

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.

Overview for Request: cder_sir_wp002

Request ID: cder_sir_wp002_ndsp_wp002

Request Description: In this report, we performed signal identification for Ozempic (specific form of semaglutide) by monitoring non-pregnancy and non-cancer outcomes among new users of Ozempic compared to new users of sitagliptin among type 2 diabetics. This is report 1 of 2. Report 2 contains the same analysis, but the cohort of type 2 diabetics was not permitted to have evidence of insulin dispensings in the baseline period.

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

Data Source: We distributed this query to five Sentinel Data Partners on August 12, 2022. The study period included data from January 1, 2018 through February 28, 2022. Please see Appendix A for a list of dates of available data for each Data Partner.

Study Design: We identified individuals with incident use of Ozempic (specific form of semaglutide) or sitagliptin, among a cohort who were >18 years of age with evidence of type 2 diabetes, and excluding those that had evidence of cancer, end stage renal disease (ESRD), or type 1 diabetes diagnosis in the prior 400 days. We 1:1 propensity score matched these users and we monitored these matched pairs for non-pregnancy and non-cancer outcomes. This is a Type 2 analysis using the Propensity Score Analysis and Signal Identification modules in the Query Request Package (QRP) documentation.

Exposures of Interest: We identified new users of Ozempic (specific form of semaglutide) and sitagliptin. Only the first qualifying treatment episode of the exposures of interest was evaluated. See Appendices C-D for a list of generic and brand names used to define exposures in this request.

Cohort Eligibility Criteria: To be included in the cohorts, we required eligible members to be continuously enrolled in health plans with medical and drug coverage for at least 400 days during which gaps in coverage of up to 45 days were allowed. We defined new use as no evidence of Ozempic or sitagliptin in the 365 days prior to the index dispensing. We included members with a type 2 diabetes diagnosis in the 400 days prior to the index dispensing. We excluded members with any cancer diagnosis, type 1 diabetes diagnosis, ESRD diagnosis, utilization of alternative forms of semaglutide (Rybelsus and Wegovy), or the opposite study drug in the 400 days prior to and including the index dispensing date. We included qualifying members ages 18 years or older. See Appendix F for a list of International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis codes used to define inclusion criteria in this request. See Appendix G for a list of generic and brand names, and Appendix H for a list of International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition (CPT-4) to define exclusions in this request.

Follow-up Time: We created exposure episodes based on the number of days of product supplied per dispensing in the outpatient pharmacy dispensing data. We bridged together episodes less than 14 days apart and added 14 days to the end of each episode. Follow-up began on the day after index dispensing and continued until the first occurrence of any of the following: 1) death, 2) disenrollment, 3) end of the query period, 4) end of the exposure episode, 5) end of Data Partner data, 6) dispensing of the opposite study drug, 7) dispensing of other semaglutide products (Rybelsus and Wegovy), 8) dispensing of a Dipeptidyl peptidase 4 (DPP-4) inhibitor, 9) dispensing of a glucagon-like peptide 1 (GLP-1) receptor agonist, or 10) 183 days following index dispensing.

Overview for Request: cder_sir_wp002

Propensity Score Estimation: We assessed age, sex, and calendar year on the day of dispensing and the following covariates in the prior 400 days to exposure initiation dispensing date and included them in the propensity score model: healthcare service utilization, Combined Comorbidity Score¹, acute myocardial infarction; ADHD, Conduct, Hyperkinetic Syndrome; alcohol use disorders, anemia, anxiety disorders, arrhythmia, asthma, autism spectrum disorders, autoimmune disease, bacterial infection, benign prostatic hyperplasia, cataracts, chronic kidney disease, coagulopathy, colonoscopy, COPD; cystic fibrosis and other metabolic developmental disorders, degenerative diseases of CNS; Depression, bipolar, or other depressive mood disorders; diabetes, drug use disorders, durable medical equipment, epilepsy, fecal occult blood test; fibromyalgia, chronic pain, and fatigue, fluid and electrolyte disorder, gallstones, glaucoma, heart failure and non ischemic heart disease, hip/pelvic fracture, HIV/AIDS, hyperparathyroidism, hyperlipidemia, hypertension, hypothyroidism, ischemic heart disease, leukemias and lymphomas; liver disease, cirrhosis, and other liver conditions; mammogram, medicines for gout, mental and physical impairments, migraine and chronic headache, muscular dystrophy, obesity, opioid disorder, organ transplant, osteoporosis with or without pathological fracture, other developmental delays, other infections, oxicam anti inflammatory drugs, pap smear, Parkinson's disease and secondary parkinsonism, peripheral vascular disease, personality disorders, pneumonia, PTSD, pressure and chronic ulcers, PSA test, psychosis, pulmonary circulation disorders, pulmonary disease, renal failure, rheumatoid arthritis/osteoarthritis, schizophrenia and other psychotic disorders, screening examinations and disease management, sertraline, spina bifida and other congenital anomalies of the nervous system, spinal cord injury, stroke/transient ischemic attack, sulfa antibiotics, tobacco use, traumatic brain injury and nonpsychotic mental disorders, viral hepatitis, weight loss, insulin dispensings, and insulin procedures. The Propensity Score Analysis (PSA) module was used to calculate the propensity scores and identify matched cohorts based on propensity scores within each Data Partner. Covariates were defined using ICD-10-CM, ICD-10-PCS, CPT-4, HCPCS, diagnosis and procedure codes as well as, NDC drug codes. For a list of codes used to defined A high dimensions propensity score (HDPS) analysis was run in addition to the conventional propensity score model. HDPS covariates were added to the pre-defined covariates listed above. Additional exposure associations selected by the HPDS model can be found in Appendix B, stratified by Data Partner.

Matching: The matching ratio for the propensity score was 1:1. Patients in the exposed and comparator cohorts were nearest neighbor matched without replacement. The matching caliper was 0.025.

Outcome Assessment via Signal Identification: Among the 1:1 matched Ozempic and sitagliptin pairs, we evaluated new health outcomes of interest (HOI). We used a hierarchical tree of ICD-10-CM diagnostic codes excluding C00-D49 (Neoplasms), O00-O9A (Pregnancy, childbirth and the puerperium), P00-P96 (Certain conditions originating in the perinatal period), Q00-Q99 (Congenital malformations, deformations, and chromosomal abnormalities), V00-Y99 (External causes of morbidity), and Z00-Z99 (Factors influencing health status and contact with health services).

In our primary analysis, we identified incident HOIs as the first inpatient or emergency department diagnosis to occur in 400 days relative to the date of HOI diagnosis. For an outcome to be considered incident, there were required to be no outcomes with the same first 3 digits of the ICD-10-CM code in the prior 400 days in any setting. We evaluated incident HOIs beginning 1 day after exposure initiation until the end of the exposure episode provided that both members of the matched pair were still able to contribute at-risk time for the outcomes of interest. In a sensitivity analysis, we identified the HOIs in any setting (inpatient, emergency department, or ambulatory). All other identification rules remained unchanged.

Tree-Based Scan Statistic: These data were evaluated via the TreeScan™ software (v.2.0) to determine whether there were imbalances in outcome occurrence between the two groups that rose to the level of statistical significance. TreeScan™ is a data-mining software that implements tree-based scan statistics. Under the null hypothesis, there is no position on the tree where outcomes are expected to occur in a ratio other than the fixed match ratio (1:1) of the cohort. We used unconditional Bernoulli tree-based scan statistic to calculate the log likelihood ratio for every 3rd-6th level node of the outcome tree. See Appendix K for calculation of test statistic.

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

Overview for Request: cder_sir_wp002

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

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

¹The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (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)

Table of Contents

<u>Glossary</u>	List of Terms to Define the Cohort Identification and Descriptive Analysis (CIDA) Found in this Report (CIDA)
<u>Glossary</u>	List of Terms to Define the Propensity Score Analysis (PSA) Found in this Report
<u>Table 1a</u>	Aggregated Unadjusted Characteristics of the Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022
<u>Table 1b</u>	Aggregated Adjusted Characteristics of the Propensity Score Model (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.025) in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022
<u>Table 1c</u>	Aggregated Unadjusted Characteristics of the High Dimensional Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022
<u>Table 1d</u>	Aggregated Adjusted Characteristics of the High Dimensional Propensity Score Model (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.025) in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022
<u>Table 2</u>	Summary of Time to End of At-Risk Period for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022
<u>Table 3</u>	Summary of Reasons for End of At-Risk Period for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022
<u>Table 4</u>	Summary of Time to End of At-Risk Period due to End of Exposure Episode for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022
<u>Table 5</u>	Summary of Time to End of At-Risk Period due to Occurrence of User-Defined Censoring Criteria for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022
<u>Table 6</u>	Summary of Time to End of At-Risk Period due to Evidence of Death for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022
<u>Table 7</u>	Summary of Time to End of At-Risk Period due to Disenrollment for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022
<u>Table 8</u>	Summary of Time to End of At-Risk Period due to End of Data for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022
<u>Table 9</u>	Signal Identification Outcome Assessment in Inpatient and Emergency Department Settings, via Unconditional Bernoulli Tree-Based Scan Statistic among Semaglutide (Ozempic) Initiators Matched to Sitagliptin Initiators, Conventional Propensity Score, Ratio 1:1, P-Value ≤ 0.05
<u>Table 10</u>	Signal Identification Outcome Assessment in Inpatient, Emergency Department, and Outpatient Settings, via Unconditional Bernoulli Tree-Based Scan Statistic among Semaglutide (Ozempic) Initiators Matched to Sitagliptin Initiators, Conventional Propensity Score, Ratio 1:1, P-Value ≤ 0.05
<u>Table 11</u>	Signal Identification Outcome Assessment in Inpatient and Emergency Department Settings, via Unconditional Bernoulli Tree-Based Scan Statistic among Semaglutide (Ozempic) Initiators Matched to Sitagliptin Initiators, Conventional Propensity Score with High Dimensional Propensity Score, Ratio 1:1, P-Value ≤ 0.05
<u>Table 12</u>	Signal Identification Outcome Assessment in Inpatient, Emergency Department, and Outpatient Settings, via Unconditional Bernoulli Tree-Based Scan Statistic among Semaglutide (Ozempic) Initiators Matched to Sitagliptin Initiators, Conventional Propensity Score High Dimensional Propensity Score, Ratio 1:1, P-Value ≤ 0.05
<u>Figure 1</u>	Histograms Depicting Propensity Score Distributions Before and After Adjustment for High Dimensional Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022
<u>Figure 2</u>	Histograms Depicting Propensity Score Distributions Before and After Adjustment for Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022
<u>Figure 3a</u>	Reasons for End of Follow-Up Among semaglutide in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Table of Contents

Figure 3b Reasons for End of Follow-Up Among sitagliptin in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

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

Appendix B Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Appendix C Generic and Brand Names of Medical Products Used to Define Exposure of Interest in this Request

Appendix D Generic and Brand Names of Medical Products Used to Define Comparator in this Request

Appendix E Generic and Brand Names of Medical Products Used to Define Censor-Defining Codes in this Request

Appendix F International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Inclusions in this Request

Appendix G Generic and Brand Names of Medical Products Used to Define Exclusions in this Request

Appendix H International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Appendix I Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Appendix J International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS), Current Procedural Terminology, Fourth Edition (CPT-4), and Healthcare Common Procedure Coding System (HCPCS) Codes Used to Define Covariates in this Request

Appendix K Calculation of the Test Statistic for Unconditional Bernoulli Probability

Appendix L Specifications Defining Parameters for this Request

Appendix M Specifications Defining Parameters for Baseline Characteristics in this Request

Appendix N Diagram Detailing the Design of this Request

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

*all terms may not be used in this report

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

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

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

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

*all terms may not be used in this report

Table 1a. Aggregated Unadjusted Characteristics of the Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product		Covariate Balance			
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
Unique patients	182,003	100.0%	334,156	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	62.3	10.4	67.1	11.3	-4.767	-0.440
Age						
18-39 years	8,083	4.4%	9,905	3.0%	1.477	0.078
40-64 years	84,342	46.3%	111,232	33.3%	13.054	0.269
≥ 65 years	89,578	49.2%	213,019	63.7%	-14.530	-0.296
Sex						
Female	100,179	55.0%	181,055	54.2%	0.860	0.017
Male	81,824	45.0%	153,101	45.8%	-0.860	-0.017
Race ⁴						
American Indian or Alaska Native	2,137	1.2%	1,514	0.5%	0.721	0.080
Asian	2,428	1.3%	12,235	3.7%	-2.327	-0.150
Black or African American	16,250	8.9%	38,738	11.6%	-2.664	-0.088
Native Hawaiian or Other Pacific Islander	353	0.2%	983	0.3%	-0.100	-0.020
Unknown	65,410	35.9%	97,811	29.3%	6.668	0.143
White	95,425	52.4%	182,875	54.7%	-2.297	-0.046
Hispanic origin						
Yes	4,937	2.7%	13,884	4.2%	-1.442	-0.079
No	105,296	57.9%	219,266	65.6%	-7.764	-0.160
Unknown	71,770	39.4%	101,006	30.2%	9.206	0.194
Year						
2018	12,970	7.1%	99,142	29.7%	-22.543	-0.608
2019	43,761	24.0%	92,323	27.6%	-3.585	-0.082
2020	50,378	27.7%	74,255	22.2%	5.458	0.126
2021	71,036	39.0%	66,276	19.8%	19.196	0.431
2022	3,858	2.1%	2,160	0.6%	1.473	0.126
Health Characteristics						
Combined comorbidity score ⁵	2.0	2.1	2.0	2.3	-0.088	-0.040
Anemia	33,379	18.3%	68,842	20.6%	-2.262	-0.057
Arrhythmia	33,787	18.6%	66,463	19.9%	-1.326	-0.034
Autoimmune disease	20,413	11.2%	29,613	8.9%	2.354	0.078
Bacterial infection	40,798	22.4%	79,649	23.8%	-1.420	-0.034
Coagulopathy	4,071	2.2%	9,014	2.7%	-0.461	-0.030
Colonoscopy	18,186	10.0%	28,774	8.6%	1.381	0.048
Degenerative Disease of CNS	49,673	27.3%	87,679	26.2%	1.053	0.024
Durable Medical Equipment	4,269	2.3%	5,974	1.8%	0.558	0.039
Fecal occult blood test	7,444	4.1%	17,423	5.2%	-1.124	-0.053
Fluid and electrolyte disorder	19,167	10.5%	43,371	13.0%	-2.448	-0.076
Gallstones	3,883	2.1%	8,088	2.4%	-0.287	-0.019
HPV DNA test	0	0.0%	0	0.0%	NaN	NaN

Table 1a. Aggregated Unadjusted Characteristics of the Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product		Covariate Balance			
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
Hyperparathyroidism	2,143	1.2%	2,987	0.9%	0.284	0.028
Kawasaki Disease	*****	*****	*****	*****	0.002	0.004
Mammogram	51,179	28.1%	78,786	23.6%	4.542	0.104
Organ Transplant	1,751	1.0%	2,652	0.8%	0.168	0.018
Other Infections (mumps, flu/influenza, Herpes, Coxsackie, Epstein-Barr, Cytomegalovirus, Histoplasmosis, Parvovirus B19, Pneumocytosis)	8,537	4.7%	16,313	4.9%	-0.191	-0.009
PSA Test	37,414	20.6%	69,014	20.7%	-0.096	-0.002
Pap smear	16,051	8.8%	20,465	6.1%	2.695	0.103
Psychosis	50,088	27.5%	79,081	23.7%	3.855	0.088
Pulmonary circulation disorders	4,033	2.2%	7,984	2.4%	-0.173	-0.012
Pulmonary Disease	41,138	22.6%	72,794	21.8%	0.818	0.020
Renal Failure	25,998	14.3%	48,986	14.7%	-0.375	-0.011
Reyes Syndrome	0	0.0%	0	0.0%	NaN	NaN
Screening examinations and disease management	31,469	17.3%	49,445	14.8%	2.493	0.068
Thrombotic Thrombocytopenic purpura	19	0.0%	27	0.0%	0.002	0.002
Weight Loss	759	0.4%	3,201	1.0%	-0.541	-0.065
Medicines for gout	111,715	61.4%	192,742	57.7%	3.701	0.075
Oxicam anti inflammatory drugs	43,688	24.0%	73,117	21.9%	2.123	0.051
Sertraline	12,372	6.8%	20,539	6.1%	0.651	0.026
Sulfa Antibiotics	20,381	11.2%	34,303	10.3%	0.933	0.030
Acute Myocardial Infarction	3,591	2.0%	7,323	2.2%	-0.218	-0.015
Alzheimers	769	0.4%	6,033	1.8%	-1.383	-0.132
Asthma	23,162	12.7%	34,868	10.4%	2.292	0.072
Benign Prostatic Hyperplasia	17,715	9.7%	38,752	11.6%	-1.864	-0.060
Cataracts	48,663	26.7%	90,906	27.2%	-0.467	-0.011
CKD	42,136	23.2%	70,723	21.2%	1.987	0.048
COPD	27,022	14.8%	53,891	16.1%	-1.280	-0.035
Depression, Bipolar or other depressive mood disorders	51,219	28.1%	78,633	23.5%	4.610	0.105
Diabetes	182,003	100.0%	334,149	100.0%	0.002	0.006
Glaucoma	20,449	11.2%	43,316	13.0%	-1.727	-0.053
Heart Failure and Non-Ischemic Heart Disease	20,829	11.4%	39,312	11.8%	-0.320	-0.010
Hip/Pelvic Fracture	494	0.3%	2,127	0.6%	-0.365	-0.054
Hyperlipidemia	156,494	86.0%	281,205	84.2%	1.830	0.051
Hypertension	158,918	87.3%	291,946	87.4%	-0.052	-0.002
Hypothyroidism	44,140	24.3%	74,728	22.4%	1.889	0.045
Ischemic Heart Disease	43,567	23.9%	80,289	24.0%	-0.090	-0.002

Table 1a. Aggregated Unadjusted Characteristics of the Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product		Covariate Balance			
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
Non-Alzheimer's dementia	2,963	1.6%	17,268	5.2%	-3.540	-0.196
Osteoporosis With or Without Pathological Fracture	8,897	4.9%	23,267	7.0%	-2.075	-0.088
Parkinson's Disease and Secondary Parkinsonism	1,148	0.6%	3,863	1.2%	-0.525	-0.056
Pneumonia, All-cause	8,932	4.9%	19,269	5.8%	-0.859	-0.038
Rheumatoid Arthritis/Osteoarthritis	70,848	38.9%	124,091	37.1%	1.791	0.037
Stroke/Transient Ischemic attack	8,652	4.8%	22,891	6.9%	-2.097	-0.090
ADHD, Conduct Disorders, Hyperkinetic Syndrome	3,284	1.8%	4,268	1.3%	0.527	0.043
Alcohol Use Disorders	2,415	1.3%	5,597	1.7%	-0.348	-0.029
Autism Spectrum Disorders	410	0.2%	766	0.2%	-0.004	-0.001
Anxiety Disorders	44,037	24.2%	68,960	20.6%	3.559	0.085
Bipolar Disorder	9,766	5.4%	15,549	4.7%	0.713	0.033
Cerebral Palsy	211	0.1%	699	0.2%	-0.093	-0.023
Cystic Fibrosis and Other Metabolic Developmental Disorders	2,352	1.3%	4,067	1.2%	0.075	0.007
Depressive Disorders	45,834	25.2%	70,080	21.0%	4.211	0.100
Drug Use Disorders	7,434	4.1%	12,725	3.8%	0.276	0.014
Epilepsy	2,748	1.5%	7,029	2.1%	-0.594	-0.045
Fibromyalgia, Chronic Pain and Fatigue	56,681	31.1%	88,156	26.4%	4.761	0.105
HIV/AIDS	892	0.5%	1,627	0.5%	0.003	0.000
Intellectual Disabilities and Related Conditions	1,243	0.7%	3,643	1.1%	-0.407	-0.043
Learning Disabilities	355	0.2%	937	0.3%	-0.085	-0.018
Leukemias and Lymphomas	132	0.1%	294	0.1%	-0.015	-0.005
Liver Disease, Cirrhosis and Other Liver Conditions	21,855	12.0%	31,399	9.4%	2.612	0.085
Migraine and Chronic Headache	11,170	6.1%	15,396	4.6%	1.530	0.068
Mobility Impairments	3,010	1.7%	9,290	2.8%	-1.126	-0.077
Muscular Dystrophy	73	0.0%	192	0.1%	-0.017	-0.008
Multiple Sclerosis and Transverse Myelitis	946	0.5%	1,465	0.4%	0.081	0.012
Obesity	111,256	61.1%	133,931	40.1%	21.048	0.431
Opioid Use Disorder	4,927	2.7%	7,479	2.2%	0.469	0.030
Other Developmental Delays	249	0.1%	589	0.2%	-0.039	-0.010
Peripheral vascular disease	27,760	15.3%	58,180	17.4%	-2.159	-0.058
Personality Disorders	4,096	2.3%	6,344	1.9%	0.352	0.025
Post-Traumatic Stress Disorder (PTSD)	4,276	2.3%	5,183	1.6%	0.798	0.058
Pressure and Chronic Ulcers	8,845	4.9%	14,889	4.5%	0.404	0.019

Table 1a. Aggregated Unadjusted Characteristics of the Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product		Covariate Balance			
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
Schizophrenia	3,099	1.7%	8,537	2.6%	-0.852	-0.059
<i>Schizophrenia and Other Psychotic disorders</i>	4,306	2.4%	12,273	3.7%	-1.307	-0.076
Sensory - Blindness and Visual Impairment	534	0.3%	1,619	0.5%	-0.191	-0.031
Sensory - Deafness and Hearing Impairment	10,094	5.5%	21,697	6.5%	-0.947	-0.040
<i>Spina Bifida and Other Congenital Anomalies of the Nervous System</i>	315	0.2%	494	0.1%	0.025	0.006
<i>Spinal Cord Injury</i>	688	0.4%	1,869	0.6%	-0.181	-0.027
Tobacco Use	21,275	11.7%	41,206	12.3%	-0.642	-0.020
<i>Traumatic Brain Injury and Nonpsychotic Mental Disorders due to Brain Damage</i>	629	0.3%	1,362	0.4%	-0.062	-0.010
<i>Viral Hepatitis</i>	1,677	0.9%	4,181	1.3%	-0.330	-0.032
<i>Mental and Physical Impairments</i>	14,613	8.0%	34,789	10.4%	-2.382	-0.082
<i>Insulin dispensings</i>	87,812	48.2%	76,047	22.8%	25.490	0.553
<i>Insulin procedures</i>	10,228	5.6%	13,038	3.9%	1.718	0.081
Health Service Utilization Intensity Metrics						
<i>Mean number of ambulatory encounters</i>	22.1	17.9	19.1	16.7	2.940	0.170
Mean number of emergency room encounters	0.6	1.6	0.6	1.8	-0.071	-0.042
Mean number of inpatient hospital encounters	0.1	0.5	0.2	0.6	-0.052	-0.097
<i>Mean number of non-acute institutional encounters</i>	0.0	0.2	0.1	0.4	-0.045	-0.144
Mean number of other ambulatory encounters	4.9	9.5	5.8	13.6	-0.865	-0.074
<i>Mean number of filled prescriptions</i>	54.5	40.8	48.0	40.2	6.549	0.162
<i>Mean number of generics</i>	13.3	6.7	11.5	6.3	1.816	0.281

Table 1a. Aggregated Unadjusted Characteristics of the Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	Medical Product				Covariate Balance	
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
Patient Characteristics ^{1,2}	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
Mean number of unique drug classes dispensed	11.6	5.7	10.2	5.4	1.367	0.245

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

²Covariates in italics were included in the propensity score logistic regression model.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (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)

