM
I69.328	Other speech and language deficits following cerebral infarction	Diagnosis	ICD-10-CM
I69.33	Monoplegia of upper limb following cerebral infarction	Diagnosis	ICD-10-CM
I69.331	Monoplegia of upper limb following cerebral infarction affecting right dominant side	Diagnosis	ICD-10-CM
I69.332	Monoplegia of upper limb following cerebral infarction affecting left dominant side	Diagnosis	ICD-10-CM
I69.333	Monoplegia of upper limb following cerebral infarction affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.334	Monoplegia of upper limb following cerebral infarction affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.339	Monoplegia of upper limb following cerebral infarction affecting unspecified side	Diagnosis	ICD-10-CM
I69.34	Monoplegia of lower limb following cerebral infarction	Diagnosis	ICD-10-CM
I69.341	Monoplegia of lower limb following cerebral infarction affecting right dominant side	Diagnosis	ICD-10-CM
I69.342	Monoplegia of lower limb following cerebral infarction affecting left dominant side	Diagnosis	ICD-10-CM
I69.343	Monoplegia of lower limb following cerebral infarction affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.344	Monoplegia of lower limb following cerebral infarction affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.349	Monoplegia of lower limb following cerebral infarction affecting unspecified side	Diagnosis	ICD-10-CM
I69.35	Hemiplegia and hemiparesis following cerebral infarction	Diagnosis	ICD-10-CM
I69.351	Hemiplegia and hemiparesis following cerebral infarction affecting right dominant side	Diagnosis	ICD-10-CM
I69.352	Hemiplegia and hemiparesis following cerebral infarction affecting left dominant side	Diagnosis	ICD-10-CM
I69.353	Hemiplegia and hemiparesis following cerebral infarction affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.354	Hemiplegia and hemiparesis following cerebral infarction affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.359	Hemiplegia and hemiparesis following cerebral infarction affecting unspecified side	Diagnosis	ICD-10-CM
I69.36	Other paralytic syndrome following cerebral infarction	Diagnosis	ICD-10-CM
I69.361	Other paralytic syndrome following cerebral infarction affecting right dominant side	Diagnosis	ICD-10-CM
I69.362	Other paralytic syndrome following cerebral infarction affecting left dominant side	Diagnosis	ICD-10-CM
I69.363	Other paralytic syndrome following cerebral infarction affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.364	Other paralytic syndrome following cerebral infarction affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.365	Other paralytic syndrome following cerebral infarction, bilateral	Diagnosis	ICD-10-CM
I69.369	Other paralytic syndrome following cerebral infarction affecting unspecified side	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I69.39	Other sequelae of cerebral infarction	Diagnosis	ICD-10-CM
I69.390	Apraxia following cerebral infarction	Diagnosis	ICD-10-CM
I69.391	Dysphagia following cerebral infarction	Diagnosis	ICD-10-CM
I69.392	Facial weakness following cerebral infarction	Diagnosis	ICD-10-CM
I69.393	Ataxia following cerebral infarction	Diagnosis	ICD-10-CM
I69.398	Other sequelae of cerebral infarction	Diagnosis	ICD-10-CM
I69.8	Sequelae of other cerebrovascular diseases	Diagnosis	ICD-10-CM
I69.80	Unspecified sequelae of other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.81	Cognitive deficits following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.810	Attention and concentration deficit following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.811	Memory deficit following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.812	Visuospatial deficit and spatial neglect following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.813	Psychomotor deficit following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.814	Frontal lobe and executive function deficit following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.815	Cognitive social or emotional deficit following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.818	Other symptoms and signs involving cognitive functions following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.819	Unspecified symptoms and signs involving cognitive functions following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.82	Speech and language deficits following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.820	Aphasia following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.821	Dysphasia following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.822	Dysarthria following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.823	Fluency disorder following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.828	Other speech and language deficits following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.83	Monoplegia of upper limb following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.831	Monoplegia of upper limb following other cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.832	Monoplegia of upper limb following other cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.833	Monoplegia of upper limb following other cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.834	Monoplegia of upper limb following other cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.839	Monoplegia of upper limb following other cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.84	Monoplegia of lower limb following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.841	Monoplegia of lower limb following other cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.842	Monoplegia of lower limb following other cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.843	Monoplegia of lower limb following other cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM