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

Table 1b. Aggregated Adjusted Characteristics of the Propensity Score Model (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.025) in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product		Covariate Balance			
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
Unique patients	134,007	73.6%	134,007	40.1%	N/A	N/A
Demographic Characteristics						
Age (years)	63.6	10.1	63.5	11.3	0.040	0.004
Age						
18-39 years	4,590	3.4%	6,270	4.7%	-1.254	-0.064
40-64 years	57,629	43.0%	57,365	42.8%	0.197	0.004
≥ 65 years	71,788	53.6%	70,372	52.5%	1.057	0.021
Sex						
Female	72,729	54.3%	72,673	54.2%	0.042	0.001
Male	61,278	45.7%	61,334	45.8%	-0.042	-0.001
Race ⁴						
American Indian or Alaska Native	1,518	1.1%	601	0.4%	0.684	0.077
Asian	1,949	1.5%	3,573	2.7%	-1.212	-0.085
Black or African American	11,720	8.7%	15,029	11.2%	-2.469	-0.082
Native Hawaiian or Other Pacific Islander	296	0.2%	378	0.3%	-0.061	-0.012
Unknown	45,767	34.2%	48,289	36.0%	-1.882	-0.039
White	72,757	54.3%	66,137	49.4%	4.940	0.099
Hispanic origin						
Yes	3,565	2.7%	5,536	4.1%	-1.471	-0.081
No	80,004	59.7%	78,221	58.4%	1.331	0.027
Unknown	50,438	37.6%	50,250	37.5%	0.140	0.003
Year						
2018	12,649	9.4%	12,058	9.0%	0.441	0.015
2019	36,419	27.2%	36,754	27.4%	-0.250	-0.006
2020	38,047	28.4%	38,363	28.6%	-0.236	-0.005
2021	45,047	33.6%	44,976	33.6%	0.053	0.001
2022	1,845	1.4%	1,856	1.4%	-0.008	-0.001
Health Characteristics						
Combined comorbidity score ⁵	1.9	2.1	1.9	2.1	0.002	0.001
<i>Anemia</i>	24,700	18.4%	24,833	18.5%	-0.099	-0.003
<i>Arrhythmia</i>	24,605	18.4%	24,409	18.2%	0.146	0.004
<i>Autoimmune disease</i>	13,471	10.1%	13,471	10.1%	0.000	0.000
<i>Bacterial infection</i>	29,753	22.2%	29,722	22.2%	0.023	0.001
<i>Coagulopathy</i>	3,069	2.3%	3,022	2.3%	0.035	0.002
<i>Colonoscopy</i>	12,865	9.6%	12,893	9.6%	-0.021	-0.001
<i>Degenerative Disease of CNS</i>	35,173	26.2%	35,144	26.2%	0.022	0.000
<i>Durable Medical Equipment</i>	2,892	2.2%	2,816	2.1%	0.057	0.004
<i>Fecal occult blood test</i>	5,876	4.4%	5,979	4.5%	-0.077	-0.004
<i>Fluid and electrolyte disorder</i>	14,472	10.8%	14,520	10.8%	-0.036	-0.001
<i>Gallstones</i>	2,894	2.2%	2,913	2.2%	-0.014	-0.001
HPV DNA test	0	0.0%	0	0.0%	NaN	NaN

Table 1b. Aggregated Adjusted Characteristics of the Propensity Score Model (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.025) in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product		Covariate Balance			
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
<i>Hyperparathyroidism</i>	1,370	1.0%	1,377	1.0%	-0.005	-0.001
<i>Kawasaki Disease</i>	*****	*****	*****	*****	0.003	0.005
<i>Mammogram</i>	36,119	27.0%	36,235	27.0%	-0.087	-0.002
<i>Organ Transplant</i>	1,207	0.9%	1,211	0.9%	-0.003	-0.000
<i>Other Infections (mumps, flu/influenza, Herpes, Coxsackie, Epstein-Barr, Cytomegalovirus, Histoplasmosis, Parvovirus B19, Pneumocytosis)</i>	6,312	4.7%	6,334	4.7%	-0.016	-0.001
<i>PSA Test</i>	28,097	21.0%	28,229	21.1%	-0.099	-0.002
<i>Pap smear</i>	10,573	7.9%	10,455	7.8%	0.088	0.003
<i>Psychosis</i>	34,484	25.7%	34,403	25.7%	0.060	0.001
<i>Pulmonary circulation disorders</i>	2,931	2.2%	2,887	2.2%	0.033	0.002
<i>Pulmonary Disease</i>	29,412	21.9%	29,237	21.8%	0.131	0.003
<i>Renal Failure</i>	18,733	14.0%	18,574	13.9%	0.119	0.003
<i>Reyes Syndrome</i>	0	0.0%	0	0.0%	NaN	NaN
<i>Screening examinations and disease management</i>	21,985	16.4%	21,885	16.3%	0.075	0.002
<i>Thrombotic Thrombocytopenic purpura</i>	15	0.0%	*****	*****	0.004	0.004
<i>Weight Loss</i>	623	0.5%	643	0.5%	-0.015	-0.002
<i>Medicines for gout</i>	80,531	60.1%	80,431	60.0%	0.075	0.002
<i>Oxicam anti inflammatory drugs</i>	31,399	23.4%	31,304	23.4%	0.071	0.002
<i>Sertraline</i>	8,712	6.5%	8,711	6.5%	0.001	0.000
<i>Sulfa Antibiotics</i>	14,281	10.7%	14,243	10.6%	0.028	0.001
<i>Acute Myocardial Infarction</i>	2,563	1.9%	2,582	1.9%	-0.014	-0.001
<i>Alzheimers</i>	685	0.5%	1,260	0.9%	-0.429	-0.051
<i>Asthma</i>	15,811	11.8%	15,556	11.6%	0.190	0.006
<i>Benign Prostatic Hyperplasia</i>	13,761	10.3%	13,799	10.3%	-0.028	-0.001
<i>Cataracts</i>	35,659	26.6%	35,559	26.5%	0.075	0.002
<i>CKD</i>	29,219	21.8%	29,005	21.6%	0.160	0.004
<i>COPD</i>	20,062	15.0%	20,068	15.0%	-0.004	-0.000
<i>Depression, Bipolar or other depressive mood disorders</i>	35,069	26.2%	34,992	26.1%	0.057	0.001
<i>Diabetes</i>	134,007	100.0%	134,007	100.0%	0.000	NaN
<i>Glaucoma</i>	15,384	11.5%	15,338	11.4%	0.034	0.001
<i>Heart Failure and Non-Ischemic Heart Disease</i>	14,808	11.1%	14,800	11.0%	0.006	0.000
<i>Hip/Pelvic Fracture</i>	425	0.3%	414	0.3%	0.008	0.001
<i>Hyperlipidemia</i>	114,225	85.2%	114,364	85.3%	-0.104	-0.003
<i>Hypertension</i>	116,485	86.9%	116,381	86.8%	0.078	0.002
<i>Hypothyroidism</i>	31,212	23.3%	31,413	23.4%	-0.150	-0.004
<i>Ischemic Heart Disease</i>	31,243	23.3%	31,080	23.2%	0.122	0.003

Table 1b. Aggregated Adjusted Characteristics of the Propensity Score Model (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.025) in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product		Covariate Balance			
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
Non-Alzheimer's dementia	2,514	1.9%	3,945	2.9%	-1.068	-0.070
Osteoporosis With or Without Pathological Fracture	7,189	5.4%	7,118	5.3%	0.053	0.002
Parkinson's Disease and Secondary Parkinsonism	962	0.7%	959	0.7%	0.002	0.000
Pneumonia, All-cause	6,613	4.9%	6,605	4.9%	0.006	0.000
Rheumatoid Arthritis/Osteoarthritis	50,666	37.8%	50,636	37.8%	0.022	0.000
Stroke/Transient Ischemic attack	6,836	5.1%	6,923	5.2%	-0.065	-0.003
ADHD, Conduct Disorders, Hyperkinetic Syndrome	2,060	1.5%	1,985	1.5%	0.056	0.005
Alcohol Use Disorders	1,890	1.4%	1,895	1.4%	-0.004	-0.000
Autism Spectrum Disorders	299	0.2%	308	0.2%	-0.007	-0.001
Anxiety Disorders	30,330	22.6%	30,369	22.7%	-0.029	-0.001
Bipolar Disorder	6,403	4.8%	7,133	5.3%	-0.545	-0.025
Cerebral Palsy	157	0.1%	265	0.2%	-0.081	-0.020
Cystic Fibrosis and Other Metabolic Developmental Disorders	1,650	1.2%	1,625	1.2%	0.019	0.002
Depressive Disorders	31,521	23.5%	30,896	23.1%	0.466	0.011
Drug Use Disorders	5,306	4.0%	5,294	4.0%	0.009	0.000
Epilepsy	2,139	1.6%	2,265	1.7%	-0.094	-0.007
Fibromyalgia, Chronic Pain and Fatigue	39,266	29.3%	39,417	29.4%	-0.113	-0.002
HIV/AIDS	657	0.5%	656	0.5%	0.001	0.000
Intellectual Disabilities and Related Conditions	902	0.7%	1,402	1.0%	-0.373	-0.040
Learning Disabilities	269	0.2%	305	0.2%	-0.027	-0.006
Leukemias and Lymphomas	96	0.1%	112	0.1%	-0.012	-0.004
Liver Disease, Cirrhosis and Other Liver Conditions	14,782	11.0%	14,751	11.0%	0.023	0.001
Migraine and Chronic Headache	7,423	5.5%	7,320	5.5%	0.077	0.003
Mobility Impairments	2,443	1.8%	2,764	2.1%	-0.240	-0.017
Muscular Dystrophy	59	0.0%	57	0.0%	0.001	0.001
Multiple Sclerosis and Transverse Myelitis	627	0.5%	680	0.5%	-0.040	-0.006
Obesity	73,205	54.6%	73,362	54.7%	-0.117	-0.002
Opioid Use Disorder	3,398	2.5%	3,338	2.5%	0.045	0.003
Other Developmental Delays	189	0.1%	187	0.1%	0.001	0.000
Peripheral vascular disease	20,704	15.4%	20,767	15.5%	-0.047	-0.001
Personality Disorders	2,814	2.1%	2,760	2.1%	0.040	0.003
Post-Traumatic Stress Disorder (PTSD)	2,714	2.0%	2,642	2.0%	0.054	0.004

Table 1b. Aggregated Adjusted Characteristics of the Propensity Score Model (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.025) in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	Medical Product				Covariate Balance	
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
Patient Characteristics ^{1,2}	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
<i>Pressure and Chronic Ulcers</i>	5,926	4.4%	5,931	4.4%	-0.004	-0.000
Schizophrenia	2,505	1.9%	2,677	2.0%	-0.128	-0.009
<i>Schizophrenia and Other Psychotic disorders</i>	3,519	2.6%	3,531	2.6%	-0.009	-0.001
Sensory - Blindness and Visual Impairment	381	0.3%	514	0.4%	-0.099	-0.017
Sensory - Deafness and Hearing Impairment	7,865	5.9%	7,026	5.2%	0.626	0.027
<i>Spina Bifida and Other Congenital Anomalies of the Nervous System</i>	216	0.2%	201	0.1%	0.011	0.003
<i>Spinal Cord Injury</i>	541	0.4%	534	0.4%	0.005	0.001
<i>Tobacco Use</i>	16,020	12.0%	16,232	12.1%	-0.158	-0.005
<i>Traumatic Brain Injury and Nonpsychotic Mental Disorders due to Brain Damage</i>	465	0.3%	456	0.3%	0.007	0.001
<i>Viral Hepatitis</i>	1,335	1.0%	1,302	1.0%	0.025	0.002
<i>Mental and Physical Impairments</i>	11,354	8.5%	11,326	8.5%	0.021	0.001
Insulin dispensings	49,501	36.9%	48,983	36.6%	0.387	0.008
<i>Insulin procedures</i>	6,502	4.9%	6,511	4.9%	-0.007	-0.000
Health Service Utilization Intensity Metrics						
Mean number of ambulatory encounters	20.7	16.5	20.6	18.1	0.098	0.006
Mean number of emergency room encounters	0.6	1.7	0.6	1.4	-0.006	-0.004
Mean number of inpatient hospital encounters	0.2	0.5	0.2	0.5	-0.000	-0.000
Mean number of non-acute institutional encounters	0.0	0.2	0.0	0.3	-0.017	-0.064
Mean number of other ambulatory encounters	4.7	9.6	5.2	11.9	-0.540	-0.050
Mean number of filled prescriptions	51.2	38.4	51.1	41.9	0.097	0.002
Mean number of generics dispensed	12.6	6.3	12.4	6.6	0.209	0.033

Table 1b. Aggregated Adjusted Characteristics of the Propensity Score Model (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.025) in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	Medical Product				Covariate Balance	
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
Patient Characteristics^{1,2}	Number/ Mean	Percent/ Standard Deviation³	Number/ Mean	Percent/ Standard Deviation³		
Mean number of unique drug classes dispensed	11.0	5.4	10.9	5.7	0.014	0.002

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

²Covariates in italics were included in the propensity score logistic regression model.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (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)

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

Table 1c. Aggregated Unadjusted Characteristics of the High Dimensional Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product		Covariate Balance			
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
Unique patients	182,003	100.0%	334,156	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	62.3	10.4	67.1	11.3	-4.767	-0.440
Age						
18-39 years	8,083	4.4%	9,905	3.0%	1.477	0.078
40-64 years	84,342	46.3%	111,232	33.3%	13.054	0.269
≥ 65 years	89,578	49.2%	213,019	63.7%	-14.530	-0.296
Sex						
Female	100,179	55.0%	181,055	54.2%	0.860	0.017
Male	81,824	45.0%	153,101	45.8%	-0.860	-0.017
Race ⁴						
American Indian or Alaska Native	2,137	1.2%	1,514	0.5%	0.721	0.080
Asian	2,428	1.3%	12,235	3.7%	-2.327	-0.150
Black or African American	16,250	8.9%	38,738	11.6%	-2.664	-0.088
Native Hawaiian or Other Pacific Islander	353	0.2%	983	0.3%	-0.100	-0.020
Unknown	65,410	35.9%	97,811	29.3%	6.668	0.143
White	95,425	52.4%	182,875	54.7%	-2.297	-0.046
Hispanic origin						
Yes	4,937	2.7%	13,884	4.2%	-1.442	-0.079
No	105,296	57.9%	219,266	65.6%	-7.764	-0.160
Unknown	71,770	39.4%	101,006	30.2%	9.206	0.194
Year						
2018	12,970	7.1%	99,142	29.7%	-22.543	-0.608
2019	43,761	24.0%	92,323	27.6%	-3.585	-0.082
2020	50,378	27.7%	74,255	22.2%	5.458	0.126
2021	71,036	39.0%	66,276	19.8%	19.196	0.431
2022	3,858	2.1%	2,160	0.6%	1.473	0.126
Health Characteristics						
Combined comorbidity score ⁵	2.0	2.1	2.0	2.3	-0.088	-0.040
Anemia	33,379	18.3%	68,842	20.6%	-2.262	-0.057
Arrhythmia	33,787	18.6%	66,463	19.9%	-1.326	-0.034
Autoimmune disease	20,413	11.2%	29,613	8.9%	2.354	0.078
Bacterial infection	40,798	22.4%	79,649	23.8%	-1.420	-0.034
Coagulopathy	4,071	2.2%	9,014	2.7%	-0.461	-0.030
Colonoscopy	18,186	10.0%	28,774	8.6%	1.381	0.048
Degenerative Disease of CNS	49,673	27.3%	87,679	26.2%	1.053	0.024
Durable Medical Equipment	4,269	2.3%	5,974	1.8%	0.558	0.039
Fecal occult blood test	7,444	4.1%	17,423	5.2%	-1.124	-0.053
Fluid and electrolyte disorder	19,167	10.5%	43,371	13.0%	-2.448	-0.076
Gallstones	3,883	2.1%	8,088	2.4%	-0.287	-0.019
HPV DNA test	0	0.0%	0	0.0%	NaN	NaN
Hyperparathyroidism	2,143	1.2%	2,987	0.9%	0.284	0.028

Table 1c. Aggregated Unadjusted Characteristics of the High Dimensional Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product semaglutide		Medical Product sitagliptin		Covariate Balance	
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³	Absolute Difference	Standardized Difference
Kawasaki Disease	*****	*****	*****	*****	0.002	0.004
<i>Mammogram</i>	<i>51,179</i>	<i>28.1%</i>	<i>78,786</i>	<i>23.6%</i>	<i>4.542</i>	<i>0.104</i>
<i>Organ Transplant</i>	<i>1,751</i>	<i>1.0%</i>	<i>2,652</i>	<i>0.8%</i>	<i>0.168</i>	<i>0.018</i>
<i>Other Infections (mumps, flu/influenza, Herpes, Coxsackie, Epstein-Barr, Cytomegalovirus, Histoplasmosis, Parvovirus B19, Pneumocytosis)</i>	<i>8,537</i>	<i>4.7%</i>	<i>16,313</i>	<i>4.9%</i>	<i>-0.191</i>	<i>-0.009</i>
<i>PSA Test</i>	<i>37,414</i>	<i>20.6%</i>	<i>69,014</i>	<i>20.7%</i>	<i>-0.096</i>	<i>-0.002</i>
<i>Pap smear</i>	<i>16,051</i>	<i>8.8%</i>	<i>20,465</i>	<i>6.1%</i>	<i>2.695</i>	<i>0.103</i>
<i>Psychosis</i>	<i>50,088</i>	<i>27.5%</i>	<i>79,081</i>	<i>23.7%</i>	<i>3.855</i>	<i>0.088</i>
<i>Pulmonary circulation disorders</i>	<i>4,033</i>	<i>2.2%</i>	<i>7,984</i>	<i>2.4%</i>	<i>-0.173</i>	<i>-0.012</i>
<i>Pulmonary Disease</i>	<i>41,138</i>	<i>22.6%</i>	<i>72,794</i>	<i>21.8%</i>	<i>0.818</i>	<i>0.020</i>
<i>Renal Failure</i>	<i>25,998</i>	<i>14.3%</i>	<i>48,986</i>	<i>14.7%</i>	<i>-0.375</i>	<i>-0.011</i>
<i>Reyes Syndrome</i>	<i>0</i>	<i>0.0%</i>	<i>0</i>	<i>0.0%</i>	<i>NaN</i>	<i>NaN</i>
<i>Screening examinations and disease management</i>	<i>31,469</i>	<i>17.3%</i>	<i>49,445</i>	<i>14.8%</i>	<i>2.493</i>	<i>0.068</i>
<i>Thrombotic Thrombocytopenic purpura</i>	<i>19</i>	<i>0.0%</i>	<i>27</i>	<i>0.0%</i>	<i>0.002</i>	<i>0.002</i>
<i>Weight Loss</i>	<i>759</i>	<i>0.4%</i>	<i>3,201</i>	<i>1.0%</i>	<i>-0.541</i>	<i>-0.065</i>
<i>Medicines for gout</i>	<i>111,715</i>	<i>61.4%</i>	<i>192,742</i>	<i>57.7%</i>	<i>3.701</i>	<i>0.075</i>
<i>Oxicam anti inflammatory drugs</i>	<i>43,688</i>	<i>24.0%</i>	<i>73,117</i>	<i>21.9%</i>	<i>2.123</i>	<i>0.051</i>
<i>Sertraline</i>	<i>12,372</i>	<i>6.8%</i>	<i>20,539</i>	<i>6.1%</i>	<i>0.651</i>	<i>0.026</i>
<i>Sulfa Antibiotics</i>	<i>20,381</i>	<i>11.2%</i>	<i>34,303</i>	<i>10.3%</i>	<i>0.933</i>	<i>0.030</i>
<i>Acute Myocardial Infarction</i>	<i>3,591</i>	<i>2.0%</i>	<i>7,323</i>	<i>2.2%</i>	<i>-0.218</i>	<i>-0.015</i>
<i>Alzheimers</i>	<i>769</i>	<i>0.4%</i>	<i>6,033</i>	<i>1.8%</i>	<i>-1.383</i>	<i>-0.132</i>
<i>Asthma</i>	<i>23,162</i>	<i>12.7%</i>	<i>34,868</i>	<i>10.4%</i>	<i>2.292</i>	<i>0.072</i>
<i>Benign Prostatic Hyperplasia</i>	<i>17,715</i>	<i>9.7%</i>	<i>38,752</i>	<i>11.6%</i>	<i>-1.864</i>	<i>-0.060</i>
<i>Cataracts</i>	<i>48,663</i>	<i>26.7%</i>	<i>90,906</i>	<i>27.2%</i>	<i>-0.467</i>	<i>-0.011</i>
<i>CKD</i>	<i>42,136</i>	<i>23.2%</i>	<i>70,723</i>	<i>21.2%</i>	<i>1.987</i>	<i>0.048</i>
<i>COPD</i>	<i>27,022</i>	<i>14.8%</i>	<i>53,891</i>	<i>16.1%</i>	<i>-1.280</i>	<i>-0.035</i>
<i>Depression, Bipolar or other depressive mood disorders</i>	<i>51,219</i>	<i>28.1%</i>	<i>78,633</i>	<i>23.5%</i>	<i>4.610</i>	<i>0.105</i>
<i>Diabetes</i>	<i>182,003</i>	<i>100.0%</i>	<i>334,149</i>	<i>100.0%</i>	<i>0.002</i>	<i>0.006</i>
<i>Glaucoma</i>	<i>20,449</i>	<i>11.2%</i>	<i>43,316</i>	<i>13.0%</i>	<i>-1.727</i>	<i>-0.053</i>
<i>Heart Failure and Non-Ischemic Heart Disease</i>	<i>20,829</i>	<i>11.4%</i>	<i>39,312</i>	<i>11.8%</i>	<i>-0.320</i>	<i>-0.010</i>
<i>Hip/Pelvic Fracture</i>	<i>494</i>	<i>0.3%</i>	<i>2,127</i>	<i>0.6%</i>	<i>-0.365</i>	<i>-0.054</i>
<i>Hyperlipidemia</i>	<i>156,494</i>	<i>86.0%</i>	<i>281,205</i>	<i>84.2%</i>	<i>1.830</i>	<i>0.051</i>
<i>Hypertension</i>	<i>158,918</i>	<i>87.3%</i>	<i>291,946</i>	<i>87.4%</i>	<i>-0.052</i>	<i>-0.002</i>
<i>Hypothyroidism</i>	<i>44,140</i>	<i>24.3%</i>	<i>74,728</i>	<i>22.4%</i>	<i>1.889</i>	<i>0.045</i>
<i>Ischemic Heart Disease</i>	<i>43,567</i>	<i>23.9%</i>	<i>80,289</i>	<i>24.0%</i>	<i>-0.090</i>	<i>-0.002</i>

Table 1c. Aggregated Unadjusted Characteristics of the High Dimensional Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product semaglutide		Medical Product sitagliptin		Covariate Balance	
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³	Absolute Difference	Standardized Difference
Non-Alzheimer's dementia	2,963	1.6%	17,268	5.2%	-3.540	-0.196
<i>Osteoporosis With or Without Pathological Fracture</i>	8,897	4.9%	23,267	7.0%	-2.075	-0.088
<i>Parkinson's Disease and Secondary Parkinsonism</i>	1,148	0.6%	3,863	1.2%	-0.525	-0.056
<i>Pneumonia, All-cause</i>	8,932	4.9%	19,269	5.8%	-0.859	-0.038
<i>Rheumatoid Arthritis/Osteoarthritis</i>	70,848	38.9%	124,091	37.1%	1.791	0.037
<i>Stroke/Transient Ischemic attack</i>	8,652	4.8%	22,891	6.9%	-2.097	-0.090
<i>ADHD, Conduct Disorders, Hyperkinetic Syndrome</i>	3,284	1.8%	4,268	1.3%	0.527	0.043
<i>Alcohol Use Disorders</i>	2,415	1.3%	5,597	1.7%	-0.348	-0.029
<i>Autism Spectrum Disorders</i>	410	0.2%	766	0.2%	-0.004	-0.001
<i>Anxiety Disorders</i>	44,037	24.2%	68,960	20.6%	3.559	0.085
<i>Bipolar Disorder</i>	9,766	5.4%	15,549	4.7%	0.713	0.033
<i>Cerebral Palsy</i>	211	0.1%	699	0.2%	-0.093	-0.023
<i>Cystic Fibrosis and Other Metabolic Developmental Disorders</i>	2,352	1.3%	4,067	1.2%	0.075	0.007
<i>Depressive Disorders</i>	45,834	25.2%	70,080	21.0%	4.211	0.100
<i>Drug Use Disorders</i>	7,434	4.1%	12,725	3.8%	0.276	0.014
<i>Epilepsy</i>	2,748	1.5%	7,029	2.1%	-0.594	-0.045
Fibromyalgia, Chronic Pain and Fatigue	56,681	31.1%	88,156	26.4%	4.761	0.105
<i>HIV/AIDS</i>	892	0.5%	1,627	0.5%	0.003	0.000
<i>Intellectual Disabilities and Related Conditions</i>	1,243	0.7%	3,643	1.1%	-0.407	-0.043
<i>Learning Disabilities</i>	355	0.2%	937	0.3%	-0.085	-0.018
<i>Leukemias and Lymphomas</i>	132	0.1%	294	0.1%	-0.015	-0.005
<i>Liver Disease, Cirrhosis and Other Liver Conditions</i>	21,855	12.0%	31,399	9.4%	2.612	0.085
<i>Migraine and Chronic Headache</i>	11,170	6.1%	15,396	4.6%	1.530	0.068
<i>Mobility Impairments</i>	3,010	1.7%	9,290	2.8%	-1.126	-0.077
<i>Muscular Dystrophy</i>	73	0.0%	192	0.1%	-0.017	-0.008
<i>Multiple Sclerosis and Transverse Myelitis</i>	946	0.5%	1,465	0.4%	0.081	0.012
Obesity	111,256	61.1%	133,931	40.1%	21.048	0.431
<i>Opioid Use Disorder</i>	4,927	2.7%	7,479	2.2%	0.469	0.030
<i>Other Developmental Delays</i>	249	0.1%	589	0.2%	-0.039	-0.010
<i>Peripheral vascular disease</i>	27,760	15.3%	58,180	17.4%	-2.159	-0.058
<i>Personality Disorders</i>	4,096	2.3%	6,344	1.9%	0.352	0.025
<i>Post-Traumatic Stress Disorder (PTSD)</i>	4,276	2.3%	5,183	1.6%	0.798	0.058

Table 1c. Aggregated Unadjusted Characteristics of the High Dimensional Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product semaglutide		Medical Product sitagliptin		Covariate Balance	
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³	Absolute Difference	Standardized Difference
<i>Pressure and Chronic Ulcers</i>	8,845	4.9%	14,889	4.5%	0.404	0.019
Schizophrenia	3,099	1.7%	8,537	2.6%	-0.852	-0.059
<i>Schizophrenia and Other Psychotic disorders</i>	4,306	2.4%	12,273	3.7%	-1.307	-0.076
Sensory - Blindness and Visual Impairment	534	0.3%	1,619	0.5%	-0.191	-0.031
Sensory - Deafness and Hearing Impairment	10,094	5.5%	21,697	6.5%	-0.947	-0.040
<i>Spina Bifida and Other Congenital Anomalies of the Nervous System</i>	315	0.2%	494	0.1%	0.025	0.006
<i>Spinal Cord Injury</i>	688	0.4%	1,869	0.6%	-0.181	-0.027
<i>Tobacco Use</i>	21,275	11.7%	41,206	12.3%	-0.642	-0.020
<i>Traumatic Brain Injury and Nonpsychotic Mental Disorders due to Brain Damage</i>	629	0.3%	1,362	0.4%	-0.062	-0.010
<i>Viral Hepatitis</i>	1,677	0.9%	4,181	1.3%	-0.330	-0.032
<i>Mental and Physical Impairments</i>	14,613	8.0%	34,789	10.4%	-2.382	-0.082
<i>Insulin dispensings</i>	87,812	48.2%	76,047	22.8%	25.490	0.553
<i>Insulin procedures</i>	10,228	5.6%	13,038	3.9%	1.718	0.081
Health Service Utilization Intensity Metrics						
Mean number of ambulatory encounters	22.1	17.9	19.1	16.7	2.940	0.170
Mean number of emergency room encounters	0.6	1.6	0.6	1.8	-0.071	-0.042
Mean number of inpatient hospital encounters	0.1	0.5	0.2	0.6	-0.052	-0.097
Mean number of non-acute institutional encounters	0.0	0.2	0.1	0.4	-0.045	-0.144
Mean number of other ambulatory encounters	4.9	9.5	5.8	13.6	-0.865	-0.074
Mean number of filled prescriptions	54.5	40.8	48.0	40.2	6.549	0.162
Mean number of generics dispensed	13.3	6.7	11.5	6.3	1.816	0.281

Table 1c. Aggregated Unadjusted Characteristics of the High Dimensional Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	Medical Product				Covariate Balance	
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
Patient Characteristics ^{1,2}	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
Mean number of unique drug classes dispensed	11.6	5.7	10.2	5.4	1.367	0.245

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

²Covariates in italics were included in the propensity score logistic regression model.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (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)

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

Table 1d. Aggregated Adjusted Characteristics of the High Dimensional Propensity Score Model (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.025) in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product		Covariate Balance			
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
Unique patients	118,161	64.9%	118,161	35.4%	N/A	N/A
Demographic Characteristics						
Age (years)	63.5	10.2	63.4	11.3	0.083	0.008
Age						
18-39 years	4,305	3.6%	5,520	4.7%	-1.028	-0.052
40-64 years	50,779	43.0%	51,049	43.2%	-0.229	-0.005
≥ 65 years	63,077	53.4%	61,592	52.1%	1.257	0.025
Sex						
Female	64,120	54.3%	64,172	54.3%	-0.044	-0.001
Male	54,041	45.7%	53,989	45.7%	0.044	0.001
Race ⁴						
American Indian or Alaska Native	1,250	1.1%	539	0.5%	0.602	0.069
Asian	1,781	1.5%	2,890	2.4%	-0.939	-0.067
Black or African American	10,373	8.8%	12,905	10.9%	-2.143	-0.072
Native Hawaiian or Other Pacific Islander	247	0.2%	299	0.3%	-0.044	-0.009
Unknown	40,521	34.3%	42,356	35.8%	-1.553	-0.033
White	63,989	54.2%	59,172	50.1%	4.077	0.082
Hispanic origin						
Yes	3,246	2.7%	4,670	4.0%	-1.205	-0.067
No	70,422	59.6%	69,151	58.5%	1.076	0.022
Unknown	44,493	37.7%	44,340	37.5%	0.129	0.003
Year						
2018	11,866	10.0%	10,925	9.2%	0.796	0.027
2019	31,278	26.5%	31,470	26.6%	-0.162	-0.004
2020	33,117	28.0%	33,546	28.4%	-0.363	-0.008
2021	40,170	34.0%	40,471	34.3%	-0.255	-0.005
2022	1,730	1.5%	1,749	1.5%	-0.016	-0.001
Health Characteristics						
Combined comorbidity score ⁵	1.9	2.1	1.9	2.1	0.004	0.002
<i>Anemia</i>	21,776	18.4%	21,619	18.3%	0.133	0.003
<i>Arrhythmia</i>	21,461	18.2%	21,335	18.1%	0.107	0.003
<i>Autoimmune disease</i>	11,840	10.0%	11,848	10.0%	-0.007	-0.000
<i>Bacterial infection</i>	25,979	22.0%	25,975	22.0%	0.003	0.000
<i>Coagulopathy</i>	2,722	2.3%	2,754	2.3%	-0.027	-0.002
<i>Colonoscopy</i>	11,284	9.5%	11,273	9.5%	0.009	0.000
<i>Degenerative Disease of CNS</i>	30,879	26.1%	30,896	26.1%	-0.014	-0.000
<i>Durable Medical Equipment</i>	2,581	2.2%	2,569	2.2%	0.010	0.001
<i>Fecal occult blood test</i>	5,294	4.5%	5,231	4.4%	0.053	0.003
<i>Fluid and electrolyte disorder</i>	12,661	10.7%	12,818	10.8%	-0.133	-0.004
<i>Gallstones</i>	2,548	2.2%	2,618	2.2%	-0.059	-0.004
HPV DNA test	0	0.0%	0	0.0%	NaN	NaN
<i>Hyperparathyroidism</i>	1,201	1.0%	1,192	1.0%	0.008	0.001

Table 1d. Aggregated Adjusted Characteristics of the High Dimensional Propensity Score Model (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.025) in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product semaglutide		Medical Product sitagliptin		Covariate Balance	
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³	Absolute Difference	Standardized Difference
Kawasaki Disease	*****	*****	*****	*****	0.001	0.002
Mammogram	31,692	26.8%	31,810	26.9%	-0.100	-0.002
Organ Transplant	1,033	0.9%	1,065	0.9%	-0.027	-0.003
Other Infections (mumps, flu/influenza, Herpes, Coxsackie, Epstein-Barr, Cytomegalovirus, Histoplasmosis, Parvovirus B19, Pneumocytosis)	5,550	4.7%	5,530	4.7%	0.017	0.001
PSA Test	24,836	21.0%	24,768	21.0%	0.058	0.001
Pap smear	9,306	7.9%	9,346	7.9%	-0.034	-0.001
Psychosis	30,379	25.7%	30,423	25.7%	-0.037	-0.001
Pulmonary circulation disorders	2,553	2.2%	2,523	2.1%	0.025	0.002
Pulmonary Disease	25,754	21.8%	25,911	21.9%	-0.133	-0.003
Renal Failure	16,309	13.8%	16,091	13.6%	0.184	0.005
Reyes Syndrome	0	0.0%	0	0.0%	NaN	NaN
Screening examinations and disease management	19,213	16.3%	19,294	16.3%	-0.069	-0.002
Thrombotic Thrombocytopenic purpura	13	0.0%	*****	*****	0.003	0.003
Weight Loss	557	0.5%	535	0.5%	0.019	0.003
Medicines for gout	70,841	60.0%	70,816	59.9%	0.021	0.000
Oxicam anti inflammatory drugs	27,627	23.4%	27,551	23.3%	0.064	0.002
Sertraline	7,705	6.5%	7,785	6.6%	-0.068	-0.003
Sulfa Antibiotics	12,546	10.6%	12,654	10.7%	-0.091	-0.003
Acute Myocardial Infarction	2,286	1.9%	2,296	1.9%	-0.008	-0.001
Alzheimers	645	0.5%	855	0.7%	-0.178	-0.022
Asthma	13,771	11.7%	13,853	11.7%	-0.069	-0.002
Benign Prostatic Hyperplasia	12,085	10.2%	11,995	10.2%	0.076	0.003
Cataracts	30,989	26.2%	31,010	26.2%	-0.018	-0.000
CKD	25,417	21.5%	25,193	21.3%	0.190	0.005
COPD	17,719	15.0%	17,789	15.1%	-0.059	-0.002
Depression, Bipolar or other depressive mood disorders	30,916	26.2%	30,979	26.2%	-0.053	-0.001
Diabetes	118,161	100.0%	118,161	100.0%	0.000	NaN
Glaucoma	13,369	11.3%	13,407	11.3%	-0.032	-0.001
Heart Failure and Non-Ischemic Heart Disease	12,929	10.9%	12,907	10.9%	0.019	0.001
Hip/Pelvic Fracture	372	0.3%	370	0.3%	0.002	0.000
Hyperlipidemia	100,439	85.0%	100,408	85.0%	0.026	0.001
Hypertension	102,556	86.8%	102,432	86.7%	0.105	0.003
Hypothyroidism	27,471	23.2%	27,273	23.1%	0.168	0.004
Ischemic Heart Disease	27,403	23.2%	27,259	23.1%	0.122	0.003
Non-Alzheimer's dementia	2,369	2.0%	3,005	2.5%	-0.538	-0.036

Table 1d. Aggregated Adjusted Characteristics of the High Dimensional Propensity Score Model (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.025) in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Patient Characteristics ^{1,2}	Medical Product		Covariate Balance			
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
<i>Osteoporosis With or Without Pathological Fracture</i>	6,282	5.3%	6,276	5.3%	0.005	0.000
<i>Parkinson's Disease and Secondary Parkinsonism</i>	851	0.7%	883	0.7%	-0.027	-0.003
<i>Pneumonia, All-cause</i>	5,807	4.9%	5,772	4.9%	0.030	0.001
<i>Rheumatoid Arthritis/Osteoarthritis</i>	44,459	37.6%	44,531	37.7%	-0.061	-0.001
<i>Stroke/Transient Ischemic attack</i>	6,011	5.1%	6,055	5.1%	-0.037	-0.002
<i>ADHD, Conduct Disorders, Hyperkinetic Syndrome</i>	1,800	1.5%	1,820	1.5%	-0.017	-0.001
<i>Alcohol Use Disorders</i>	1,676	1.4%	1,659	1.4%	0.014	0.001
<i>Autism Spectrum Disorders</i>	263	0.2%	280	0.2%	-0.014	-0.003
<i>Anxiety Disorders</i>	26,700	22.6%	26,910	22.8%	-0.178	-0.004
<i>Bipolar Disorder</i>	5,773	4.9%	6,046	5.1%	-0.231	-0.011
<i>Cerebral Palsy</i>	142	0.1%	236	0.2%	-0.080	-0.020
<i>Cystic Fibrosis and Other Metabolic Developmental Disorders</i>	1,499	1.3%	1,508	1.3%	-0.008	-0.001
<i>Depressive Disorders</i>	27,711	23.5%	27,446	23.2%	0.224	0.005
<i>Drug Use Disorders</i>	4,648	3.9%	4,730	4.0%	-0.069	-0.004
<i>Epilepsy</i>	1,941	1.6%	1,973	1.7%	-0.027	-0.002
<i>Fibromyalgia, Chronic Pain and Fatigue</i>	34,565	29.3%	34,672	29.3%	-0.091	-0.002
<i>HIV/AIDS</i>	548	0.5%	557	0.5%	-0.008	-0.001
<i>Intellectual Disabilities and Related Conditions</i>	815	0.7%	1,176	1.0%	-0.306	-0.033
<i>Learning Disabilities</i>	226	0.2%	296	0.3%	-0.059	-0.013
<i>Leukemias and Lymphomas</i>	92	0.1%	90	0.1%	0.002	0.001
<i>Liver Disease, Cirrhosis and Other Liver Conditions</i>	13,097	11.1%	13,122	11.1%	-0.021	-0.001
<i>Migraine and Chronic Headache</i>	6,665	5.6%	6,582	5.6%	0.070	0.003
<i>Mobility Impairments</i>	2,212	1.9%	2,300	1.9%	-0.074	-0.005
<i>Muscular Dystrophy</i>	48	0.0%	53	0.0%	-0.004	-0.002
<i>Multiple Sclerosis and Transverse Myelitis</i>	580	0.5%	563	0.5%	0.014	0.002
<i>Obesity</i>	64,180	54.3%	64,320	54.4%	-0.118	-0.002
<i>Opioid Use Disorder</i>	2,997	2.5%	2,996	2.5%	0.001	0.000
<i>Other Developmental Delays</i>	150	0.1%	178	0.2%	-0.024	-0.006
<i>Peripheral vascular disease</i>	18,104	15.3%	18,077	15.3%	0.023	0.001
<i>Personality Disorders</i>	2,424	2.1%	2,467	2.1%	-0.036	-0.003
<i>Post-Traumatic Stress Disorder (PTSD)</i>	2,383	2.0%	2,403	2.0%	-0.017	-0.001
<i>Pressure and Chronic Ulcers</i>	5,225	4.4%	5,126	4.3%	0.084	0.004

Table 1d. Aggregated Adjusted Characteristics of the High Dimensional Propensity Score Model (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.025) in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	Medical Product				Covariate Balance	
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
Patient Characteristics ^{1,2}	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
Schizophrenia	2,191	1.9%	2,308	2.0%	-0.099	-0.007
<i>Schizophrenia and Other Psychotic disorders</i>	3,064	2.6%	3,088	2.6%	-0.020	-0.001
Sensory - Blindness and Visual Impairment	341	0.3%	434	0.4%	-0.079	-0.014
Sensory - Deafness and Hearing Impairment	6,783	5.7%	6,263	5.3%	0.440	0.019
<i>Spina Bifida and Other Congenital Anomalies of the Nervous System</i>	185	0.2%	186	0.2%	-0.001	-0.000
<i>Spinal Cord Injury</i>	480	0.4%	501	0.4%	-0.018	-0.003
<i>Tobacco Use</i>	14,336	12.1%	14,478	12.3%	-0.120	-0.004
<i>Traumatic Brain Injury and Nonpsychotic Mental Disorders due to Brain Damage</i>	396	0.3%	432	0.4%	-0.030	-0.005
<i>Viral Hepatitis</i>	1,189	1.0%	1,210	1.0%	-0.018	-0.002
<i>Mental and Physical Impairments</i>	9,927	8.4%	9,878	8.4%	0.041	0.001
Insulin dispensings	43,405	36.7%	43,253	36.6%	0.129	0.003
<i>Insulin procedures</i>	5,714	4.8%	5,713	4.8%	0.001	0.000
Health Service Utilization Intensity Metrics						
Mean number of ambulatory encounters	20.5	16.7	20.4	17.4	0.041	0.002
Mean number of emergency room encounters	0.6	1.7	0.6	1.4	-0.007	-0.004
Mean number of inpatient hospital encounters	0.1	0.5	0.2	0.5	-0.001	-0.003
Mean number of non-acute institutional encounters	0.0	0.2	0.0	0.3	-0.008	-0.031
Mean number of other ambulatory encounters	4.7	9.9	5.0	10.8	-0.284	-0.027
Mean number of filled prescriptions	50.5	39.5	50.4	39.6	0.062	0.002
Mean number of generics dispensed	12.5	6.4	12.4	6.5	0.156	0.024

Table 1d. Aggregated Adjusted Characteristics of the High Dimensional Propensity Score Model (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.025) in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	Medical Product				Covariate Balance	
	semaglutide		sitagliptin		Absolute Difference	Standardized Difference
Patient Characteristics ^{1,2}	Number/ Mean	Percent/ Standard Deviation ³	Number/ Mean	Percent/ Standard Deviation ³		
Mean number of unique drug classes dispensed	10.9	5.5	10.9	5.6	0.012	0.002

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

²Covariates in italics were included in the propensity score logistic regression model.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (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)

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

Table 2. Summary of Time to End of At-Risk Period for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	Number of Episodes by Episode Length								
	0-30 days			31-60 days		61-90 days		91-180 days	
	Total Number of Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
<i>semaglutide</i>	183,831	21,901	11.9%	52,342	28.5%	25,074	13.6%	40,358	22.0%
<i>sitagliptin</i>	334,436	31,774	9.5%	65,886	19.7%	28,783	8.6%	83,128	24.9%

Table 2. Summary of Time to End of At-Risk Period for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022 (Continued)

	Number of Episodes by Episode Length					Distribution of At-Risk Time in Days, by Episode						
	181-365 days			366+ days		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
	Total Number of Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes							
<i>semaglutide</i>	183,831	44,156	24.0%	0	0.0%	0	41	76	169	182	93.9	61.0
<i>sitagliptin</i>	334,436	124,865	37.3%	0	0.0%	0	43	103	182	182	113.6	62.8

Table 3. Summary of Reasons for End of At-Risk Period for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022¹

	Censoring Reason								
	End of Exposure Episode ²			Occurrence of Outcome of Interest ³		Occurrence of User-Defined Censoring Criteria ⁴		Evidence of Death ⁵	
	Total Number of Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
<i>semaglutide</i>	183,831	132,485	72.1%	0	0.0%	22,510	12.2%	391	0.2%
<i>sitagliptin</i>	334,436	260,067	77.8%	0	0.0%	40,581	12.1%	2,327	0.7%

¹An episode may be censored due to more than one reason if they occur on the same date. Therefore, the sum of the reasons for censoring may be greater than the total number of episodes.

²Represents episodes censored due to end of the exposure episode. In as-treated analyses, exposure episodes are defined using days supplied as recorded in outpatient pharmacy dispensing records, and episodes end after days supplied are exhausted or a pre-determined maximum episode duration is met. In point exposure analyses, exposure episodes end when a pre-determined maximum episode duration is met.

³Represents episodes censored due to occurrence of request-defined event.

⁴Represents episodes censored due to occurrence of additional user-defined criteria using drug, procedure, diagnosis, and/or laboratory codes.

⁵Represents episodes censored due to evidence of death. Death data source and completeness varies by Data Partner.

⁶Represents episodes censored due to disenrollment from health plan. Data Partners often artificially assign a "disenrollment" date equal to data end date for members still enrolled on that date. Therefore, a patient may have dual reasons for censoring as "disenrollment" and "end of data" on the same day - this can be interpreted as right-censoring in most cases.

⁷Represents episodes censored due to Data Partner data end date. This end date represents the last day of the most recent year-month in which all of a Data Partner's data tables in the Sentinel Common Data Model have at least 80% of the record count relative to the prior month.

⁸Represents episodes censored due to user-specified study end date.

**Table 3. Summary of Reasons for End of At-Risk Period for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022¹
(Continued)**

	Censoring Reason						
	Disenrollment ⁶			End of Data ⁷		End of Study Period ⁸	
	Total Number of Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
<i>semaglutide</i>	183,831	26,413	14.4%	22,089	12.0%	0	0.0%
<i>sitagliptin</i>	334,436	30,322	9.1%	18,470	5.5%	0	0.0%

¹An episode may be censored due to more than one reason if they occur on the same date. Therefore, the sum of the reasons for censoring may be greater than the total number of episodes.

²Represents episodes censored due to end of the exposure episode. In as-treated analyses, exposure episodes are defined using days supplied as recorded in outpatient pharmacy dispensing records, and episodes end after days supplied are exhausted or a pre-determined maximum episode duration is met. In point exposure analyses, exposure episodes end when a pre-determined maximum episode duration is met.

³Represents episodes censored due to occurrence of request-defined event.

⁴Represents episodes censored due to occurrence of additional user-defined criteria using drug, procedure, diagnosis, and/or laboratory codes.

⁵Represents episodes censored due to evidence of death. Death data source and completeness varies by Data Partner.

⁶Represents episodes censored due to disenrollment from health plan. Data Partners often artificially assign a "disenrollment" date equal to data end date for members still enrolled on that date. Therefore, a patient may have dual reasons for censoring as "disenrollment" and "end of data" on the same day - this can be interpreted as right-censoring in most cases.

⁷Represents episodes censored due to Data Partner data end date. This end date represents the last day of the most recent year-month in which all of a Data Partner's data tables in the Sentinel Common Data Model have at least 80% of the record count relative to the prior month.

⁸Represents episodes censored due to user-specified study end date.

Table 4. Summary of Time to End of At-Risk Period due to End of Exposure Episode for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	Number of Episodes Censored due to End of Exposure Episode by Episode Length									
		0-30 days		31-60 days		61-90 days		91-180 days		
	Total Number of Episodes	Total Number of Exposure Episodes ¹	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
<i>semaglutide</i>	183,831	132,485	325	0.2%	41,595	31.4%	17,274	13.0%	29,198	22.0%
<i>sitagliptin</i>	334,436	260,067	2,552	1.0%	51,547	19.8%	16,985	6.5%	64,287	24.7%

¹Represents episodes censored due to end of the exposure episode. In as-treated analyses, exposure episodes are defined using days supplied as recorded in outpatient pharmacy dispensing records, and episodes end after days supplied are exhausted or a pre-determined maximum episode duration is met. In point exposure analyses, exposure episodes end when a pre-determined maximum episode duration is met.