**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

Code	Description	Code Category	Code Type
I69.844	Monoplegia of lower limb following other cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.849	Monoplegia of lower limb following other cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.85	Hemiplegia and hemiparesis following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.851	Hemiplegia and hemiparesis following other cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.852	Hemiplegia and hemiparesis following other cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.853	Hemiplegia and hemiparesis following other cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.854	Hemiplegia and hemiparesis following other cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.859	Hemiplegia and hemiparesis following other cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.86	Other paralytic syndrome following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.861	Other paralytic syndrome following other cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.862	Other paralytic syndrome following other cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.863	Other paralytic syndrome following other cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.864	Other paralytic syndrome following other cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.865	Other paralytic syndrome following other cerebrovascular disease, bilateral	Diagnosis	ICD-10-CM
I69.869	Other paralytic syndrome following other cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.89	Other sequelae of other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.890	Apraxia following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.891	Dysphagia following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.892	Facial weakness following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.893	Ataxia following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.898	Other sequelae of other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.9	Sequelae of unspecified cerebrovascular diseases	Diagnosis	ICD-10-CM
I69.90	Unspecified sequelae of unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.91	Cognitive deficits following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.910	Attention and concentration deficit following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.911	Memory deficit following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.912	Visuospatial deficit and spatial neglect following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.913	Psychomotor deficit following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.914	Frontal lobe and executive function deficit following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.915	Cognitive social or emotional deficit following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
I69.918	Other symptoms and signs involving cognitive functions following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.919	Unspecified symptoms and signs involving cognitive functions following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.92	Speech and language deficits following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.920	Aphasia following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.921	Dysphasia following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.922	Dysarthria following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.923	Fluency disorder following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.928	Other speech and language deficits following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.93	Monoplegia of upper limb following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.931	Monoplegia of upper limb following unspecified cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.932	Monoplegia of upper limb following unspecified cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.933	Monoplegia of upper limb following unspecified cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.934	Monoplegia of upper limb following unspecified cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.939	Monoplegia of upper limb following unspecified cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.94	Monoplegia of lower limb following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.941	Monoplegia of lower limb following unspecified cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.942	Monoplegia of lower limb following unspecified cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.943	Monoplegia of lower limb following unspecified cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.944	Monoplegia of lower limb following unspecified cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.949	Monoplegia of lower limb following unspecified cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.95	Hemiplegia and hemiparesis following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.951	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.952	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.953	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.954	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.959	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.96	Other paralytic syndrome following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM

**Appendix I. List of Current Procedural Terminology, Fourth Edition (CPT-4), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
I69.961	Other paralytic syndrome following unspecified cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.962	Other paralytic syndrome following unspecified cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.963	Other paralytic syndrome following unspecified cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.964	Other paralytic syndrome following unspecified cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.965	Other paralytic syndrome following unspecified cerebrovascular disease, bilateral	Diagnosis	ICD-10-CM
I69.969	Other paralytic syndrome following unspecified cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.99	Other sequelae of unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.990	Apraxia following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.991	Dysphagia following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.992	Facial weakness following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.993	Ataxia following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.998	Other sequelae following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
<b>COVID-19 Dx</b>			
U07.1	COVID-19	Diagnosis	ICD-10-CM

**Appendix J. List of Lab Codes Used to Define Positive COVID-19 Lab Tests in this Request**

Code	Description	Code Category	Code Type
<b>Positive COVID-19 Lab</b>			
L0241031010401	PCR_BAL_O	LB	01C
L0241031010501	PCR_BAL_U	LB	01C
L0241031020401	PCR_NSWAB_O	LB	01C
L0241031020501	PCR_NSWAB_U	LB	01C
L0241031030401	PCR_NWASH_O	LB	01C
L0241031030501	PCR_NWASH_U	LB	01C
L0241031040401	PCR_NPH_O	LB	01C
L0241031040501	PCR_NPH_U	LB	01C
L0241031050401	PCR_NPWASH_O	LB	01C
L0241031050501	PCR_NPWASH_U	LB	01C
L0241031060401	PCR_SPUTUM_O	LB	01C
L0241031060501	PCR_SPUTUM_U	LB	01C
L0241031070401	PCR_THRT_O	LB	01C
L0241031070501	PCR_THRT_U	LB	01C
L0241031080401	PCR_UNK_O	LB	01C
L0241031080501	PCR_UNK_U	LB	01C
L0241031090401	PCR_BLOOD_O	LB	01C
L0241031090501	PCR_BLOOD_U	LB	01C
L0241031100401	PCR_PLASMA_O	LB	01C
L0241031100501	PCR_PLASMA_U	LB	01C
L0241031110401	PCR_SERUM_O	LB	01C
L0241031110501	PCR_SERUM_U	LB	01C
L0241031120401	PCR_SR_PLS_O	LB	01C
L0241031120501	PCR_SR_PLS_U	LB	01C
L0241031130401	PCR_SALIVA_O	LB	01C
L0241031130501	PCR_SALIVA_U	LB	01C

LB: Laboratory code

**Appendix K. Baseline Covariate Groups Evaluated in this Request**

<b>Covariate Type</b>	<b>Covariate Name</b>	<b>Care Setting</b>	<b>Evaluation Window</b>
Demographics	Mean age (continuous)	--	Index date
Demographics	Age: 18-44 years	--	Index date
Demographics	Age: 45-64 years	--	Index date
Demographics	Age: 65-74 years	--	Index date
Demographics	Age: 75-79 years	--	Index date
Demographics	Age: 80+ years	--	Index date
Demographics	Sex: Female	--	Index date
Demographics	Race: American Indian or Alaska Native	--	Index date
Demographics	Race: Asian	--	Index date
Demographics	Race: Black or African American	--	Index date
Demographics	Race: Native Hawaiian or Other Pacific Islander	--	Index date
Demographics	Race: White	--	Index date
Demographics	Race: Unknown	--	Index date
Demographics	Hispanic ethnicity	--	Index date
Demographics	Calendar Year	--	Index date
Diabetes Comorbidity	aDCSI Severity Score (continuous)	--	(-183, -1)
Diabetes Comorbidity	aDCSI Severity Score Category: 0	--	(-183, -1)
Diabetes Comorbidity	aDCSI Severity Score Category: 1	--	(-183, -1)
Diabetes Comorbidity	aDCSI Severity Score Category: 2	--	(-183, -1)
Diabetes Comorbidity	aDCSI Severity Score Category: 3+	--	(-183, -1)
Diabetes Comorbidity	Mean number of outpatient hyperglycemia diagnoses	AV, OA	(-183, -1)
Diabetes Comorbidity	Nicotine Dependence (Smoking)	Any	(-183, -1)
Diabetes Comorbidity	Obesity	Any	(-183, -1)
Diabetes Comorbidity	Nephropathy	Any	(-183, -1)
Diabetes Comorbidity	Neuropathy	Any	(-183, -1)
Diabetes Comorbidity	Retinopathy	Any	(-183, -1)
Diabetes Comorbidity	Hospitalized Myocardial infarction	IP	(-183, -1)
Diabetes Comorbidity	Hospitalized Stroke/Transient Ischemic Attack	IP	(-183, -1)
Diabetes Comorbidity	Peripheral vascular disease	Any	(-183, -1)
Diabetes Comorbidity	Outpatient Diabetic Ketoacidosis	AV, OA	(-183, -1)
Other Comorbidity	Combined Comorbidity Score (continuous)	--	(-183, -1)
Other Comorbidity	Frailty Index (continuous)	Any	(-183, -1)
Other Comorbidity	Asthma	Any	(-183, -1)
Other Comorbidity	COPD	Any	(-183, -1)
Other Comorbidity	Heart Failure	Any	(-183, -1)
Other Comorbidity	Hypertension	Any	(-183, -1)
Other Comorbidity	Cancer	Any	(-183, -1)
Other Comorbidity	Chronic kidney disease	Any	(-183, -1)
Other Comorbidity	Hyperlipidemia	Any	(-183, -1)
Other Comorbidity	Psychosis or psychotic disorder	Any	(-183, -1)
Other Comorbidity	Rheumatological and inflammatory disease	Any	(-183, -1)
Other Comorbidity	Chronic liver disease	Any	(-183, -1)
Other Comorbidity	Coronary artery disease	Any	(-183, -1)
Other Comorbidity	Cerebrovascular disease	Any	(-183, -1)
Other Comorbidity	Outpatient COVID Diagnosis	AV, OA	(-14, 0)
Other Comorbidity	Positive Outpatient SARS-COV-2 PCR Test	AV, OA	(-14, 0)
Antidiabetic treatments	Metformin	Any	(-183, -1)
Antidiabetic treatments	Insulin	Any	(-183, -1)