Table 4. Summary of Time to End of At-Risk Period due to End of Exposure Episode for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022 (Continued)

	Number of Episodes Censored due to End of Exposure Episode by Episode Length						Distribution of At-Risk Time in Days, by Episode						
		181-365 days		366+ days									
	Total Number of Episodes	Total Number of Episodes Censored due to End of Exposure Episode ¹	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
<i>semaglutide</i>	183,831	132,485	44,093	33.3%	0	0.0%	14	43	97	182	182	108.9	58.9
<i>sitagliptin</i>	334,436	260,067	124,696	47.9%	0	0.0%	14	75	159	182	182	129.3	57.1

¹Represents episodes censored due to end of the exposure episode. In as-treated analyses, exposure episodes are defined using days supplied as recorded in outpatient pharmacy dispensing records, and episodes end after days supplied are exhausted or a pre-determined maximum episode duration is met. In point exposure analyses, exposure episodes end when a pre-determined maximum episode duration is met.

Table 5. Summary of Time to End of At-Risk Period due to Occurrence of User-Defined Censoring Criteria for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	Number of Episodes Censored due to Occurrence of User-Defined Censoring Criteria by Episode Length									
		0-30 days		31-60 days		61-90 days		91-180 days		
	Total Number of Episodes	Total Number of Episodes Censored due to Occurrence of User-Defined Censoring Criteria ¹	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
<i>semaglutide</i>	183,831	22,510	13,239	58.8%	4,624	20.5%	3,040	13.5%	1,576	7.0%
<i>sitagliptin</i>	334,436	40,581	20,730	51.1%	7,558	18.6%	5,823	14.3%	6,276	15.5%

¹Represents episodes censored due to occurrence of additional user-defined criteria using drug, procedure, diagnosis, and/or laboratory codes.

Table 5. Summary of Time to End of At-Risk Period due to Occurrence of User-Defined Censoring Criteria for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022 (Continued)

	Number of Episodes Censored due to Occurrence of User-Defined Censoring Criteria by Episode Length						Distribution of At-Risk Time in Days, by Episode						
	Total Number of Episodes	Total Number of Episodes Censored due to Occurrence of User-Defined Censoring Criteria ¹	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
<i>semaglutide</i>	183,831	22,510	31	0.1%	0	0.0%	0	9	25	52	182	35.3	34.7
<i>sitagliptin</i>	334,436	40,581	194	0.5%	0	0.0%	0	10	29	71	182	45.0	44.4

¹Represents episodes censored due to occurrence of additional user-defined criteria using drug, procedure, diagnosis, and/or laboratory codes.

Table 6. Summary of Time to End of At-Risk Period due to Evidence of Death for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	Number of Episodes Censored due to Evidence of Death by Episode Length									
			0-30 days		31-60 days		61-90 days		91-180 days	
	Total Number of Episodes	Total Number of Episodes Censored due to Evidence of Death ¹	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
<i>semaglutide</i>	183,831	391	91	23.3%	99	25.3%	77	19.7%	124	31.7%
<i>sitagliptin</i>	334,436	2,327	517	22.2%	495	21.3%	*****	*****	864	37.1%

¹Represents episodes censored due to evidence of death. Death data source and completeness varies by Data Partner.

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

Table 6. Summary of Time to End of At-Risk Period due to Evidence of Death for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022 (Continued)

	Number of Episodes Censored due to Evidence of Death by Episode Length												
			181-365 days		366+ days		Distribution of At-Risk Time in Days, by Episode						
	Total Number of Episodes	Total Number of Episodes Censored due to Evidence of Death ¹	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
<i>semaglutide</i>	183,831	391	0	0.0%	0	0.0%	1	32	62	104	178	71.3	46.7
<i>sitagliptin</i>	334,436	2,327	*****	*****	0	0.0%	0	35	70	115	182	76.8	49.8

¹Represents episodes censored due to evidence of death. Death data source and completeness varies by Data Partner.

*****Data are not presented in these cells due to a small

Table 7. Summary of Time to End of At-Risk Period due to Disenrollment for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	Number of Episodes Censored due to Disenrollment by Episode Length									
		0-30 days		31-60 days		61-90 days		91-180 days		
	Total Number of Episodes	Total Number of Episodes Censored due to Disenrollment ¹	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
<i>semaglutide</i>	183,831	26,413	7,606	28.8%	5,609	21.2%	4,348	16.5%	8,714	33.0%
<i>sitagliptin</i>	334,436	30,322	7,566	25.0%	6,086	20.1%	5,303	17.5%	11,140	36.7%

¹Represents episodes censored due to disenrollment from health plan. Data Partners often artificially assign a "disenrollment" date equal to data end date for members still enrolled on that date. Therefore, a patient may have dual reasons for censoring as "disenrollment" and "end of data" on the same day - this can be interpreted as right-censoring in most cases.

Table 7. Summary of Time to End of At-Risk Period due to Disenrollment for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022 (Continued)

	Number of Episodes Censored due to Disenrollment by Episode Length						Distribution of At-Risk Time in Days, by Episode						
	Total Number of Episodes	Total Number of Episodes Censored due to Disenrollment ¹	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
<i>semaglutide</i>	183,831	26,413	136	0.5%	0	0.0%	0	26	60	109	182	70.6	50.7
<i>sitagliptin</i>	334,436	30,322	227	0.7%	0	0.0%	0	31	69	115	182	75.8	51.3

¹Represents episodes censored due to disenrollment from health plan. Data Partners often artificially assign a "disenrollment" date equal to data end date for members still enrolled on that date. Therefore, a patient may have dual reasons for censoring as "disenrollment" and "end of data" on the same day - this can be interpreted as right-censoring in most cases.

Table 8. Summary of Time to End of At-Risk Period due to End of Data for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	Number of Episodes Censored due to End of Data by Episode Length									
		0-30 days		31-60 days		61-90 days		91-180 days		
	Total Number of Episodes	Total Number of Episodes Censored due to End of Data ¹	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
<i>semaglutide</i>	183,831	22,089	6,211	28.1%	4,629	21.0%	3,624	16.4%	7,516	34.0%
<i>sitagliptin</i>	334,436	18,470	4,444	24.1%	3,564	19.3%	3,193	17.3%	7,139	38.7%

¹Represents episodes censored due to Data Partner data end date. This end date represents the last day of the most recent year-month in which all of a Data Partner's data tables in the Sentinel Common Data Model have at least 80% of the record count relative to the prior month.

Table 8. Summary of Time to End of At-Risk Period due to End of Data for Exposures of Interest in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022 (Continued)

	Number of Episodes Censored due to End of Data by Episode Length						Distribution of At-Risk Time in Days, by Episode						
	Total Number of Episodes	Total Number of Episodes Censored due to End of Data ¹	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
<i>semaglutide</i>	183,831	22,089	109	0.5%	0	0.0%	0	27	63	110	182	71.7	50.8
<i>sitagliptin</i>	334,436	18,470	130	0.7%	0	0.0%	0	31	72	120	182	77.9	51.8

¹Represents episodes censored due to Data Partner data end date. This end date represents the last day of the most recent year-month in which all of a Data Partner's data tables in the Sentinel Common Data Model have at least 80% of the record count relative to the prior month.

Table 9. Signal Identification Outcome Assessment¹ in Inpatient and Emergency Department Settings, via Unconditional Bernoulli Tree-Based Scan Statistic² among Semaglutide (Ozempic) Initiators Matched to Sitagliptin Initiators, Conventional Propensity Score, Ratio 1:1, P-Value ≤ 0.05

Node Name	Node ID	Node Level	Total Node Outcomes among Semaglutide and Sitagliptin Initiators	Node Outcomes among Semaglutide Initiators	Expected Node Outcomes among Semaglutide Initiators	Relative Risk	Test Statistic²	P-Value
Nausea and Vomiting	R11grp	3	1,862	1,103	931	1.18	31.959863	0.001
Nausea with vomiting unspecified	R112grp	4	899	562	450	1.25	28.457855	0.001

¹Outcomes were assessed at the 3,4,5, and 6th level with a 400-day washout using the hierarchical ICD-10-CM tree structure.

²See Appendix K for details calculating the unconditional Bernoulli log likelihood ratio (LLR) based test statistic.

Table 10. Signal Identification Outcome Assessment¹ in Inpatient, Emergency Department, and Outpatient Settings, via Unconditional Bernoulli Tree-Based Scan Statistic² among Semaglutide (Ozempic) Initiators Matched to Sitagliptin Initiators, Conventional Propensity Score, Ratio 1:1, P-Value ≤ 0.05

Node Name	Node ID	Node Level	Total Node Outcomes among Semaglutide and Sitagliptin Initiators	Node Outcomes among Semaglutide Initiators	Expected Node Outcomes among Semaglutide Initiators	Relative Risk	Test Statistic ²	P-Value
Nausea and Vomiting	R11grp	3	4,909	3,183	2,455	1.3	219.51207	0.0001
Nausea with vomiting unspecified	R112grp	4	1,829	1,239	915	1.35	117.692101	0.0001
Nausea	R110grp	4	2,386	1,509	1,193	1.26	84.708899	0.0001
Vomiting	R111grp	4	694	435	347	1.25	22.562594	0.0001
Vomiting, unspecified	R1110grp	5	610	383	305	1.26	20.170871	0.0001
Other symptoms and signs involving the digestive system and abdomen	R19grp	3	4,420	2,454	2,210	1.11	26.994366	0.0001
Diarrhea, unspecified	R197grp	4	2,971	1,751	1,486	1.18	47.708121	0.0001
Abdominal and pelvic pain	R10grp	3	6,887	3,705	3,444	1.08	19.877487	0.0001
Pain localized to upper abdomen	R101grp	4	1,879	1,035	940	1.1	9.724344	0.0343
Epigastric pain	R1013grp	5	986	577	493	1.17	14.382441	0.0006
Other specified metabolic disorders	E888grp	4	375	244	188	1.3	17.292829	0.0001
Metabolic syndrome	E8881grp	5	352	235	176	1.34	20.16658	0.0001
Sleep apnea	G473grp	4	2,763	1,523	1,382	1.1	14.518571	0.0004
Obstructive sleep apnea (adult) (pediatric)	G4733grp	5	2,014	1,121	1,007	1.11	12.933369	0.0016
Diverticular disease of intestine	K57grp	3	3,879	2,092	1,940	1.08	12.003234	0.0044
Diverticular disease of large intestine without perforation or abscess	K573grp	4	3,052	1,663	1,526	1.09	12.316051	0.003
Diverticulosis of large intestine without perforation or abscess without bleeding	K5730grp	5	2,861	1,574	1,431	1.1	14.419382	0.0006
Seborrheic keratosis	L82grp	3	3,130	1,714	1,565	1.1	14.207452	0.0007
Other and unspecified noninfective gastroenteritis and colitis	K52grp	3	1,489	842	745	1.13	12.805388	0.0016
Noninfective gastroenteritis and colitis,	K529grp	4	1,287	738	644	1.15	13.927938	0.0007
Poisoning by, adverse effect of and underdosing of other and unspecified drugs, medicaments and biological substances	T509grp	4	457	283	229	1.24	13.125046	0.0015

Table 10. Signal Identification Outcome Assessment¹ in Inpatient, Emergency Department, and Outpatient Settings, via Unconditional Bernoulli Tree-Based Scan Statistic² among Semaglutide (Ozempic) Initiators Matched to Sitagliptin Initiators, Conventional Propensity Score, Ratio 1:1, P-Value ≤ 0.05

Node Name	Node ID	Node Level	Total Node Outcomes among Semaglutide and Sitagliptin Initiators	Node Outcomes among Semaglutide Initiators	Expected Node Outcomes among Semaglutide Initiators	Relative Risk	Test Statistic ²	P-Value
Poisoning by, adverse effect of and underdosing of unspecified drugs, medicaments and biological substances	T5090grp	5	350	216	175	1.23	9.695578	0.0444
Other functional intestinal disorders	K59grp	3	3,510	1,886	1,755	1.07	9.787448	0.0313
Constipation	K590grp	4	3,313	1,802	1,657	1.09	12.796593	0.0016
Other fatigue	R5383grp	5	2,862	1,566	1,431	1.09	12.754808	0.0016
Foreign body in stomach	T182grp	4	71	56	36	1.58	12.603626	0.0019
Testicular dysfunction	E29grp	3	459	283	230	1.23	12.587165	0.0019
Testicular hypofunction	E291grp	4	448	277	224	1.24	12.659886	0.0018
Gastro-esophageal reflux disease	K21grp	3	6,166	3,277	3,083	1.06	12.215659	0.0034
Gastro-esophageal reflux disease without esophagitis	K219grp	4	5,689	3,018	2,845	1.06	10.589187	0.0147
Skin changes due to chronic exposure to nonionizing radiation	L57grp	3	2,317	1,276	1,159	1.1	11.937867	0.0045
Prediabetes	R7303grp	5	194	130	97	1.34	11.454066	0.0075
Abnormal weight loss	R634grp	4	1,027	589	514	1.15	11.141125	0.0088

¹Outcomes were assessed at the 3,4,5, and 6th level with a 400-day washout using the hierarchical ICD-10-CM tree structure.

²See Appendix K for details calculating the unconditional Bernoulli log likelihood ratio (LLR) based test statistic.

Table 11. Signal Identification Outcome Assessment¹ in Inpatient and Emergency Department Settings, via Unconditional Bernoulli Tree-Based Scan Statistic² among Semaglutide (Ozempic) Initiators Matched to Sitagliptin Initiators, Conventional Propensity Score with High Dimensional Propensity Score, Ratio 1:1, P-Value ≤ 0.05

Node Name	Node ID	Node Level	Total Node Outcomes among Semaglutide and Sitagliptin Initiators	Node Outcomes among Semaglutide Initiators	Expected Node Outcomes among Semaglutide Initiators	Relative Risk	Test Statistic ²	P-Value
Nausea and Vomiting	R11grp	3	1,644	973	822	1.18	27.896593	0.0001
Nausea with vomiting unspecified	R112grp	4	804	503	402	1.25	25.649566	0.0001
Poisoning by, adverse effect of, and underdosing of other drugs, medicaments, and biological substances	T5099grp	5	56	47	28	1.68	14.128506	0.0002
Adverse effect of other drugs, medicaments, and biological substances	T50995grp	6	49	42	25	1.71	13.868512	0.0002

¹Outcomes were assessed at the 3,4,5, and 6th level with a 400-day washout using the hierarchical ICD-10-CM tree structure.

²See Appendix K for details calculating the unconditional Bernoulli log likelihood ratio (LLR) based test statistic.

Table 12. Signal Identification Outcome Assessment¹ in Inpatient, Emergency Department, and Outpatient Settings, via Unconditional Bernoulli Tree-Based Scan Statistic² among Semaglutide (Ozempic) Initiators Matched to Sitagliptin Initiators, Conventional Propensity Score High Dimensional Propensity Score, Ratio 1:1, P-Value ≤ 0.05

Node Name	Node ID	Node Level	Total Node			Relative Risk	Test Statistic ²	P-Value
			Outcomes among Semaglutide and Sitagliptin Initiators	Node Outcomes among Semaglutide Initiators	Expected Node Outcomes among Semaglutide Initiators			
Nausea and vomiting	R11grp	3	4,400	2,835	2,200	1.29	185.917821	0.0001
Nausea	R110grp	4	2,137	1,368	1,069	1.28	85.085063	0.0001
Vomiting	R111grp	4	615	385	308	1.25	19.744746	0.0001
Vomiting, unspecified	R1110grp	5	532	334	266	1.26	17.577927	0.0001
Nausea with vomiting, unspecified	R112grp	4	1,648	1,082	824	1.31	82.156124	0.0001
Other symptoms and signs involving the digestive system and abdomen	R19grp	3	3,855	2,147	1,928	1.11	25.050547	0.0001
Diarrhea, unspecified	R197grp	4	2,608	1,520	1,304	1.17	35.944582	0.0001
Overweight and obesity	E66grp	3	5,767	3,133	2,884	1.09	21.615454	0.0001
Obesity due to excess calories	E660grp	4	1,977	1,115	989	1.13	16.232894	0.0001
Morbid (severe) obesity due to excess calories	E6601grp	5	1,616	898	808	1.11	10.045585	0.0277
Obesity, unspecified	E669grp	4	2,997	1,634	1,499	1.09	12.269171	0.0026
Other functional intestinal disorders	K59grp	3	3,101	1,698	1,551	1.1	14.053005	0.0004
Constipation	K590grp	4	2,945	1,623	1,473	1.1	15.409067	0.0001
Constipation, unspecified	K5900grp	5	2,165	1,188	1,083	1.1	10.298325	0.0232
Abdominal and pelvic pain	R10grp	3	5,977	3,197	2,989	1.07	14.558336	0.0003
Sleep disorders	G47grp	3	3,885	2,095	1,943	1.08	11.984658	0.0031
Sleep apnea	G473grp	4	2,378	1,298	1,189	1.09	10.006474	0.0281
Other specified metabolic disorders	E888grp	4	322	204	161	1.27	11.625059	0.0048
Metabolic syndrome	E8881grp	5	296	188	148	1.27	10.946429	0.0111
Foreign body in stomach	T182grp	4	69	53	35	1.54	10.460698	0.016
Gastro-esophageal reflux disease	K21grp	3	5,352	2,839	2,676	1.06	9.934774	0.0283
Abnormal weight loss	R634grp	4	811	468	406	1.15	9.671677	0.0472

¹Outcomes were assessed at the 3,4,5, and 6th level with a 400-day washout using the hierarchical ICD-10-CM tree structure.

²See Appendix K for details calculating the unconditional Bernoulli log likelihood ratio (LLR) based test statistic.

Table 13. Summary of Patient Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	sema_sita_hdps				sema_sita_ps			
	semaglutide		sitagliptin		semaglutide		sitagliptin	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	149,991,524	N/A	149,991,524	N/A	149,991,524	N/A	149,991,524	N/A
Had required coverage type (medical and/or drug coverage)	91,765,099	58,226,425	91,765,099	58,226,425	91,765,099	58,226,425	91,765,099	58,226,425
Enrolled during specified age range	82,427,708	9,337,391	82,427,708	9,337,391	82,427,708	9,337,391	82,427,708	9,337,391
Had requestable medical charts	82,427,708	N/A	82,427,708	N/A	82,427,708	N/A	82,427,708	N/A
Met demographic requirements (sex, race, and Hispanic origin)	82,426,342	1,366	82,426,342	1,366	82,426,342	1,366	82,426,342	1,366
Members with a valid index event								
Had any cohort-defining claim during the query period	546,197	81,880,145	1,627,311	80,799,031	546,197	81,880,145	1,627,311	80,799,031
Claim recorded during specified age range	546,167	30	1,627,280	31	546,167	30	1,627,280	31
Episode defining index claim recorded during the query period	546,126	41	1,038,845	588,435	546,126	41	1,038,845	588,435
Members with required pre-index history								
Had sufficient pre-index continuous enrollment	372,174	173,952	554,877	483,968	372,174	173,952	554,877	483,968
Met inclusion and exclusion criteria ¹	183,831	188,343	334,436	220,441	183,831	188,343	334,436	220,441
<i>Evidence of cancer</i>	N/A	71,127	N/A	114,807	N/A	71,127	N/A	114,807
<i>Evidence of esrd</i>	N/A	40,620	N/A	84,239	N/A	40,620	N/A	84,239
<i>Evidence of rybelsus</i>	N/A	3,381	N/A	1,441	N/A	3,381	N/A	1,441
<i>Evidence of semaglutide</i>	N/A	N/A	N/A	6,448	N/A	N/A	N/A	6,448
<i>Evidence of sitagliptin</i>	N/A	56,489	N/A	N/A	N/A	56,489	N/A	N/A

Table 13. Summary of Patient Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	sema_sita_hdps				sema_sita_ps			
	semaglutide		sitagliptin		semaglutide		sitagliptin	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<i>Evidence of t1dm_aved</i>	N/A	11,864	N/A	9,751	N/A	11,864	N/A	9,751
<i>Evidence of t1dm_ip</i>	N/A	2,462	N/A	4,766	N/A	2,462	N/A	4,766
<i>Evidence of wegovy</i>	N/A	193	N/A	*****	N/A	193	N/A	*****
<i>No evidence of t2dm_aved</i>	N/A	48,894	N/A	48,898	N/A	48,894	N/A	48,898
<i>No evidence of t2dm_ip</i>	N/A	153,090	N/A	143,214	N/A	153,090	N/A	143,214
Met event incidence criteria	183,831	0	334,436	0	183,831	0	334,436	0
Members with required post-index follow-up								
Had sufficient post-index continuous enrollment	183,784	47	334,382	54	183,784	47	334,382	54
Had minimum days' supply on index date	183,784	0	334,382	0	183,784	0	334,382	0
Had index episode of at least required length	183,784	0	334,382	0	183,784	0	334,382	0
Had index episode longer than blackout period	183,784	0	334,382	0	183,784	0	334,382	0
Did not have an event during blackout period	183,784	0	334,382	0	183,784	0	334,382	0
Final cohort								
Number of members	183,784	N/A	334,382	N/A	183,784	N/A	334,382	N/A
Number of episodes	183,784	N/A	334,382	N/A	183,784	N/A	334,382	N/A
Members meeting comparative cohort eligibility requirements								
Excluded due to same-day initiation of both exposure groups	183,831	0	334,436	0	183,831	0	334,436	0
Excluded due to prior initiation of other exposure group	182,003	1,828	334,156	280	182,003	1,828	334,156	280
Excluded due to prior initiation of other exposure group in a prior look	182,003	0	334,156	0	182,003	0	334,156	0

Table 13. Summary of Patient Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

	sema_sita_hdps				sema_sita_ps			
	semaglutide		sitagliptin		semaglutide		sitagliptin	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Included in comparative analysis	118,161	63,842	118,161	215,995	134,007	47,996	134,007	200,149

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

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

Figure 1. Histograms Depicting Propensity Score Distributions Before and After Adjustment for High Dimensional Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Unadjusted Propensity Score Distribution

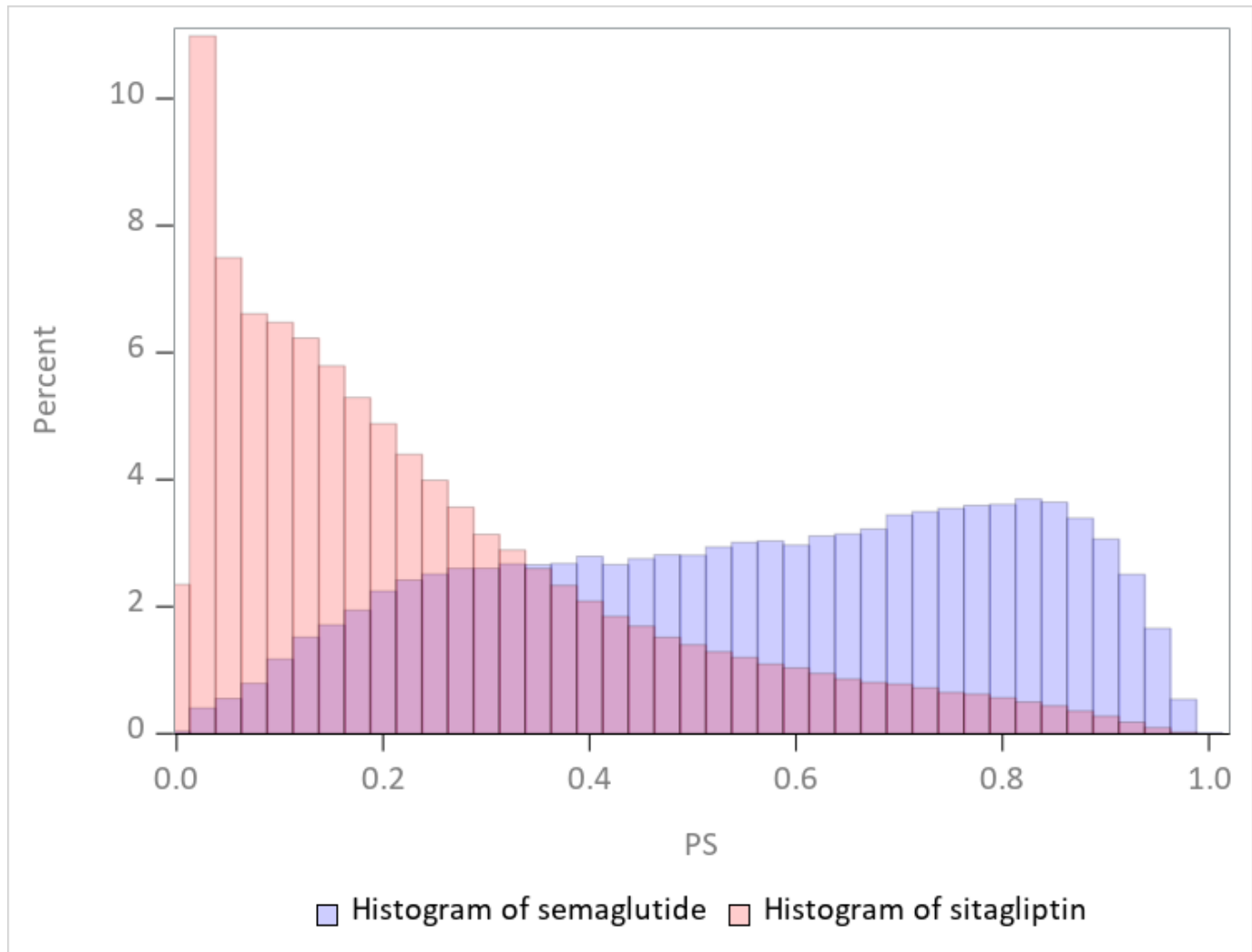


Figure 1. Histograms Depicting Propensity Score Distributions Before and After Adjustment for High Dimensional Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022 (Continued)

Propensity Score Fixed Ratio 1:1 Adjusted Cohort, Matched Caliper=0.025

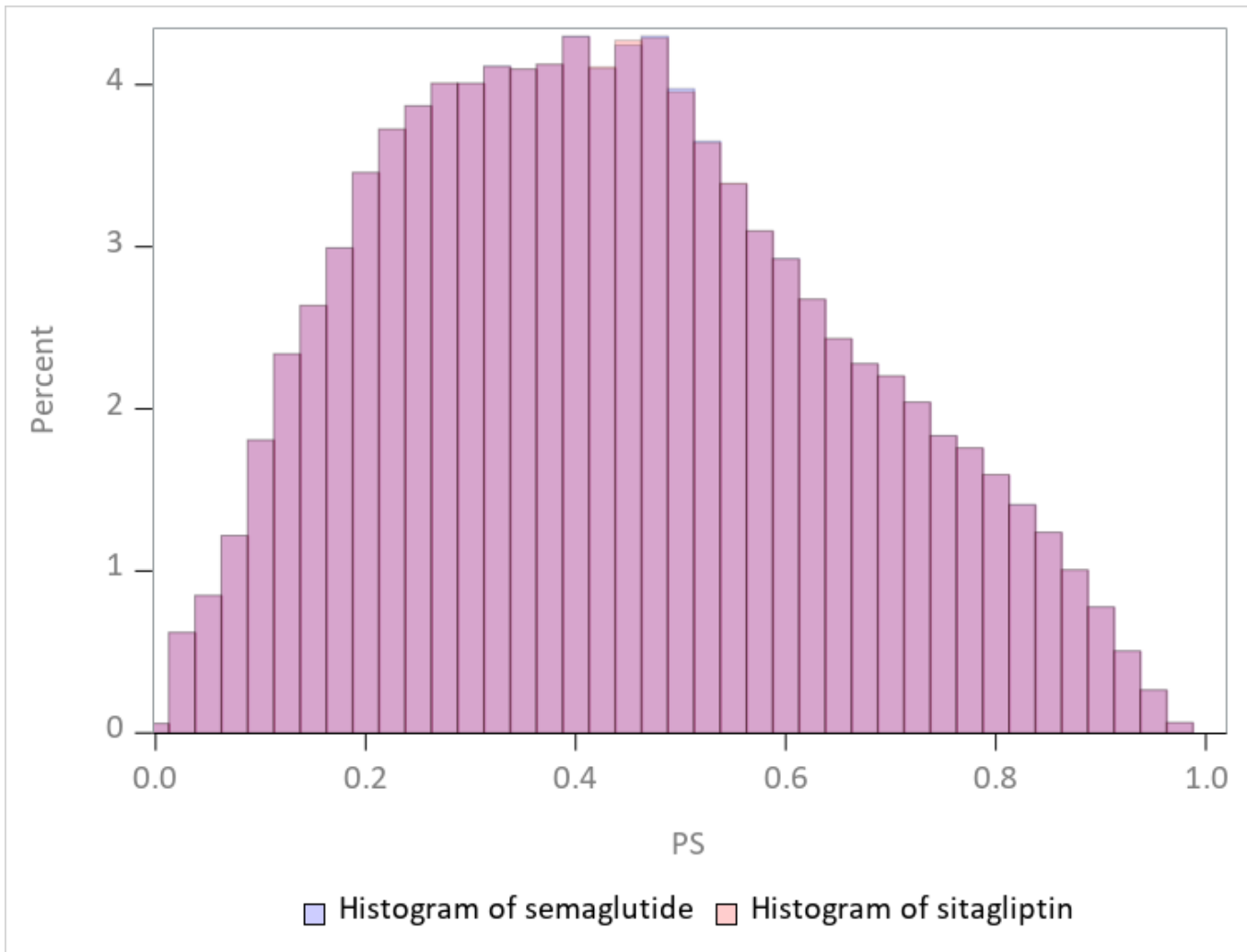


Figure 2. Histograms Depicting Propensity Score Distributions Before and After Adjustment for Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022

Unadjusted Propensity Score Distribution

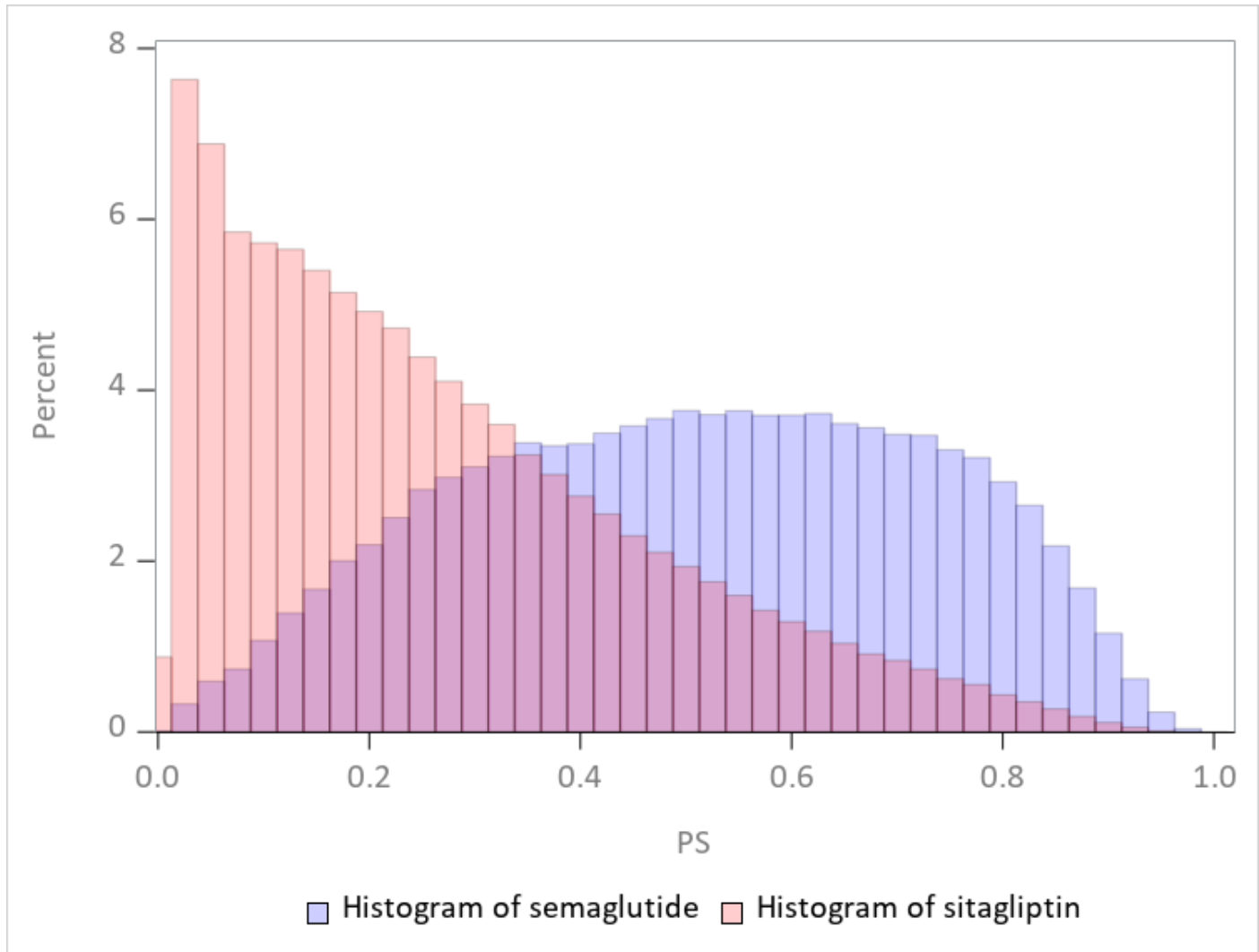


Figure 2. Histograms Depicting Propensity Score Distributions Before and After Adjustment for Propensity Score Model in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022 (Continued)

Propensity Score Fixed Ratio 1:1 Adjusted Cohort, Matched Caliper = 0.025

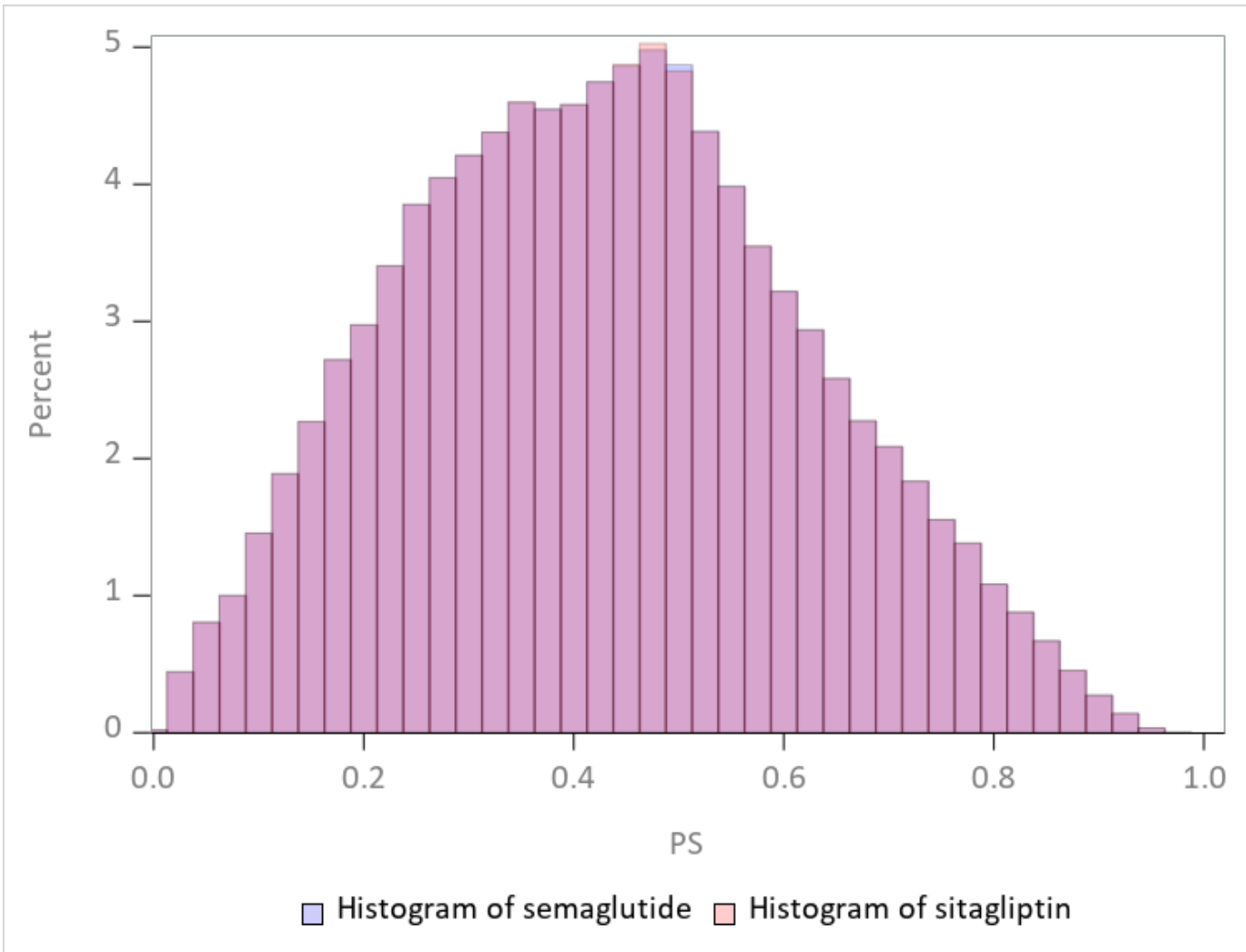
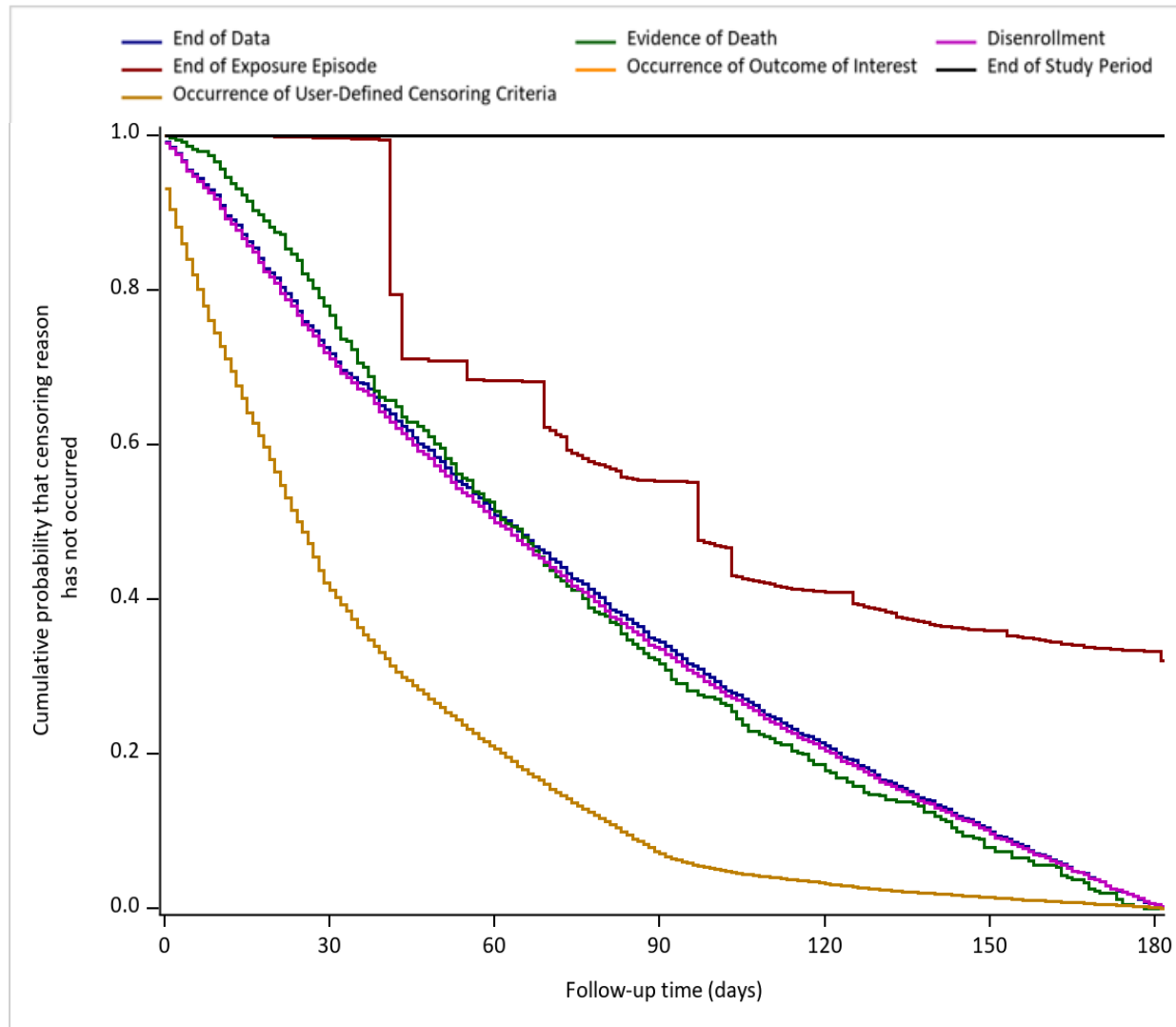
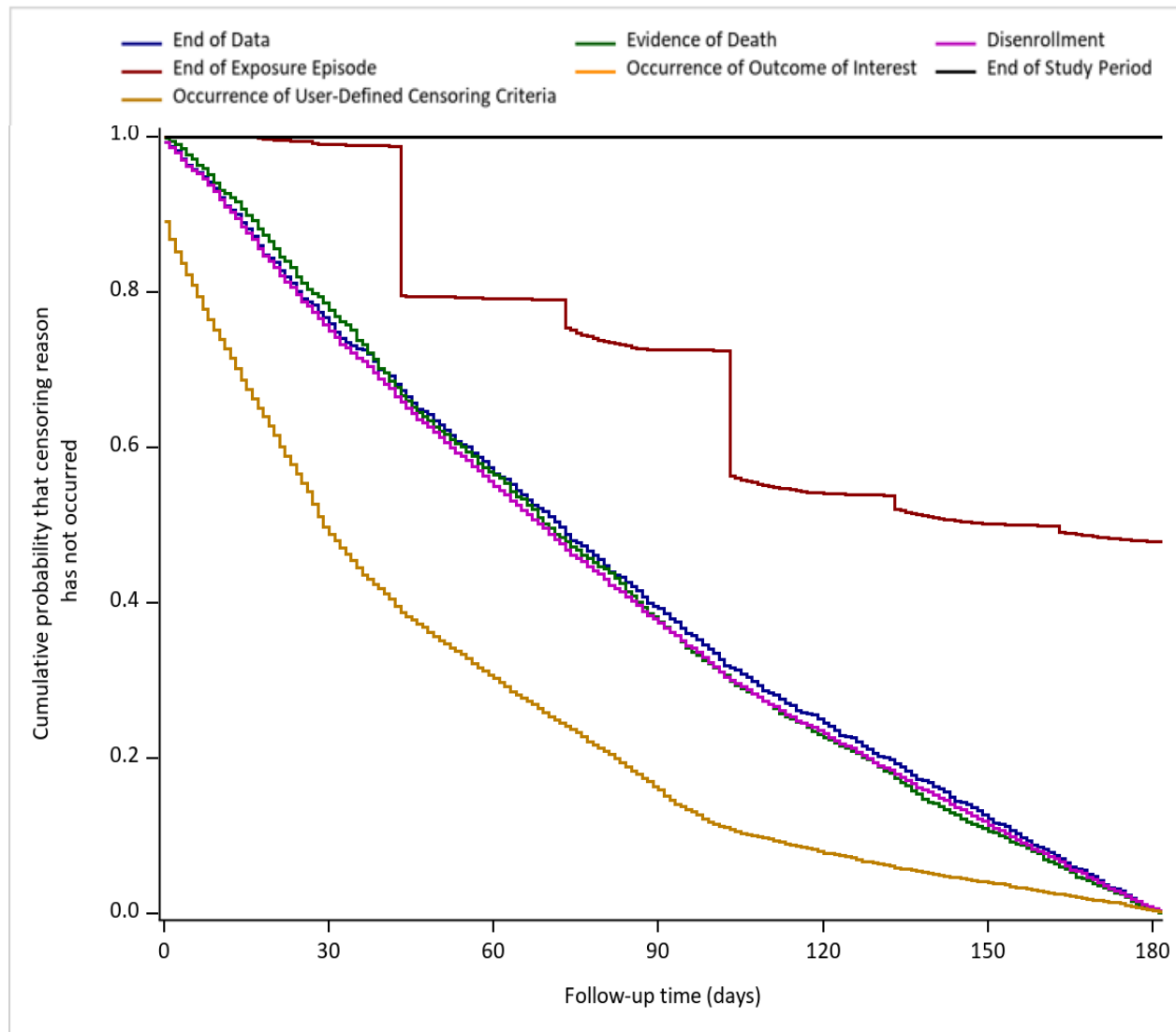


Figure 3a. Reasons for End of Follow-Up Among semaglutide in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022¹



¹A single episode may contribute to multiple categories if a patient was censored due to multiple criteria on the same day.

Figure 3b. Reasons for End of Follow-Up Among sitagliptin in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022¹



¹A single episode may contribute to multiple categories if a patient was censored due to multiple criteria on the same day.