**Appendix K. Baseline Covariate Groups Evaluated in this Request**

<b>Covariate Type</b>	<b>Covariate Name</b>	<b>Care Setting</b>	<b>Evaluation Window</b>
Antidiabetic treatments	Sulfonylureas	Any	(-183, -1)
Antidiabetic treatments	DPP-4 Inhibitors	Any	(-183, -1)
Antidiabetic treatments	GLP-1 agonists	Any	(-183, -1)
Antidiabetic treatments	SGLT-2 Inhibitors	Any	(-183, -1)
Antidiabetic treatments	Thiazolidinediones	Any	(-183, -1)
Antidiabetic treatments	Meglitindes	Any	(-183, -1)
Antidiabetic treatments	Alpha-glucosidase inhibitors	Any	(-183, -1)
COVID-19 treatments	Paxlovid	Any	(-14, -1)
COVID-19 treatments	Remdesivir	Any	(-14, -1)
COVID-19 treatments	Molnupiravir	Any	(-14, -1)
COVID-19 treatments	Hydroxychloroquine	Any	(-14, -1)
Other treatments	ACE Inhibitors	Any	(-183, -1)
Other treatments	ARBs	Any	(-183, -1)
Other treatments	Loop diuretics	Any	(-183, -1)
Other treatments	Other diuretics	Any	(-183, -1)
Other treatments	Statins	Any	(-183, -1)
Other treatments	Beta Blockers	Any	(-183, -1)
Other treatments	Calcium Channel Blockers	Any	(-183, -1)
Health Services Utilization	Mean number of ambulatory encounters	AV	(-183, -1)
Health Services Utilization	Mean number of other ambulatory encounters	OA	(-183, -1)
Health Services Utilization	Mean number of emergency department encounters	ED	(-183, -1)
Health Services Utilization	Mean number of inpatient encounters	IP	(-183, -1)
Health Services Utilization	Mean number of non-acute institutional stay encounters	IS	(-183, -1)
Health Services Utilization	Mean number of unique drug classes	Any	(-183, -1)
Health Services Utilization	Mean number of generics	Any	(-183, -1)
Health Services Utilization	Mean number of filled prescriptions	Any	(-183, -1)
Health Services Utilization	Mean number of unique antidiabetic drugs	Any	(-183, -1)

**Appendix L. Specifications Defining Parameters**

This request executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 12.2.2 to estimate risk of hyperglycemia in COVID patients treated with corticosteroid and azithromycin compared to COVID patients treated with azithromycin alone in the Sentinel Distributed Database (SDD).

**Query Period:** 05/01/2021 - 08/01/2023  
**Coverage Requirement:** Medical & Drug Coverage  
**Pre-index enrollment requirement:** 183 days  
**Post-index enrollment requirement:** None  
**Post-episode requirement for Type 2 analyses:** None  
**Enrollment gap:** 45 days  
**Restrictions:** Male and Female  
**Age groups:** 18-44, 45-64, 65-74, 75-79, 80+  
**Envelope macro:** Reclassify encounters during inpatient stay as inpatient  
**Never-exposed cohort:** No  
**Distribution of index-defining codes:** No  
**Distribution of outcome-defining codes:** Yes  
**Freeze data:** Yes