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

Masked DP ID	DP Start Date	DP End Date ²
DP01	01/01/2008	12/31/2021
DP02	01/01/2007	01/31/2022
DP03	01/01/2006	02/28/2022
DP04	01/01/2000	12/31/2019
DP05	01/01/2010	12/31/2021

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

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP01	0DB64Z3	PX	ICD-10_CM	Any	1.529	EXCISION STOMACH PERQ ENDO VERTICAL
DP01	C776	RX	CLASS	Frequent	1.476	LHRH (GnRH) Agonist Analog Pit Suppres - Central Precocious Puberty
DP01	10E0XZZ	PX	ICD-10_CM	Any	1.428	DELIVERY PRODUCTS OF CONCEPTION EXT
DP01	F07Z9ZZ	PX	ICD-10_CM	Any	1.399	GAIT TRAINING FUNC AMBULATION TX
DP01	C776	RX	CLASS	Often	1.370	LHRH (GnRH) Agonist Analog Pit Suppres - Central Precocious Puberty
DP01	0UB70ZZ	PX	ICD-10_CM	Any	1.348	EXCISION BILAT FALLOPIAN TUBES OP
DP01	02K83ZZ	PX	ICD-10_CM	Any	1.319	MAP CONDUCTION MECHANISM PERQ APPR
DP01	B3101ZZ	PX	ICD-10_CM	Any	1.262	FLURO THORACIC AORTA LOW OSM CONT
DP01	0SG30AJ	PX	ICD-10_CM	Any	1.246	FUSION LS JNT IF POST APPR AC OPEN
DP01	Z794	DX	ICD-10_CM	Frequent	1.203	LONG TERM CURRENT USE OF INSULIN
DP01	02RF08Z	PX	ICD-10_CM	Any	1.137	REPL AORTIC VALVE ZOOPLSTC TISS OPN
DP01	0SG3071	PX	ICD-10_CM	Any	1.101	FUSION LS JOINT AUTO SUB POST PC OP
DP01	Z794	DX	ICD-10_CM	Often	1.082	LONG TERM CURRENT USE OF INSULIN
DP01	0FC98ZZ	PX	ICD-10_CM	Any	1.068	EXTIRPATN MATTER CMN BILE DUCT ENDO
DP01	0SG1071	PX	ICD-10_CM	Any	1.003	FUS 2/> LV JNT AUTO SUB POST PC OP
DP01	4A033BC	PX	ICD-10_CM	Any	0.994	MEASURE ARTERIAL PRESS CORONARY PC
DP01	02583ZZ	PX	ICD-10_CM	Any	0.974	DESTRUCTION CONDUCTION MECH PERQ
DP01	C776	RX	CLASS	Any	0.972	LHRH (GnRH) Agonist Analog Pit Suppres - Central Precocious Puberty
DP01	E660	DX	ICD-10_CM	Frequent	0.943	OBESITY DUE TO EXCESS CALORIES
DP01	Z794	DX	ICD-10_CM	Any	0.928	LONG TERM CURRENT USE OF INSULIN
DP01	A4604	PX	HCPCS	Frequent	0.926	Tubing with integrated heating element for use with positive airway pressure device
DP01	Z684	DX	ICD-10_CM	Frequent	0.920	BODY MASS INDEX 40 OR GREATER ADULT
DP01	3E03329	PX	ICD-10_CM	Any	0.914	INTRO OTH ANTI-INFEC PERIPH VN PERQ
DP01	A7033	PX	HCPCS	Frequent	0.888	Pillow for use on nasal cannula type interface, replacement only, pair
DP01	10D00Z1	PX	ICD-10_CM	Any	0.878	EXTRACTION POC LOW OPEN
DP01	U0005	PX	HCPCS	Frequent	0.868	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, CDC or non-CDC, making use of high throughput technologies, completed within 2 calendar days from date of specimen collection (list separately in addition to either HCPCS code U0003 or U0004) as described by CMS-2020-01-R2
DP01	E660	DX	ICD-10_CM	Often	0.844	OBESITY DUE TO EXCESS CALORIES

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP01	G0108	PX	HCPCS	Frequent	0.838	Diabetes outpatient self-management training services, individual, per 30 minutes
DP01	C144	RX	CLASS	Often	0.831	Anticonvulsant - Oxazolidinediones
DP01	OSG00AJ	PX	ICD-10_CM	Any	0.829	FUSION LV JOINT IF POST APPR AC OPN
DP01	Z684	DX	ICD-10_CM	Often	0.828	BODY MASS INDEX 40 OR GREATER ADULT
DP01	C144	RX	CLASS	Any	0.817	Anticonvulsant - Oxazolidinediones
DP01	C1135	RX	CLASS	Frequent	0.803	Vitamin C Combinations
DP01	A4604	PX	HCPCS	Often	0.799	Tubing with integrated heating element for use with positive airway pressure device
DP01	U0003	PX	HCPCS	Frequent	0.791	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, making use of high throughput technologies as described by CMS-2020-01-R
DP01	A4604	PX	HCPCS	Any	0.786	Tubing with integrated heating element for use with positive airway pressure device
DP01	OST20ZZ	PX	ICD-10_CM	Any	0.783	RESECT LUMBAR VERTEBRAL DISC OPEN
DP01	A7031	PX	HCPCS	Frequent	0.777	Face mask interface, replacement for full face mask, each
DP01	C679	RX	CLASS	Frequent	0.764	Factor IX Preparations
DP01	U0005	PX	HCPCS	Any	0.764	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, CDC or non-CDC, making use of high throughput technologies, completed within 2 calendar days from date of specimen collection (list separately in addition to either HCPCS code U0003 or U0004) as described by CMS-2020-01-R2
DP01	Z684	DX	ICD-10_CM	Any	0.761	BODY MASS INDEX 40 OR GREATER ADULT
DP01	C144	RX	CLASS	Frequent	0.757	Anticonvulsant - Oxazolidinediones
DP01	G2023	PX	HCPCS	Any	0.753	Specimen collection for Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) (Coronavirus disease [COVID-19]), any specimen source
DP01	021009W	PX	ICD-10_CM	Any	0.751	BP CA 1 ART AORTA AUTO VEN TISS OP
DP01	HZ2ZZZZ	PX	ICD-10_CM	Any	0.751	DTX SERVICES FOR SUBSTANCE ABUSE TX
DP01	C172	RX	CLASS	Often	0.745	Antidepressant-Tricyclics and Related (Non-Select Reuptake
DP01	C64	RX	CLASS	Frequent	0.745	Androgens

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP01	02H63JZ	PX	ICD-10_CM	Any	0.744	INSERTION PACEMAKER LEAD RT ATRIUM PERQ APPR
DP01	C104	RX	CLASS	Often	0.744	Antiarrhythmic - Class I
DP01	C131	RX	CLASS	Frequent	0.744	INSERT PACEMKR LEAD RT ATRIUM PERQ
DP01	G8420	PX	HCPCS	Frequent	0.743	BMI is documented within normal parameters and no follow-up plan is required
DP01	C64	RX	CLASS	Often	0.739	Androgens
DP01	C131	RX	CLASS	Often	0.733	Anticonvulsant - Carboxylic Acid Derivatives / Bipolar Therapy Agents - Anticonvulsant Type
DP01	A7033	PX	HCPCS	Often	0.731	Pillow for use on nasal cannula type interface, replacement only, pair
DP01	U0004	PX	HCPCS	Any	0.730	2019-nCoV coronavirus, SARS-CoV-2/2019-nCoV (COVID-19), any technique, multiple types or subtypes (includes all targets), non-CDC, making use of high throughput technologies as described by CMS-2020-01-R
DP01	A7046	PX	HCPCS	Frequent	0.728	Water chamber for humidifier, used with positive airway pressure device, replacement, each
DP01	A7033	PX	HCPCS	Any	0.723	Pillow for use on nasal cannula type interface, replacement only, pair
DP01	C172	RX	CLASS	Any	0.720	Antidepressant-Tricyclics and Related (Non-Select Reuptake
DP01	A7038	PX	HCPCS	Frequent	0.715	Filter, disposable, used with positive airway pressure device
DP01	0WUF0JZ	PX	ICD-10_CM	Any	0.696	CONTCT W EXPOS OTH COMMUNICABLE DZ
DP01	Z208	DX	ICD-10_CM	Frequent	0.696	SUPPLEMENT ADBOMINAL WALL SYN OPEN
DP01	E660	DX	ICD-10_CM	Any	0.693	OBESITY DUE TO EXCESS CALORIES
DP01	3E033XZ	PX	ICD-10_CM	Any	0.691	INTRO VASOPRESSOR PERIPH VN PERQ
DP01	U0003	PX	HCPCS	Any	0.690	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, making use of high throughput technologies as described by CMS-2020-01-R
DP01	06BQ4ZZ	PX	ICD-10_CM	Any	0.688	EXCISION OF LEFT SAPHENOUS VEIN PE
DP01	C168	RX	CLASS	Frequent	0.687	Antidepressant Combinations

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP01	G0481	PX	HCPCS	Frequent	0.687	Drug test(s), definitive, utilizing (1) drug identification methods able to identify individual drugs and distinguish between structural isomers (but not necessarily stereoisomers), including, but not limited to, GC/MS (any type, single or tandem) and LC/MS (any type, single or tandem and excluding immunoassays (e.g., IA, EIA, ELISA, EMIT, FPIA) and enzymatic methods (e.g., alcohol dehydrogenase)), (2) stable isotope or other universally recognized internal standards in all samples (e.g., to control for matrix effects, interferences and variations in signal strength), and (3) method or drug-specific calibration and matrix-matched quality control material (e.g., to control for instrument variations and mass spectral drift); qualitative or quantitative, all sources, includes specimen validity testing, per day; 8-14 drug class(es), including metabolite(s) if performed
DP01	Z208	DX	ICD-10_CM	Any	0.687	CONTACT W/ & EXPOSURE OTH COMMUNICABLE DISEASES
DP01	84403	PX	CPT	Frequent	0.684	Testosterone; total
DP01	A7038	PX	HCPCS	Often	0.684	Filter, disposable, used with positive airway pressure device
DP01	C172	RX	CLASS	Frequent	0.684	Antidepressant-Tricyclics and Related (Non-Select Reuptake
DP01	A7046	PX	HCPCS	Any	0.681	Water chamber for humidifier, used with positive airway pressure device, replacement, each
DP01	A7034	PX	HCPCS	Often	0.677	Nasal interface (mask or cannula type) used with positive airway pressure device, with or without head strap
DP01	E669	DX	ICD-10_CM	Frequent	0.676	OBESITY UNSPECIFIED
DP01	A7035	PX	HCPCS	Frequent	0.674	Headgear used with positive airway pressure device
DP01	5A1945Z	PX	ICD-10_CM	Any	0.673	RESPIRATORY VENT 24-96 CONSEC HOURS
DP01	U0004	PX	HCPCS	Frequent	0.671	2019-nCoV coronavirus, SARS-CoV-2/2019-nCoV (COVID-19), any technique, multiple types or subtypes (includes all targets), non-CDC, making use of high throughput technologies as described by CMS-2020-01-R
DP01	A7031	PX	HCPCS	Often	0.670	Face mask interface, replacement for full face mask, each
DP01	A7032	PX	HCPCS	Frequent	0.669	Cushion for use on nasal mask interface, replacement only, each
DP01	0JH606Z	PX	ICD-10_CM	Any	0.667	INSERT PM DUAL CHAMB CHEST SUBQ TISS FASCIA OPEN
DP01	A7032	PX	HCPCS	Often	0.667	INS PM DUAL CHMB CHST SUBQ FASC OPN

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP01	A7034	PX	HCPCS	Any	0.666	Nasal interface (mask or cannula type) used with positive airway pressure device, with or without head strap
DP01	021209W	PX	ICD-10_CM	Any	0.659	BP CA 3 ART AORTA AUTO VEN TISS OP
DP01	A7034	PX	HCPCS	Frequent	0.656	Nasal interface (mask or cannula type) used with positive airway pressure device, with or without head strap
DP01	C64	RX	CLASS	Any	0.654	Androgens
DP01	G0108	PX	HCPCS	Any	0.648	Diabetes outpatient self-management training services, individual, per 30 minutes
DP01	C168	RX	CLASS	Often	0.647	Antidepressant Combinations
DP01	G473	DX	ICD-10_CM	Often	0.646	SLEEP APNEA
DP01	A7030	PX	HCPCS	Often	0.645	Full face mask used with positive airway pressure device, each
DP01	A7038	PX	HCPCS	Any	0.642	Filter, disposable, used with positive airway pressure device
DP01	C672	RX	CLASS	Often	0.642	Estrogen Combinations / Estrogens
DP01	A7035	PX	HCPCS	Any	0.641	Headgear used with positive airway pressure device
DP01	A7032	PX	HCPCS	Any	0.639	Cushion for use on nasal mask interface, replacement only, each
DP01	C131	RX	CLASS	Any	0.637	Anticonvulsant - Carboxylic Acid Derivatives / Bipolar Therapy Agents - Anticonvulsant Type
DP01	C672	RX	CLASS	Frequent	0.637	Estrogen Combinations / Estrogens
DP01	99214	PX	CPT	Any	0.636	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.
DP01	C104	RX	CLASS	Frequent	0.634	Antiarrhythmic - Class I
DP01	A7030	PX	HCPCS	Any	0.633	Full face mask used with positive airway pressure device, each
DP01	G473	DX	ICD-10_CM	Frequent	0.633	SLEEP APNEA
DP01	C438	RX	CLASS	Any	0.632	Contraceptives - Intravaginal, Systemic
DP02	G0202	PX	HCPCS	Often	2.068	Screening mammography, bilateral (2-view study of each breast), including computer-aided detection (CAD) when performed
DP02	9999999	PX	ICD-10_CM	Frequent	2.001	
DP02	G0202	PX	HCPCS	Any	1.817	Screening mammography, bilateral (2-view study of each breast), including computer-aided detection (CAD) when performed
DP02	0DB64Z3	PX	ICD-10_CM	Any	1.576	EXCISION STOMACH PERQ ENDO VERTICAL

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP02	C776	RX	CLASS	Frequent	1.406	LHRH (GnRH) Agonist Analog Pit Suppres - Central Precocious Puberty
DP02	C776	RX	CLASS	Often	1.246	LHRH (GnRH) Agonist Analog Pit Suppres - Central Precocious Puberty
DP02	02703ZZ	PX	ICD-10_CM	Any	1.228	DILATION CORONARY ARTERY 1 ART PERQ
DP02	B41G1ZZ	PX	ICD-10_CM	Any	1.228	FLURO LT LOWER EXT ART LOW OSM CT
DP02	02HK3JZ	PX	ICD-10_CM	Any	1.011	INS PACEMAKR LEAD RT VENTRICLE PERQ
DP02	8E0W4CZ	PX	ICD-10_CM	Any	1.010	ROBOTIC ASSTD PROC TRUNK PERQ ENDO
DP02	Z794	DX	ICD-10_CM	Frequent	1.008	LONG TERM CURRENT USE OF INSULIN
DP02	C222	RX	CLASS	Frequent	0.996	Antihyperlipidemic - PCSK9 Inhibitors
DP02	Z684	DX	ICD-10_CM	Frequent	0.987	BODY MASS INDEX 40 OR GREATER ADULT
DP02	3E0234Z	PX	ICD-10_CM	Any	0.940	INTRO SERUM TOXOID VAC MSC PERQ
DP02	5A1223Z	PX	ICD-10_CM	Any	0.940	PERFORMANCE CARDIAC PACING CONT
DP02	Z684	DX	ICD-10_CM	Often	0.901	BODY MASS INDEX 40 OR GREATER ADULT
DP02	Z794	DX	ICD-10_CM	Often	0.898	LONG TERM CURRENT USE OF INSULIN
DP02	A4604	PX	HCPCS	Frequent	0.883	Tubing with integrated heating element for use with positive airway pressure device
DP02	C44	RX	CLASS	Frequent	0.882	Alzheimer's Disease Therapy - Cholinesterase Inhibitors
DP02	E660	DX	ICD-10_CM	Frequent	0.869	OBESITY DUE TO EXCESS CALORIES
DP02	G0108	PX	HCPCS	Frequent	0.868	Diabetes outpatient self-management training services, individual, per 30 minutes
DP02	C222	RX	CLASS	Often	0.865	Antihyperlipidemic - PCSK9 Inhibitors
DP02	0JH606Z	PX	ICD-10_CM	Any	0.863	INS PM DUAL CHMB CHST SUBQ FASC OPN
DP02	A4604	PX	HCPCS	Often	0.853	Tubing with integrated heating element for use with positive airway pressure device
DP02	C144	RX	CLASS	Any	0.841	Anticonvulsant - Oxazolidinediones
DP02	A7030	PX	HCPCS	Frequent	0.830	Full face mask used with positive airway pressure device, each
DP02	B246ZZZ	PX	ICD-10_CM	Any	0.822	ULTRASONOGRAPHY RIGHT & LEFT HEART
DP02	A7031	PX	HCPCS	Often	0.805	Face mask interface, replacement for full face mask, each
DP02	A7031	PX	HCPCS	Frequent	0.802	Face mask interface, replacement for full face mask, each
DP02	C144	RX	CLASS	Often	0.798	Anticonvulsant - Oxazolidinediones
DP02	C222	RX	CLASS	Any	0.798	Antihyperlipidemic - PCSK9 Inhibitors
DP02	A7046	PX	HCPCS	Frequent	0.787	Water chamber for humidifier, used with positive airway pressure device, replacement, each
DP02	03HY32Z	PX	ICD-10_CM	Any	0.786	INSERT MONIT DEVC UPPER ARTERY PERQ

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP02	A4604	PX	HCPCS	Any	0.781	Tubing with integrated heating element for use with positive airway pressure device
DP02	C44	RX	CLASS	Any	0.777	Alzheimer's Disease Therapy - Cholinesterase Inhibitors
DP02	A7030	PX	HCPCS	Often	0.774	Full face mask used with positive airway pressure device, each
DP02	C9803	PX	HCPCS	Any	0.760	Hospital outpatient clinic visit specimen collection for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), any specimen source
DP02	0T9B70Z	PX	ICD-10_CM	Any	0.758	DRAIN BLADDER DRAIN DEVC NAT/ART OP
DP02	Z684	DX	ICD-10_CM	Any	0.756	BODY MASS INDEX 40 OR GREATER ADULT
DP02	C776	RX	CLASS	Any	0.755	LHRH (GnRH) Agonist Analog Pit Suppres - Central Precocious Puberty
DP02	A7038	PX	HCPCS	Frequent	0.751	Filter, disposable, used with positive airway pressure device
DP02	U0005	PX	HCPCS	Any	0.751	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, CDC or non-CDC, making use of high throughput technologies, completed within 2 calendar days from date of specimen collection (list separately in addition to either HCPCS code U0003 or U0004) as described by CMS-2020-01-R2
DP02	02H63JZ	PX	ICD-10_CM	Any	0.748	INSERT PACEMKR LEAD RT ATRIUM PERQ
DP02	C333	RX	CLASS	Often	0.745	Antipsychotic - Dopamine Antagonists
DP02	A7046	PX	HCPCS	Any	0.742	Water chamber for humidifier, used with positive airway pressure device, replacement, each
DP02	A7035	PX	HCPCS	Frequent	0.741	Headgear used with positive airway pressure device
DP02	Z794	DX	ICD-10_CM	Any	0.740	LONG TERM CURRENT USE OF INSULIN
DP02	C144	RX	CLASS	Frequent	0.736	Anticonvulsant - Oxazolidinediones
DP02	A7031	PX	HCPCS	Any	0.726	Face mask interface, replacement for full face mask, each
DP02	HZ2ZZZZ	PX	ICD-10_CM	Any	0.724	DTX SERVICES FOR SUBSTANCE ABUSE TX
DP02	E660	DX	ICD-10_CM	Often	0.723	OBESITY DUE TO EXCESS CALORIES
DP02	C172	RX	CLASS	Often	0.719	Antidepressant-Tricyclics and Related (Non-Select Reuptake
DP02	3E0333Z	PX	ICD-10_CM	Any	0.718	INTRO AIF PERIPH VEIN PERQ APPROACH
DP02	A7038	PX	HCPCS	Often	0.711	Filter, disposable, used with positive airway pressure device
DP02	5A1955Z	PX	ICD-10_CM	Any	0.709	RESPIRATORY VENTILATION > 96 CON HR
DP02	C131	RX	CLASS	Often	0.693	Anticonvulsant - Carboxylic Acid Derivatives / Bipolar Therapy Agents - Anticonvulsant Type

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP02	A7034	PX	HCPCS	Often	0.692	Nasal interface (mask or cannula type) used with positive airway pressure device, with or without head strap
DP02	A7037	PX	HCPCS	Frequent	0.692	Tubing used with positive airway pressure device
DP02	Z208	DX	ICD-10_CM	Frequent	0.690	CONTCT W EXPOS OTH COMMUNICABLE DZ
DP02	02RF08Z	PX	ICD-10_CM	Any	0.689	REPL AORTIC VALVE ZOOPLSTC TISS OPN
DP02	E0562	PX	HCPCS	Any	0.686	Humidifier, heated, used with positive airway pressure device
DP02	U0003	PX	HCPCS	Frequent	0.685	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, making use of high throughput technologies as described by CMS-2020-01-R
DP02	Z682	DX	ICD-10_CM	Frequent	0.684	BODY MASS INDEX BMI 20-29 ADULT
DP02	C172	RX	CLASS	Frequent	0.682	Antidepressant-Tricyclics and Related (Non-Select Reuptake
DP02	A7030	PX	HCPCS	Any	0.680	Full face mask used with positive airway pressure device, each
DP02	A7037	PX	HCPCS	Often	0.680	Tubing used with positive airway pressure device
DP02	C131	RX	CLASS	Frequent	0.680	Anticonvulsant - Carboxylic Acid Derivatives / Bipolar Therapy Agents - Anticonvulsant Type
DP02	A7038	PX	HCPCS	Any	0.678	Filter, disposable, used with positive airway pressure device
DP02	G0108	PX	HCPCS	Any	0.678	Diabetes outpatient self-management training services, individual, per 30 minutes
DP02	C44	RX	CLASS	Often	0.677	Alzheimer's Disease Therapy - Cholinesterase Inhibitors
DP02	A7039	PX	HCPCS	Frequent	0.676	Filter, nondisposable, used with positive airway pressure device
DP02	C333	RX	CLASS	Frequent	0.670	Antipsychotic - Dopamine Antagonists
DP02	G473	DX	ICD-10_CM	Frequent	0.669	SLEEP APNEA
DP02	B4101ZZ	PX	ICD-10_CM	Any	0.668	FLUORO ABD AORTA LW OSMOLAR CONTRST
DP02	A7033	PX	HCPCS	Any	0.666	Pillow for use on nasal cannula type interface, replacement only, pair
DP02	Z208	DX	ICD-10_CM	Often	0.663	CONTCT W EXPOS OTH COMMUNICABLE DZ
DP02	Z988	DX	ICD-10_CM	Frequent	0.663	OTHER SPEC POSTPROCEDURAL STATES
DP02	A7032	PX	HCPCS	Often	0.660	Cushion for use on nasal mask interface, replacement only, each
DP02	A7033	PX	HCPCS	Frequent	0.660	Pillow for use on nasal cannula type interface, replacement only, pair
DP02	ORG20A0	PX	ICD-10_CM	Any	0.659	FUS 2/> CV JNT IF ANT APPR AC OPEN
DP02	A7033	PX	HCPCS	Often	0.659	Pillow for use on nasal cannula type interface, replacement only, pair
DP02	G473	DX	ICD-10_CM	Often	0.659	SLEEP APNEA
DP02	A7035	PX	HCPCS	Any	0.658	Headgear used with positive airway pressure device

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP02	E0562	PX	HCPCS	Frequent	0.658	Humidifier, heated, used with positive airway pressure device
DP02	OST20ZZ	PX	ICD-10_CM	Any	0.651	RESECT LUMBAR VERTEBRAL DISC OPEN
DP02	A7034	PX	HCPCS	Frequent	0.649	Nasal interface (mask or cannula type) used with positive airway pressure device, with or without head strap
DP02	A7032	PX	HCPCS	Any	0.647	Cushion for use on nasal mask interface, replacement only, each
DP02	ORT30ZZ	PX	ICD-10_CM	Any	0.644	RESECT CERV VERT DISC OPN APPROACH
DP02	A7032	PX	HCPCS	Frequent	0.641	Cushion for use on nasal mask interface, replacement only, each
DP02	Z682	DX	ICD-10_CM	Often	0.638	BODY MASS INDEX BMI 20-29 ADULT
DP02	E0601	PX	HCPCS	Any	0.637	Continuous positive airway pressure (CPAP) device
DP02	U0004	PX	HCPCS	Any	0.633	2019-nCoV coronavirus, SARS-CoV-2/2019-nCoV (COVID-19), any technique, multiple types or subtypes (includes all targets), non-CDC, making use of high throughput technologies as described by CMS-2020-01-R
DP02	00NW0ZZ	PX	ICD-10_CM	Any	0.629	RELEASE CERVICAL SPINAL CORD OPEN
DP02	E0601	PX	HCPCS	Often	0.628	Continuous positive airway pressure (CPAP) device
DP02	XW13325	PX	ICD-10_CM	Any	0.626	BODY MASS INDEX BMI 20-29 ADULT
DP02	Z682	DX	ICD-10_CM	Any	0.626	TRANSFS CNVLS PLSM PRPH VN PRC NT5
DP02	B41D1ZZ	PX	ICD-10_CM	Any	0.625	FLUORO AORTA BI LOW EXT ART L OS CT
DP02	A7034	PX	HCPCS	Any	0.624	Nasal interface (mask or cannula type) used with positive airway pressure device, with or without head strap
DP02	U0003	PX	HCPCS	Any	0.622	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, making use of high throughput technologies as described by CMS-2020-01-R
DP02	99214	PX	CPT	Any	0.621	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.
DP03	3E033VJ	PX	ICD-10_CM	Any	1.637	INTRO OTH HORMONE PERIPH VN PERQ
DP03	3E03329	PX	ICD-10_CM	Any	1.507	INTRO OTH ANTI-INFEC PERIPH VN PERQ
DP03	G0202	PX	HCPCS	Frequent	1.436	Screening mammography, bilateral (2-view study of each breast), including computer-aided detection (CAD) when performed

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP03	C776	RX	CLASS	Frequent	1.396	LHRH (GnRH) Agonist Analog Pit Suppres - Central Precocious Puberty
DP03	C776	RX	CLASS	Often	1.301	LHRH (GnRH) Agonist Analog Pit Suppres - Central Precocious Puberty
DP03	0DB64Z3	PX	ICD-10_CM	Any	1.137	EXCISION STOMACH PERQ ENDO VERTICAL
DP03	10907ZC	PX	ICD-10_CM	Any	1.137	DRAIN AMNIO FLUID TX POC NAT/ART OP
DP03	Z794	DX	ICD-10_CM	Frequent	1.124	LONG TERM CURRENT USE OF INSULIN
DP03	Z794	DX	ICD-10_CM	Often	1.086	LONG TERM CURRENT USE OF INSULIN
DP03	G0202	PX	HCPCS	Any	1.083	Screening mammography, bilateral (2-view study of each breast), including computer-aided detection (CAD) when performed
DP03	3E0333Z	PX	ICD-10_CM	Any	1.051	INTRO AIF PERIPH VEIN PERQ APPROACH
DP03	10E0XZZ	PX	ICD-10_CM	Any	0.993	DELIVERY PRODUCTS OF CONCEPTION EXT
DP03	C776	RX	CLASS	Any	0.971	LHRH (GnRH) Agonist Analog Pit Suppres - Central Precocious Puberty
DP03	U0005	PX	HCPCS	Frequent	0.918	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, CDC or non-CDC, making use of high throughput technologies, completed within 2 calendar days from date of specimen collection (list separately in addition to either HCPCS code U0003 or U0004) as described by CMS-2020-01-R2
DP03	0BH17EZ	PX	ICD-10_CM	Any	0.913	INSRT ET AW TRACHEA NAT/ART OPENING
DP03	Z794	DX	ICD-10_CM	Any	0.912	LONG TERM CURRENT USE OF INSULIN
DP03	10D00Z1	PX	ICD-10_CM	Any	0.902	EXTRACTION POC LOW OPEN
DP03	A4259	PX	HCPCS	Any	0.861	Lancets, per box of 100
DP03	E660	DX	ICD-10_CM	Frequent	0.860	OBESITY DUE TO EXCESS CALORIES
DP03	U0005	PX	HCPCS	Any	0.848	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, CDC or non-CDC, making use of high throughput technologies, completed within 2 calendar days from date of specimen collection (list separately in addition to either HCPCS code U0003 or U0004) as described by CMS-2020-01-R2
DP03	0JH606Z	PX	ICD-10_CM	Any	0.826	INS PM DUAL CHMB CHST SUBQ FASC OPN
DP03	HZ2ZZZZ	PX	ICD-10_CM	Any	0.826	DTX SERVICES FOR SUBSTANCE ABUSE TX
DP03	A4259	PX	HCPCS	Often	0.824	Lancets, per box of 100
DP03	Z208	DX	ICD-10_CM	Frequent	0.802	CONTCT W EXPOS OTH COMMUNICABLE DZ
DP03	02H63JZ	PX	ICD-10_CM	Any	0.778	INSERT PACEMKR LEAD RT ATRIUM PERQ

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP03	02HK3JZ	PX	ICD-10_CM	Any	0.778	INS PACEMAKR LEAD RT VENTRICLE PERQ
DP03	A4259	PX	HCPCS	Frequent	0.778	Lancets, per box of 100
DP03	U0003	PX	HCPCS	Frequent	0.771	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, making use of high throughput technologies as described by CMS-2020-01-R
DP03	A0428	PX	HCPCS	Any	0.769	Ambulance service, basic life support, nonemergency transport, (BLS)
DP03	A4253	PX	HCPCS	Frequent	0.759	Blood glucose test or reagent strips for home blood glucose monitor, per 50 strips
DP03	Z684	DX	ICD-10_CM	Frequent	0.758	BODY MASS INDEX 40 OR GREATER ADULT
DP03	C144	RX	CLASS	Often	0.757	Anticonvulsant - Oxazolidinediones
DP03	C9803	PX	HCPCS	Any	0.755	Hospital outpatient clinic visit specimen collection for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), any specimen source
DP03	G2023	PX	HCPCS	Any	0.739	Specimen collection for Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) (Coronavirus disease [COVID-19]), any specimen source
DP03	4A1HXCZ	PX	ICD-10_CM	Any	0.731	MONITOR PROD CONCEPT CARDI RATE EXT
DP03	E660	DX	ICD-10_CM	Often	0.721	OBESITY DUE TO EXCESS CALORIES
DP03	84403	PX	CPT	Frequent	0.716	Testosterone; total
DP03	C144	RX	CLASS	Any	0.716	Anticonvulsant - Oxazolidinediones
DP03	Z208	DX	ICD-10_CM	Often	0.709	CONTCT W EXPOS OTH COMMUNICABLE DZ
DP03	Z684	DX	ICD-10_CM	Often	0.699	BODY MASS INDEX 40 OR GREATER ADULT
DP03	C144	RX	CLASS	Frequent	0.692	Anticonvulsant - Oxazolidinediones
DP03	C64	RX	CLASS	Any	0.690	Androgens
DP03	5A1945Z	PX	ICD-10_CM	Any	0.685	RESPIRATORY VENT 24-96 CONSEC HOURS
DP03	U0004	PX	HCPCS	Any	0.684	2019-nCoV coronavirus, SARS-CoV-2/2019-nCoV (COVID-19), any technique, multiple types or subtypes (includes all targets), non-CDC, making use of high throughput technologies as described by CMS-2020-01-R

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP03	U0003	PX	HCPCS	Any	0.683	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, making use of high throughput technologies as described by CMS-2020-01-R
DP03	A4253	PX	HCPCS	Any	0.680	Blood glucose test or reagent strips for home blood glucose monitor, per 50 strips
DP03	A4604	PX	HCPCS	Frequent	0.677	Tubing with integrated heating element for use with positive airway pressure device
DP03	B215YZZ	PX	ICD-10_CM	Any	0.671	FLUOROSCOPY LT HEART OTHER CONTRAST
DP03	A4253	PX	HCPCS	Often	0.663	Blood glucose test or reagent strips for home blood glucose monitor, per 50 strips
DP03	021009W	PX	ICD-10_CM	Any	0.660	BP CA 1 ART AORTA AUTO VEN TISS OP
DP03	C64	RX	CLASS	Often	0.654	Androgens
DP03	C222	RX	CLASS	Often	0.646	Antihyperlipidemic - PCSK9 Inhibitors
DP03	Z208	DX	ICD-10_CM	Any	0.644	CONTCT W EXPOS OTH COMMUNICABLE DZ
DP03	A7046	PX	HCPCS	Frequent	0.641	Water chamber for humidifier, used with positive airway pressure device, replacement, each
DP03	Z684	DX	ICD-10_CM	Any	0.631	BODY MASS INDEX 40 OR GREATER ADULT
DP03	A7031	PX	HCPCS	Frequent	0.626	Face mask interface, replacement for full face mask, each
DP03	C222	RX	CLASS	Frequent	0.626	Antihyperlipidemic - PCSK9 Inhibitors
DP03	G0108	PX	HCPCS	Frequent	0.623	Diabetes outpatient self-management training services, individual, per 30 minutes
DP03	C222	RX	CLASS	Any	0.621	Antihyperlipidemic - PCSK9 Inhibitors
DP03	C131	RX	CLASS	Frequent	0.617	Anticonvulsant - Carboxylic Acid Derivatives / Bipolar Therapy Agents - Anticonvulsant Type
DP03	A7034	PX	HCPCS	Frequent	0.608	Nasal interface (mask or cannula type) used with positive airway pressure device, with or without head strap
DP03	E660	DX	ICD-10_CM	Any	0.607	OBESITY DUE TO EXCESS CALORIES
DP03	3E0234Z	PX	ICD-10_CM	Any	0.606	INTRO SERUM TOXOID VAC MSC PERQ
DP03	A4604	PX	HCPCS	Often	0.605	Tubing with integrated heating element for use with positive airway pressure device
DP03	A7031	PX	HCPCS	Often	0.604	Face mask interface, replacement for full face mask, each
DP03	A7032	PX	HCPCS	Frequent	0.601	Cushion for use on nasal mask interface, replacement only, each

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP03	A7033	PX	HCPCS	Frequent	0.601	Pillow for use on nasal cannula type interface, replacement only, pair
DP03	C1135	RX	CLASS	Frequent	0.596	Vitamin C Combinations
DP03	C172	RX	CLASS	Often	0.590	Antidepressant-Tricyclics and Related (Non-Select Reuptake
DP03	30233N1	PX	ICD-10_CM	Any	0.586	TRAN NAUTO RED BLD CLL PERIPH VN PC
DP03	A7032	PX	HCPCS	Often	0.584	Cushion for use on nasal mask interface, replacement only, each
DP03	A7030	PX	HCPCS	Frequent	0.576	Full face mask used with positive airway pressure device, each
DP03	A7032	PX	HCPCS	Any	0.576	Cushion for use on nasal mask interface, replacement only, each
DP03	C64	RX	CLASS	Frequent	0.570	Androgens
DP03	B2131ZZ	PX	ICD-10_CM	Any	0.568	FLUORO MX CA BP GFT LOW OSMLR CONT
DP03	XW13325	PX	ICD-10_CM	Any	0.563	TRANSFS CNVLSL PLSM PRPH VN PRC NT5
DP03	A7038	PX	HCPCS	Frequent	0.561	Filter, disposable, used with positive airway pressure device
DP03	A7035	PX	HCPCS	Frequent	0.560	Headgear used with positive airway pressure device
DP03	C172	RX	CLASS	Any	0.559	Antidepressant-Tricyclics and Related (Non-Select Reuptake
DP03	A7030	PX	HCPCS	Often	0.557	ULTRASONOGRAPHY RIGHT & LEFT HEART
DP03	B246ZZZ	PX	ICD-10_CM	Any	0.557	ULTRASONOGRAPHY OF RIGHT AND LEFT HEART
DP03	99214	PX	CPT	Any	0.552	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.
DP03	A7037	PX	HCPCS	Frequent	0.548	Tubing used with positive airway pressure device
DP03	A7046	PX	HCPCS	Any	0.546	Water chamber for humidifier, used with positive airway pressure device, replacement, each
DP03	A7034	PX	HCPCS	Often	0.544	Nasal interface (mask or cannula type) used with positive airway pressure device, with or without head strap
DP03	C172	RX	CLASS	Frequent	0.544	Antidepressant-Tricyclics and Related (Non-Select Reuptake
DP03	Z682	DX	ICD-10_CM	Often	0.542	BODY MASS INDEX BMI 20-29 ADULT
DP03	C131	RX	CLASS	Often	0.538	Anticonvulsant - Carboxylic Acid Derivatives / Bipolar Therapy Agents - Anticonvulsant Type
DP03	E669	DX	ICD-10_CM	Frequent	0.537	OBESITY UNSPECIFIED
DP03	A4604	PX	HCPCS	Any	0.533	Tubing with integrated heating element for use with positive airway pressure device
DP03	A7038	PX	HCPCS	Often	0.526	Filter, disposable, used with positive airway pressure device

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP03	XW033E5	PX	ICD-10_CM	Any	0.522	INTR REMDESIVIR PERIPH VN PERC NT5
DP03	C207	RX	CLASS	Frequent	0.520	Antifungal - Fluorinated Pyrimidine-type Agents / Antifungal other
DP03	U0002	PX	HCPCS	Any	0.520	2019-nCoV coronavirus, SARS-CoV-2/2019-nCoV (COVID-19), any technique, multiple types or subtypes (includes all targets), non-CDC
DP03	C438	RX	CLASS	Any	0.519	Contraceptives - Intravaginal, Systemic
DP03	36416	PX	CPT	Frequent	0.518	Collection of capillary blood specimen (eg, finger, heel, ear stick)
DP03	A7039	PX	HCPCS	Frequent	0.518	Filter, nondisposable, used with positive airway pressure device
DP03	A7034	PX	HCPCS	Any	0.516	Nasal interface (mask or cannula type) used with positive airway pressure device, with or without head strap
DP03	A7031	PX	HCPCS	Any	0.515	Face mask interface, replacement for full face mask, each
DP03	02RF08Z	PX	ICD-10_CM	Any	0.514	REPL AORTIC VALVE ZOOPLSTC TISS OPN
DP05	G0202	PX	HCPCS	Often	2.029	Screening mammography, bilateral (2-view study of each breast), including computer-aided detection (CAD) when performed
DP05	G0202	PX	HCPCS	Any	1.988	Screening mammography, bilateral (2-view study of each breast), including computer-aided detection (CAD) when performed
DP05	ODH63UZ	PX	ICD-10_CM	Any	1.534	INSERTION FEEDING DEVC STOMACH PERQ
DP05	GZ3ZZZZ	PX	ICD-10_CM	Any	1.493	MEDICATION MANAGEMENT
DP05	C776	RX	CLASS	Frequent	1.373	LHRH (GnRH) Agonist Analog Pit Suppres - Central Precocious Puberty
DP05	C776	RX	CLASS	Often	1.291	LHRH (GnRH) Agonist Analog Pit Suppres - Central Precocious Puberty
DP05	GZHZZZZ	PX	ICD-10_CM	Any	1.218	GROUP PSYCHOTHERAPY
DP05	A0428	PX	HCPCS	Frequent	1.156	Ambulance service, basic life support, nonemergency transport, (BLS)
DP05	F08Z2ZZ	PX	ICD-10_CM	Any	1.137	GROOMING PERSONAL HYGIENE TREATMENT
DP05	Z794	DX	ICD-10_CM	Frequent	1.121	LONG TERM CURRENT USE OF INSULIN
DP05	3E0G76Z	PX	ICD-10_CM	Any	1.103	INTRO NUT SBSTNC UGI VIA NAT/ART OP
DP05	Q0092	PX	HCPCS	Frequent	1.050	Set-up portable x-ray equipment
DP05	Z684	DX	ICD-10_CM	Frequent	1.048	BODY MASS INDEX 40 OR GREATER ADULT
DP05	C44	RX	CLASS	Frequent	1.031	Alzheimer's Disease Therapy - Cholinesterase Inhibitors
DP05	0DB64Z3	PX	ICD-10_CM	Any	1.030	EXCISION STOMACH PERQ ENDO VERTICAL
DP05	Z794	DX	ICD-10_CM	Often	1.029	LONG TERM CURRENT USE OF INSULIN
DP05	C45	RX	CLASS	Frequent	1.017	Alzheimer's Disease Therapy - NMDA Receptor Antagonists
DP05	4A10X4Z	PX	ICD-10_CM	Any	0.999	MONITOR CENTRAL NERV ELECT ACT EXT
DP05	E660	DX	ICD-10_CM	Frequent	0.999	OBESITY DUE TO EXCESS CALORIES
DP05	C44	RX	CLASS	Often	0.979	Alzheimer's Disease Therapy - Cholinesterase Inhibitors

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP05	0T9B70Z	PX	ICD-10_CM	Any	0.939	DRAIN BLADDER DRAIN DEVC NAT/ART OP
DP05	G0108	PX	HCPCS	Frequent	0.924	Diabetes outpatient self-management training services, individual, per 30 minutes
DP05	Q0092	PX	HCPCS	Any	0.924	Set-up portable x-ray equipment
DP05	C45	RX	CLASS	Often	0.919	Alzheimer's Disease Therapy - NMDA Receptor Antagonists
DP05	Z684	DX	ICD-10_CM	Often	0.911	BODY MASS INDEX 40 OR GREATER ADULT
DP05	A0428	PX	HCPCS	Any	0.910	Ambulance service, basic life support, nonemergency transport, (BLS)
DP05	P9603	PX	HCPCS	Often	0.909	Travel allowance, one way in connection with medically necessary laboratory specimen collection drawn from homebound or nursing homebound patient; prorated miles actually travelled
DP05	U0005	PX	HCPCS	Any	0.906	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, CDC or non-CDC, making use of high throughput technologies, completed within 2 calendar days from date of specimen collection (list separately in addition to either HCPCS code U0003 or U0004) as described by CMS-2020-01-R2
DP05	C9803	PX	HCPCS	Any	0.894	Hospital outpatient clinic visit specimen collection for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), any specimen source
DP05	C45	RX	CLASS	Any	0.891	Alzheimer's Disease Therapy - NMDA Receptor Antagonists
DP05	3E033GC	PX	ICD-10_CM	Any	0.874	INTRO OTH TX SBSTNC PERIPH VN PERQ
DP05	P9603	PX	HCPCS	Any	0.873	Travel allowance, one way in connection with medically necessary laboratory specimen collection drawn from homebound or nursing homebound patient; prorated miles actually travelled
DP05	E660	DX	ICD-10_CM	Often	0.865	OBESITY DUE TO EXCESS CALORIES
DP05	C44	RX	CLASS	Any	0.862	Alzheimer's Disease Therapy - Cholinesterase Inhibitors
DP05	P9603	PX	HCPCS	Frequent	0.853	Travel allowance, one way in connection with medically necessary laboratory specimen collection drawn from homebound or nursing homebound patient; prorated miles actually travelled
DP05	3E0234Z	PX	ICD-10_CM	Any	0.845	INTRO SERUM TOXOID VAC MSC PERQ
DP05	G1004	PX	HCPCS	Frequent	0.827	Clinical Decision Support Mechanism National Decision Support Company, as defined by the Medicare Appropriate Use Criteria Program

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP05	Z684	DX	ICD-10_CM	Any	0.822	BODY MASS INDEX 40 OR GREATER ADULT
DP05	G1004	PX	HCPCS	Any	0.796	Clinical Decision Support Mechanism National Decision Support Company, as defined by the Medicare Appropriate Use Criteria Program
DP05	Z794	DX	ICD-10_CM	Any	0.788	LONG TERM CURRENT USE OF INSULIN
DP05	U0003	PX	HCPCS	Any	0.787	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, making use of high throughput technologies as described by CMS-2020-01-R
DP05	G8980	PX	HCPCS	Any	0.770	Mobility: walking and moving around functional limitation, discharge status, at discharge from therapy or to end reporting
DP05	99214	PX	CPT	Any	0.768	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.
DP05	U0003	PX	HCPCS	Frequent	0.765	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, making use of high throughput technologies as described by CMS-2020-01-R
DP05	G8420	PX	HCPCS	Frequent	0.764	BMI is documented within normal parameters and no follow-up plan is required
DP05	Q3014	PX	HCPCS	Any	0.762	Telehealth originating site facility fee
DP05	E660	DX	ICD-10_CM	Any	0.756	OBESITY DUE TO EXCESS CALORIES
DP05	U0005	PX	HCPCS	Frequent	0.755	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), amplified probe technique, CDC or non-CDC, making use of high throughput technologies, completed within 2 calendar days from date of specimen collection (list separately in addition to either HCPCS code U0003 or U0004) as described by CMS-2020-01-R2
DP05	G0108	PX	HCPCS	Any	0.733	Diabetes outpatient self-management training services, individual, per 30 minutes
DP05	Z208	DX	ICD-10_CM	Often	0.728	CONTACT W EXPOS OTH COMMUNICABLE DZ

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP05	C144	RX	CLASS	Any	0.724	Anticonvulsant - Oxazolidinediones
DP05	3E03329	PX	ICD-10_CM	Any	0.721	MAP CONDUCTION MECHANISM PERQ APPR
DP05	G8979	PX	HCPCS	Frequent	0.716	Mobility: walking and moving around functional limitation, projected goal status, at therapy episode outset, at reporting intervals, and at discharge or to end reporting
DP05	Z208	DX	ICD-10_CM	Frequent	0.716	CONTCT W EXPOS OTH COMMUNICABLE DZ
DP05	30233N1	PX	ICD-10_CM	Any	0.712	TRAN NAUTO RED BLD CLL PERIPH VN PC
DP05	C144	RX	CLASS	Often	0.707	Anticonvulsant - Oxazolidinediones
DP05	G473	DX	ICD-10_CM	Frequent	0.706	SLEEP APNEA
DP05	F07Z5ZZ	PX	ICD-10_CM	Any	0.701	BED MOBILITY TREATMENT
DP05	Z208	DX	ICD-10_CM	Any	0.700	CONTCT W EXPOS OTH COMMUNICABLE DZ
DP05	Q3014	PX	HCPCS	Frequent	0.697	Telehealth originating site facility fee
DP05	G0447	PX	HCPCS	Frequent	0.694	Face-to-face behavioral counseling for obesity, 15 minutes
DP05	G473	DX	ICD-10_CM	Often	0.693	SLEEP APNEA
DP05	5A1955Z	PX	ICD-10_CM	Any	0.679	RESPIRATORY VENTILATION > 96 CON HR
DP05	A0429	PX	HCPCS	Frequent	0.678	Ambulance service, basic life support, emergency transport (BLS, emergency)
DP05	F07Z9ZZ	PX	ICD-10_CM	Any	0.661	GAIT TRAINING FUNC AMBULATION TX
DP05	99232	PX	CPT	Frequent	0.660	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: An expanded problem focused interval history; An expanded problem focused examination; Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Typically, 25 minutes are spent at the bedside and on the patient's hospital floor or unit.
DP05	G8978	PX	HCPCS	Frequent	0.645	Mobility: walking and moving around functional limitation, current status, at therapy episode outset and at reporting intervals

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP05	G8979	PX	HCPCS	Often	0.641	Mobility: walking and moving around functional limitation, projected goal status, at therapy episode outset, at reporting intervals, and at discharge or to end reporting
DP05	C172	RX	CLASS	Often	0.639	Antidepressant-Tricyclics and Related (Non-Select Reuptake
DP05	G473	DX	ICD-10_CM	Any	0.633	SLEEP APNEA
DP05	G8420	PX	HCPCS	Any	0.623	BMI is documented within normal parameters and no follow-up plan is required
DP05	C1135	RX	CLASS	Frequent	0.621	Vitamin C Combinations
DP05	00NYOZZ	PX	ICD-10_CM	Any	0.619	RELEASE LUMBAR SPINAL CORD OPEN
DP05	XW13325	PX	ICD-10_CM	Any	0.613	TRANSFS CNVLSL PLSM PRPH VN PRC NT5
DP05	E669	DX	ICD-10_CM	Frequent	0.612	OBESITY UNSPECIFIED
DP05	C131	RX	CLASS	Frequent	0.609	Anticonvulsant - Carboxylic Acid Derivatives / Bipolar Therapy Agents - Anticonvulsant Type
DP05	B41D1ZZ	PX	ICD-10_CM	Any	0.606	INTRO OTH HORMONE PERIPH VN PERQ
DP05	C131	RX	CLASS	Often	0.603	Anticonvulsant - Carboxylic Acid Derivatives / Bipolar Therapy Agents - Anticonvulsant Type
DP05	C172	RX	CLASS	Any	0.598	Antidepressant-Tricyclics and Related (Non-Select Reuptake
DP05	B24BZZZ	PX	ICD-10_CM	Any	0.597	ULTRASONOGRAPHY OF HEART WITH AORTA
DP05	A0425	PX	HCPCS	Frequent	0.594	Ground mileage, per statute mile
DP05	30233K1	PX	ICD-10_CM	Any	0.592	TRAN NONAUTO FRZN PLAS PERIPH VN PC
DP05	OW3P8ZZ	PX	ICD-10_CM	Any	0.584	INTRO OTH ANTI-INFEC PERIPH VN PERQ
DP05	ODJD8ZZ	PX	ICD-10_CM	Any	0.581	INSPECTION LW INTESTINAL TRACT ENDO
DP05	G8978	PX	HCPCS	Any	0.577	Mobility: walking and moving around functional limitation, current status, at therapy episode outset and at reporting intervals
DP05	C792	RX	CLASS	Frequent	0.572	Live Vaccine and Live Virus Formulations / Vaccines - Viral
DP05	G8979	PX	HCPCS	Any	0.572	Mobility: walking and moving around functional limitation, projected goal status, at therapy episode outset, at reporting intervals, and at discharge or to end reporting
DP05	E669	DX	ICD-10_CM	Often	0.571	OBESITY UNSPECIFIED