**Comparison 1**

Drug/Exposure		
Index Exposure/Comparator	Oral Azithromycin	Oral Azithromycin
Cohort Definition	First valid exposure episodes during query period	
Incidence Exposure washout period	0	
Build Episodes on Point Exposure?	Yes	
Incidence Criteria Care Setting	Any care setting	
Principal Diagnosis Position	Any	
Create Baseline Table?	Yes	
Inclusion/Exclusion Criteria		



Appendix L. Specifications Defining Parameters		
Inclusion/Exclusion group	Oral and injectable corticosteroids	Oral and injectable corticosteroids
Type of criteria	Inclusion	Exclusion
Evaluation Period Start	0	0
Evaluation Period End	0	0
Care Setting/PDX	N/A	N/A
Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively	Evaluation period should search for evidence of dispensing only	Evaluation period should search for evidence of dispensing only
Number of instances the criteria should be found in the evaluation period	1	1
Inclusion	Outpatient COVID (Dx or NAAT test)	
Type of criteria	Inclusion	
Evaluation Period Start	-14	
Evaluation Period End	0	
Care Setting/PDX	*Ambulatory visit; *Other ambulatory visit;	
Number of instances the criteria should be found in the evaluation period	1	
Inclusion	Type 2 diabetes diagnosis	
Type of criteria	Inclusion	
Evaluation Period Start	-183	
Evaluation Period End	0	
Care Setting/PDX	Any care setting	

<b>Appendix L. Specifications Defining Parameters</b>	
<b>Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively</b>	Evaluation period should search for evidence of admission date only for IP diagnoses
<b>Inclusion</b>	<b>Diabetes treatment (including insulin)</b>
<b>Type of criteria</b>	Inclusion
<b>Evaluation Period Start</b>	-183
<b>Evaluation Period End</b>	0
<b>Care Setting/PDX</b>	Any care setting
<b>Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively</b>	Evaluation period should search for evidence of dispensing only
<b>Number of instances the criteria should be found in the evaluation period</b>	1
<b>Exclusion group</b>	<b>Type 1 diabetes diagnosis</b>
<b>Type of criteria</b>	Exclusion
<b>Evaluation Period Start</b>	-183
<b>Evaluation Period End</b>	0
<b>Care Setting/PDX</b>	Any care setting
<b>Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively</b>	Evaluation period should search for evidence of admission date only for IP diagnoses
<b>Exclusion group</b>	<b>COVID in any care setting (Dx or NAAT)</b>
<b>Type of criteria</b>	Exclusion
<b>Evaluation Period Start</b>	-30
<b>Evaluation Period End</b>	-15
<b>Care Setting/PDX</b>	Any care setting

Appendix L. Specifications Defining Parameters	
Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively	Evaluation period should search for evidence of admission date only for IP diagnoses
<b>Exclusion group</b>	<b>Hyperglycemia/DKA</b>
<b>Type of criteria</b>	Exclusion
<b>Evaluation Period Start</b>	-183
<b>Evaluation Period End</b>	-1
<b>Care Setting/PDX</b>	Inpatient hospital stay; Emergency department encounter
Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively	Evaluation period should search for evidence of admission date only for IP diagnoses
<b>Exclusion group</b>	<b>Prior use of oral and injectable corticosteroids</b>
<b>Type of criteria</b>	Exclusion
<b>Evaluation Period Start</b>	-183
<b>Evaluation Period End</b>	-1
<b>Care Setting/PDX</b>	Any care setting
Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively	Evaluation period should search for evidence of dispensing only
<b>Number of instances the criteria should be found in the evaluation period</b>	1
<b>Exclusion group</b>	<b>Prior use of oral azithromycin</b>
<b>Type of criteria</b>	Exclusion
<b>Evaluation Period Start</b>	-183
<b>Evaluation Period End</b>	-1
<b>Care Setting/PDX</b>	Any care setting

<b>Appendix L. Specifications Defining Parameters</b>	
<b>Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively</b>	Evaluation period should search for evidence of dispensing only
<b>Number of instances the criteria should be found in the evaluation period</b>	1
<b>Exclusion group</b>	<b>Institutional stay (IS) Encounter (Skilled nursing facility encounter, hospice, etc.)</b>
<b>Type of criteria</b>	Exclusion
<b>Evaluation Period Start</b>	-183
<b>Evaluation Period End</b>	-1
<b>Care Setting/PDX</b>	Non-acute institutional stay (IS)
<b>Exclusion group</b>	<b>Inpatient Hospitalization</b>
<b>Type of criteria</b>	Exclusion
<b>Evaluation Period Start</b>	-14
<b>Evaluation Period End</b>	-1
<b>Care Setting/PDX</b>	Inpatient hospital stay (IP)
<b>Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively</b>	Evaluation period should search for evidence of admission date only
<b>At Risk Time</b>	
<b>Maximum exposure episode duration</b>	30

Appendix L. Specifications Defining Parameters	
Risk window interval start	Day 0
Censor treatment episode at evidence of:	*Death; *DP end date; *Query end date; *Occurrence of outcome
<b>Event/Outcome</b>	
Event/Outcome	<b>Hyperglycemia</b>
Incident event washout period	None
Care Setting	*Inpatient hospital stay; *Emergency department encounter
Event de-duplication	*De-duplicates occurrences of the same event code and code type on the same day
<b>Propensity Score Model Parameters</b>	
PS Model Label	cort_azith_ps
Covariates	See covariates tab

Appendix L. Specifications Defining Parameters	
Output Kaplan Meier Plot	Yes
<b>A. PS Matching</b>	
Ratio Type	Fixed ratio matching
Matching Ratio	1:1
Matching Caliper Settings	0.05
Analysis Type	Conditional and unconditional
<i>ICD-9-CM, HCPCS, and CPT codes are provided by Optum360. NDC codes are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."</i>	

<b>Appendix L. Specifications Defining Parameters</b>		
This request executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 12.2.2 to estimate risk of hyperglycemia in COVID patients treated with corticosteroid and azithromycin compared to COVID patients treated with azithromycin alone in the Sentinel Distributed Database (SDD).		
	<b>Comparison 2</b>	
<b>Drug/Exposure</b>		
<b>Index Exposure/Comparator</b>	<b>Oral Azithromycin</b>	<b>Oral Azithromycin</b>
<b>Cohort Definition</b>	First valid exposure episodes during query period	
<b>Incidence Exposure washout period</b>	0	
<b>Build Episodes on Point Exposure?</b>	Yes	
<b>Incidence Criteria Care Setting</b>	Any care setting	
<b>Principal Diagnosis Position</b>	Any	
<b>Create Baseline Table?</b>	Yes	
<b>Inclusion/Exclusion Criteria</b>		
<b>Inclusion/Exclusion group</b>	<b>Oral and injectable corticosteroids</b>	<b>Oral and injectable corticosteroids</b>
<b>Type of criteria</b>	<b>Inclusion</b>	<b>Exclusion</b>
<b>Evaluation Period Start</b>	0	0
<b>Evaluation Period End</b>	0	0
<b>Care Setting/PDX</b>	N/A	N/A
<b>Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively</b>	Evaluation period should search for evidence of dispensing only	Evaluation period should search for evidence of dispensing only
<b>Number of instances the criteria should be found in the evaluation period</b>	1	1
<b>Inclusion</b>	<b>Outpatient COVID (Dx or NAAT test)</b>	
<b>Type of criteria</b>	Inclusion	
<b>Evaluation Period Start</b>	-14	
<b>Evaluation Period End</b>	0	
<b>Care Setting/PDX</b>	*Ambulatory visit; *Other ambulatory visit;	
<b>Number of instances the criteria should be found in the evaluation period</b>	1	
<b>Inclusion</b>	<b>Type 2 diabetes diagnosis</b>	
<b>Type of criteria</b>	Inclusion	



<b>Appendix L. Specifications Defining Parameters</b>	
Evaluation Period Start	-183
Evaluation Period End	0
Care Setting/PDX	Any care setting
Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively	Evaluation period should search for evidence of admission date only for IP diagnoses
<b>Inclusion</b>	<b>Diabetes treatment (including insulin)</b>
Type of criteria	Inclusion
Evaluation Period Start	-183
Evaluation Period End	0
Care Setting/PDX	Any care setting
Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively	Evaluation period should search for evidence of dispensing only
Number of instances the criteria should be found in the evaluation period	1
<b>Exclusion group</b>	<b>Type 1 diabetes diagnosis</b>
Type of criteria	Exclusion
Evaluation Period Start	-183
Evaluation Period End	0
Care Setting/PDX	Any care setting
Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively	Evaluation period should search for evidence of admission date only for IP diagnoses
<b>Exclusion group</b>	<b>COVID in any care setting (Dx or NAAT)</b>
Type of criteria	Exclusion
Evaluation Period Start	-30
Evaluation Period End	-15
Care Setting/PDX	Any care setting

<b>Appendix L. Specifications Defining Parameters</b>	
<b>Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively</b>	Evaluation period should search for evidence of admission date only for IP diagnoses
<b>Exclusion group</b>	<b>Hyperglycemia/DKA</b>
<b>Type of criteria</b>	Exclusion
<b>Evaluation Period Start</b>	-183
<b>Evaluation Period End</b>	-1
<b>Care Setting/PDX</b>	Inpatient hospital stay; Emergency department encounter
<b>Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively</b>	Evaluation period should search for evidence of admission date only for IP diagnoses
<b>Exclusion group</b>	<b>Prior use of oral and injectable corticosteroids</b>
<b>Type of criteria</b>	Exclusion
<b>Evaluation Period Start</b>	-183
<b>Evaluation Period End</b>	-1
<b>Care Setting/PDX</b>	Any care setting
<b>Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively</b>	Evaluation period should search for evidence of dispensing only
<b>Number of instances the criteria should be found in the evaluation period</b>	1
<b>Exclusion group</b>	<b>Prior use of oral azithromycin</b>
<b>Type of criteria</b>	Exclusion
<b>Evaluation Period Start</b>	-183
<b>Evaluation Period End</b>	-1
<b>Care Setting/PDX</b>	Any care setting
<b>Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively</b>	Evaluation period should search for evidence of dispensing only

<b>Appendix L. Specifications Defining Parameters</b>	
<b>Number of instances the criteria should be found in the evaluation period</b>	1
<b>Exclusion group</b>	<b>Institutional stay (IS) Encounter (Skilled nursing facility encounter, hospice, etc.)</b>
<b>Type of criteria</b>	Exclusion
<b>Evaluation Period Start</b>	-183
<b>Evaluation Period End</b>	-1
<b>Care Setting/PDX</b>	Non-acute institutional stay (IS)
<b>Exclusion group</b>	<b>Inpatient Hospitalization</b>
<b>Type of criteria</b>	Exclusion
<b>Evaluation Period Start</b>	-14
<b>Evaluation Period End</b>	-1
<b>Care Setting/PDX</b>	Inpatient hospital stay (IP)
<b>Exclude evidence of days supply or hospital stay if inclusion/exclusion evaluation period includes dispensings or inpatient diagnoses, respectively</b>	Evaluation period should search for evidence of admission date only
<b>At Risk Time</b>	
<b>Maximum exposure episode duration</b>	30
<b>Risk window interval start</b>	Day 0
<b>Censor treatment episode at evidence of:</b>	*Death; *DP end date; *Query end date; *Occurrence of outcome
<b>Event/Outcome</b>	
<b>Event/Outcome</b>	<b>Hyperglycemia</b>
<b>Incident event washout period</b>	None
<b>Care Setting</b>	*Inpatient hospital stay, Primary diagnosis position only
<b>Event de-duplication</b>	*De-duplicates occurrences of the same event code and code type on the same day
<b>Propensity Score Model Parameters</b>	
<b>PS Model Label</b>	ipp_cort_azith_ps
<b>Covariates</b>	See covariates tab
<b>Output Kaplan Meier Plot</b>	Yes
<b>A. PS Matching</b>	

Appendix L. Specifications Defining Parameters	
Ratio Type	Fixed ratio matching
Matching Ratio	1:1
Matching Caliper Settings	0.05
Analysis Type	Conditional and unconditional

*ICD-9-CM, HCPCS, and CPT codes are provided by Optum360. NDC codes are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."*

Appendix M. Design Diagram of Cohort Entry Requirements, Index Exposure, and Event Outcome Assessment

**Cohort Design: QF-7810**