Appendix B. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for model2_hdps in the Sentinel Distributed Database from January 1, 2018 to February 28, 2022, by Data Partner (DP)

Masked DP ID	Code		Code Type	Frequency	Ranking	Description
	Code	Category				
DP05	99233	PX	CPT	Frequent	0.569	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: A detailed interval history; A detailed examination; Medical decision making of high complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Typically, 35 minutes are spent at the bedside and on the patient's hospital floor or unit.
DP05	3E0F7GC	PX	ICD-10_CM	Any	0.564	INTRO OTH TX SBSTNC RESP TRACT
DP05	C1135	RX	CLASS	Any	0.560	Vitamin C Combinations
DP05	F07Z8FZ	PX	ICD-10_CM	Any	0.557	TRANSFER TRAINING TX AASP EQUIPMENT
DP05	0DB78ZX	PX	ICD-10_CM	Any	0.553	EXC STOM PYLORUS NAT/ART OP ENDO DX
DP05	C144	RX	CLASS	Frequent	0.542	Anticonvulsant - Oxazolidediones
DP05	G0447	PX	HCPCS	Any	0.539	Face-to-face behavioral counseling for obesity, 15 minutes
DP05	99222	PX	CPT	Frequent	0.537	Initial hospital care, per day, for the evaluation and management of a patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the problem(s) requiring admission are of moderate severity. Typically, 50 minutes are spent at the bedside and on the patient's hospital floor or unit.
DP05	0DJ08ZZ	PX	ICD-10_CM	Any	0.536	INSPECT UPPER INTESTINE TRACT ENDO
DP05	G8985	PX	HCPCS	Frequent	0.531	Carrying, moving and handling objects, projected goal status, at therapy episode outset, at reporting intervals, and at discharge or to end reporting
DP05	Z988	DX	ICD-10_CM	Frequent	0.528	OTHER SPEC POSTPROCEDURAL STATES
DP05	B3101ZZ	PX	ICD-10_CM	Any	0.512	FLURO THORACIC AORTA LOW OSM CONT

Appendix C. Generic and Brand Names of Medical Products Used to Define Exposure of Interest in this Request

Generic Name	Brand Name
semaglutide	Ozempic

Appendix D. Generic and Brand Names of Medical Products Used to Define Comparator in this Request

Generic Name	Brand Name
	Sitagliptin
sitagliptin phosphate	Januvia
sitagliptin phosphate/metformin HCl	Janumet
sitagliptin phosphate/metformin HCl	Janumet XR

Appendix E. Generic and Brand Names of Medical Products Used to Define Censor-Defining Codes in this Request

Generic Name	Brand Name
Ozempic	
semaglutide	Ozempic
Sitagliptin	
sitagliptin phosphate	Januvia
sitagliptin phosphate/metformin HCl	Janumet
sitagliptin phosphate/metformin HCl	Janumet XR
Rybelsus	
semaglutide	Rybelsus
Wegovy	
semaglutide	Wegovy
GLP-1 Receptor Agonists	
lixisenatide	Adlyxin
exenatide microspheres	Bydureon
exenatide microspheres	Bydureon BCise
exenatide	Byetta
liraglutide	Saxenda
insulin glargine,human recombinant analog/lixisenatide	Soliqua 100/33
albiglutide	Tanzeum
dulaglutide	Trulicity
liraglutide	Victoza 2-Pak
liraglutide	Victoza 3-Pak
insulin degludec/liraglutide	Xultophy 100/3.6
DPP-4 Inhibitors	
pioglitazone HCl/metformin HCl	Actoplus MET
pioglitazone HCl/metformin HCl	Actoplus Met XR
pioglitazone HCl	Actos
alogliptin benzoate	alogliptin
alogliptin benzoate/metformin HCl	alogliptin-metformin
alogliptin benzoate/pioglitazone HCl	alogliptin-pioglitazone
pioglitazone HCl/glimepiride	DUETACT
empagliflozin/linagliptin	Glyxambi
linagliptin/metformin HCl	Jentadueto
linagliptin/metformin HCl	Jentadueto XR
alogliptin benzoate/metformin HCl	Kazano
saxagliptin HCl/metformin HCl	Kombiglyze XR
alogliptin benzoate	Nesina
saxagliptin HCl	Onglyza
alogliptin benzoate/pioglitazone HCl	Oseni
pioglitazone HCl	pioglitazone
pioglitazone HCl/glimepiride	pioglitazone-glimepiride
pioglitazone HCl/metformin HCl	pioglitazone-metformin
dapagliflozin propanediol/saxagliptin HCl	Qtern
ertugliflozin pidolate/sitagliptin phosphate	Steglujan
linagliptin	Tradjenta
empagliflozin/linagliptin/metformin HCl	Trijardy XR

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

Code	Description	Code Category	Code Type
Type 2 Diabetes			
E11.9	Type 2 diabetes mellitus without complications	Diagnosis	ICD-10-CM
E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.8	Type 2 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E11.3559	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	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
E11.3499	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	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
E11.349	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3419	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3411	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
E11.341	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3599	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	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
E11.359	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E11.3539	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E11.3531	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
E11.3529	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	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
E11.3519	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
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
E11.351	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema	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
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
E11.630	Type 2 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E11.69	Type 2 diabetes mellitus with other specified complication	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
E11.638	Type 2 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E11.39	Type 2 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.618	Type 2 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E11.59	Type 2 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E11.3399	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3391	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
E11.339	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3319	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3311	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
E11.331	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3299	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3291	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
E11.329	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3219	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3211	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
E11.321	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	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

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

Code	Description	Code Category	Code Type
E11.649	Type 2 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E11.641	Type 2 diabetes mellitus with hypoglycemia with coma	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
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E11.621	Type 2 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E11.51	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E11.52	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E11.40	Type 2 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E11.610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E11.37X9	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	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
E11.620	Type 2 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.36	Type 2 diabetes mellitus with diabetic cataract	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

Appendix G. Generic and Brand Names of Medical Products Used to Define Exclusions in this Request

Generic Name	Brand Name
Ozempic	
semaglutide	Ozempic
Sitagliptin	
sitagliptin phosphate	Januvia
sitagliptin phosphate/metformin HCl	Janumet
sitagliptin phosphate/metformin HCl	Janumet XR
Rybelsus	
semaglutide	Rybelsus
Wegovy	
semaglutide	Wegovy

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
Type 1 Diabetes			
E10.9	Type 1 diabetes mellitus without complications	Diagnosis	ICD-10-CM
E10.319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.8	Type 1 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E10.3499	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3491	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
E10.349	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3419	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3411	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
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
E10.341	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.359	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3519	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	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
E10.351	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.630	Type 1 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E10.69	Type 1 diabetes mellitus with other specified complication	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
E10.638	Type 1 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
E10.39	Type 1 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E10.49	Type 1 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E10.618	Type 1 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E10.59	Type 1 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E10.3399	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3391	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
E10.339	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3319	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3311	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
E10.331	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3299	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3291	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
E10.329	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3219	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3211	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
E10.321	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	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
E10.649	Type 1 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E10.641	Type 1 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E10.65	Type 1 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E10.621	Type 1 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E10.42	Type 1 diabetes mellitus with diabetic polyneuropathy	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
E10.40	Type 1 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E10.610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E10.41	Type 1 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E10.37X9	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	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
E10.620	Type 1 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E10.36	Type 1 diabetes mellitus with diabetic cataract	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
E11.649	Type 2 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E11.641	Type 2 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E11.00	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
End Stage Renal Disease			
I12.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal 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
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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
N17.8	Other acute kidney failure	Diagnosis	ICD-10-CM
N17.9	Acute kidney failure, unspecified	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
N19	Unspecific Kidney Failure	Diagnosis	ICD-10-CM
N99.0	Postprocedural (acute) (chronic) kidney failure	Diagnosis	ICD-10-CM
O90.4	Postpartum acute kidney failure	Diagnosis	ICD-10-CM
I95.3	Hypotension of hemodialysis	Diagnosis	ICD-10-CM
R88.0	Cloudy (hemodialysis) (peritoneal) dialysis effluent	Diagnosis	ICD-10-CM
T81.502	Unspecified complication of foreign body accidentally left in body following kidney dialysis	Diagnosis	ICD-10-CM
T81.502A	Unspecified complication of foreign body accidentally left in body following kidney dialysis, initial encounter	Diagnosis	ICD-10-CM
T81.502D	Unspecified complication of foreign body accidentally left in body following kidney dialysis, subsequent encounter	Diagnosis	ICD-10-CM
T81.502S	Unspecified complication of foreign body accidentally left in body following kidney dialysis, sequela	Diagnosis	ICD-10-CM
T81.512	Adhesions due to foreign body accidentally left in body following kidney dialysis	Diagnosis	ICD-10-CM
T81.512A	Adhesions due to foreign body accidentally left in body following kidney dialysis, initial encounter	Diagnosis	ICD-10-CM
T81.512D	Adhesions due to foreign body accidentally left in body following kidney dialysis, subsequent encounter	Diagnosis	ICD-10-CM
T81.512S	Adhesions due to foreign body accidentally left in body following kidney dialysis, sequela	Diagnosis	ICD-10-CM
T81.522	Obstruction due to foreign body accidentally left in body following kidney dialysis	Diagnosis	ICD-10-CM
T81.522A	Obstruction due to foreign body accidentally left in body following kidney dialysis, initial encounter	Diagnosis	ICD-10-CM
T81.522D	Obstruction due to foreign body accidentally left in body following kidney dialysis, subsequent encounter	Diagnosis	ICD-10-CM
T81.522S	Obstruction due to foreign body accidentally left in body following kidney dialysis, sequela	Diagnosis	ICD-10-CM
T81.532	Perforation due to foreign body accidentally left in body following kidney dialysis	Diagnosis	ICD-10-CM
T81.532A	Perforation due to foreign body accidentally left in body following kidney dialysis, initial encounter	Diagnosis	ICD-10-CM
T81.532D	Perforation due to foreign body accidentally left in body following kidney dialysis, subsequent encounter	Diagnosis	ICD-10-CM
T81.532S	Perforation due to foreign body accidentally left in body following kidney dialysis, sequela	Diagnosis	ICD-10-CM
T81.592	Other complications of foreign body accidentally left in body following kidney dialysis	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
T81.592A	Other complications of foreign body accidentally left in body following kidney dialysis, initial encounter	Diagnosis	ICD-10-CM
T81.592D	Other complications of foreign body accidentally left in body following kidney dialysis, subsequent encounter	Diagnosis	ICD-10-CM
T81.592S	Other complications of foreign body accidentally left in body following kidney dialysis, sequela	Diagnosis	ICD-10-CM
T82.41XA	Breakdown (mechanical) of vascular dialysis catheter, initial encounter	Diagnosis	ICD-10-CM
T82.41XD	Breakdown (mechanical) of vascular dialysis catheter, subsequent encounter	Diagnosis	ICD-10-CM
T82.41XS	Breakdown (mechanical) of vascular dialysis catheter, sequela	Diagnosis	ICD-10-CM
T82.42XA	Displacement of vascular dialysis catheter, initial encounter	Diagnosis	ICD-10-CM
T82.42XD	Displacement of vascular dialysis catheter, subsequent encounter	Diagnosis	ICD-10-CM
T82.42XS	Displacement of vascular dialysis catheter, sequela	Diagnosis	ICD-10-CM
T82.43XA	Leakage of vascular dialysis catheter, initial encounter	Diagnosis	ICD-10-CM
T82.43XD	Leakage of vascular dialysis catheter, subsequent encounter	Diagnosis	ICD-10-CM
T82.43XS	Leakage of vascular dialysis catheter, sequela	Diagnosis	ICD-10-CM
T82.49XA	Other complication of vascular dialysis catheter, initial encounter	Diagnosis	ICD-10-CM
T82.49XD	Other complication of vascular dialysis catheter, subsequent encounter	Diagnosis	ICD-10-CM
T82.49XS	Other complication of vascular dialysis catheter, sequela	Diagnosis	ICD-10-CM
T85.611	Breakdown (mechanical) of intraperitoneal dialysis catheter	Diagnosis	ICD-10-CM
T85.611A	Breakdown (mechanical) of intraperitoneal dialysis catheter, initial encounter	Diagnosis	ICD-10-CM
T85.611D	Breakdown (mechanical) of intraperitoneal dialysis catheter, subsequent encounter	Diagnosis	ICD-10-CM
T85.611S	Breakdown (mechanical) of intraperitoneal dialysis catheter, sequela	Diagnosis	ICD-10-CM
T85.621	Displacement of intraperitoneal dialysis catheter	Diagnosis	ICD-10-CM
T85.621A	Displacement of intraperitoneal dialysis catheter, initial encounter	Diagnosis	ICD-10-CM
T85.621D	Displacement of intraperitoneal dialysis catheter, subsequent encounter	Diagnosis	ICD-10-CM
T85.621S	Displacement of intraperitoneal dialysis catheter, sequela	Diagnosis	ICD-10-CM
T85.631	Leakage of intraperitoneal dialysis catheter	Diagnosis	ICD-10-CM
T85.631A	Leakage of intraperitoneal dialysis catheter, initial encounter	Diagnosis	ICD-10-CM
T85.631D	Leakage of intraperitoneal dialysis catheter, subsequent encounter	Diagnosis	ICD-10-CM
T85.631S	Leakage of intraperitoneal dialysis catheter, sequela	Diagnosis	ICD-10-CM
T85.691	Other mechanical complication of intraperitoneal dialysis catheter	Diagnosis	ICD-10-CM
T85.691A	Other mechanical complication of intraperitoneal dialysis catheter, initial encounter	Diagnosis	ICD-10-CM
T85.691D	Other mechanical complication of intraperitoneal dialysis catheter, subsequent encounter	Diagnosis	ICD-10-CM
T85.691S	Other mechanical complication of intraperitoneal dialysis catheter, sequela	Diagnosis	ICD-10-CM
T85.71XA	Infection and inflammatory reaction due to peritoneal dialysis catheter, initial encounter	Diagnosis	ICD-10-CM
T85.71XD	Infection and inflammatory reaction due to peritoneal dialysis catheter, subsequent encounter	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
T85.71XS	Infection and inflammatory reaction due to peritoneal dialysis catheter, sequela	Diagnosis	ICD-10-CM
Y62.2	Failure of sterile precautions during kidney dialysis and other perfusion	Diagnosis	ICD-10-CM
Y84.1	Kidney dialysis as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure	Diagnosis	ICD-10-CM
Z49.01	Encounter for fitting and adjustment of extracorporeal dialysis catheter	Diagnosis	ICD-10-CM
Z49.02	Encounter for fitting and adjustment of peritoneal dialysis catheter	Diagnosis	ICD-10-CM
Z49.31	Encounter for adequacy testing for hemodialysis	Diagnosis	ICD-10-CM
Z49.32	Encounter for adequacy testing for peritoneal dialysis	Diagnosis	ICD-10-CM
Z91.15	Patient's noncompliance with renal dialysis	Diagnosis	ICD-10-CM
Z94.0	Kidney transplant status	Diagnosis	ICD-10-CM
Z99.2	Dependence on renal dialysis	Diagnosis	ICD-10-CM
T86.10	Unspecified complication of kidney transplant	Diagnosis	ICD-10-CM
T86.11	Kidney transplant rejection	Diagnosis	ICD-10-CM
T86.12	Kidney transplant failure	Diagnosis	ICD-10-CM
T86.13	Kidney transplant infection	Diagnosis	ICD-10-CM
T86.19	Other complication of kidney transplant	Diagnosis	ICD-10-CM
Z48.22	Encounter for aftercare following kidney transplant	Diagnosis	ICD-10-CM
90951	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90952	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90953	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month	Procedure	CPT-4
90954	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90955	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
90956	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month	Procedure	CPT-4
90957	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90958	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90959	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month	Procedure	CPT-4
90960	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90961	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90962	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 1 face-to-face visit by a physician or other qualified health care professional per month	Procedure	CPT-4
90963	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents	Procedure	CPT-4
90964	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents	Procedure	CPT-4
90965	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents	Procedure	CPT-4
90966	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 20 years of age and older	Procedure	CPT-4

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
90967	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients younger than 2 years of age	Procedure	CPT-4
90968	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 2-11 years of age	Procedure	CPT-4
90969	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 12-19 years of age	Procedure	CPT-4
90970	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 20 years of age and older	Procedure	CPT-4
90976	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90977	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90978	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90979	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90982	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90983	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90984	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90985	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
00868	Anesthesia for extraperitoneal procedures in lower abdomen, including urinary tract; renal transplant (recipient)	Procedure	CPT-4
50340	Recipient nephrectomy (separate procedure)	Procedure	CPT-4
50360	Renal allotransplantation, implantation of graft; without recipient nephrectomy	Procedure	CPT-4
50365	Renal allotransplantation, implantation of graft; with recipient nephrectomy	Procedure	CPT-4
75791	Angiography, arteriovenous shunt (eg, dialysis patient fistula/graft), complete evaluation of dialysis access, including fluoroscopy, image documentation and report (includes injections of contrast and all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava), radiological supervision and interpretation	Procedure	CPT-4
90935	Hemodialysis procedure with single evaluation by a physician or other qualified health care professional	Procedure	CPT-4
90937	Hemodialysis procedure requiring repeated evaluation(s) with or without substantial revision of dialysis prescription	Procedure	CPT-4
90939	Hemodialysis access flow study to determine blood flow in grafts and arteriovenous fistulae by an indicator dilution method, hook-up; transcutaneous measurement and disconnection	Procedure	CPT-4
90940	Hemodialysis access flow study to determine blood flow in grafts and arteriovenous fistulae by an indicator method	Procedure	CPT-4
90941	Hemodialysis, For Acute Renal Failure And Or Intoxication,	Procedure	CPT-4
90942	Hemodialysis, For Acute Renal Failure And Or Intoxication,	Procedure	CPT-4
90943	Hemodialysis, For Acute Renal Failure And Or Intoxication,	Procedure	CPT-4
90944	Hemodialysis, For Acute Renal Failure And Or Intoxication,	Procedure	CPT-4

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
90945	Dialysis procedure other than hemodialysis (eg, peritoneal dialysis, hemofiltration, or other continuous renal replacement therapies), with single evaluation by a physician or other qualified health care professional	Procedure	CPT-4
90947	Dialysis procedure other than hemodialysis (eg, peritoneal dialysis, hemofiltration, or other continuous renal replacement therapies) requiring repeated evaluations by a physician or other qualified health care professional, with or without substantial revision of dialysis	Procedure	CPT-4
90951	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90952	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90953	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month	Procedure	CPT-4
90954	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90955	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90956	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month	Procedure	CPT-4
90957	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
90958	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90959	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month	Procedure	CPT-4
90960	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 4 or more face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90961	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 2-3 face-to-face visits by a physician or other qualified health care professional per month	Procedure	CPT-4
90962	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 1 face-to-face visit by a physician or other qualified health care professional per month	Procedure	CPT-4
90963	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents	Procedure	CPT-4
90964	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents	Procedure	CPT-4
90965	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents	Procedure	CPT-4
90966	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 20 years of age and older	Procedure	CPT-4
90967	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients younger than 2 years of age	Procedure	CPT-4
90968	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 2-11 years of age	Procedure	CPT-4
90969	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 12-19 years of age	Procedure	CPT-4
90970	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 20 years of age and older	Procedure	CPT-4
90976	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90977	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90978	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code	
		Category	Code Type
90979	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90982	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90983	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90984	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90985	Peritoneal Dialysis For End-stage Renal Disease (esrd),	Procedure	CPT-4
90988	Supervision Of Hemodialysis In Hospital Or Other Facility (excluding Home Dialysis), On Monthly Basis	Procedure	CPT-4
90989	Dialysis training, patient, including helper where applicable, any mode, completed course	Procedure	CPT-4
90990	Hemodialysis Training And/or Counseling	Procedure	CPT-4
90991	Home Hemodialysis Care, Outpatient, For Those Services Either Provided By The Physician Primarily Responsible	Procedure	CPT-4
90992	Peritoneal Dialysis Training And/or Counseling	Procedure	CPT-4
90993	Dialysis training, patient, including helper where applicable, any mode, course not completed, per training session	Procedure	CPT-4
90994	Supervision Of Chronic Ambulatory Peritoneal Dialysis (capd), Home Or Out-patient (monthly)	Procedure	CPT-4
90995	End Stage Renal Disease (esrd) Related Services, Per Full Month	Procedure	CPT-4
90996	Continuous Arteriovenous Hemofiltration (cavh) (per Day)	Procedure	CPT-4
90998	End Stage Renal Disease (esrd) Related Services (less Than Full Month), Per Day	Procedure	CPT-4
90999	Unlisted dialysis procedure, inpatient or outpatient	Procedure	CPT-4
99512	Home visit for hemodialysis	Procedure	CPT-4
99559	Home infusion of peritoneal dialysis, per visit	Procedure	CPT-4
0505F	Hemodialysis plan of care documented (ESRD, P-ESRD)	Procedure	CPT-2
0507F	Peritoneal dialysis plan of care documented (ESRD)	Procedure	CPT-2
0TS00ZZ	Reposition Right Kidney, Open Approach	Procedure	ICD-10-PCS
0TS10ZZ	Reposition Left Kidney, Open Approach	Procedure	ICD-10-PCS
0TT00ZZ	Resection of Right Kidney, Open Approach	Procedure	ICD-10-PCS
0TT00ZZ	Resection of Right Kidney, Open Approach	Procedure	ICD-10-PCS
0TT00ZZ	Resection of Right Kidney, Open Approach	Procedure	ICD-10-PCS
0TT04ZZ	Resection of Right Kidney, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0TT04ZZ	Resection of Right Kidney, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0TT04ZZ	Resection of Right Kidney, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0TT10ZZ	Resection of Left Kidney, Open Approach	Procedure	ICD-10-PCS
0TT10ZZ	Resection of Left Kidney, Open Approach	Procedure	ICD-10-PCS
0TT10ZZ	Resection of Left Kidney, Open Approach	Procedure	ICD-10-PCS
0TT14ZZ	Resection of Left Kidney, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0TT14ZZ	Resection of Left Kidney, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0TT14ZZ	Resection of Left Kidney, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0TT20ZZ	Resection of Bilateral Kidneys, Open Approach	Procedure	ICD-10-PCS
0TT24ZZ	Resection of Bilateral Kidneys, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0TT60ZZ	Resection of Right Ureter, Open Approach	Procedure	ICD-10-PCS
0TT64ZZ	Resection of Right Ureter, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
0TT67ZZ	Resection of Right Ureter, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0TT68ZZ	Resection of Right Ureter, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0TT70ZZ	Resection of Left Ureter, Open Approach	Procedure	ICD-10-PCS
0TT74ZZ	Resection of Left Ureter, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0TT77ZZ	Resection of Left Ureter, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0TT78ZZ	Resection of Left Ureter, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0TY00Z0	Transplantation of Right Kidney, Allogeneic, Open Approach	Procedure	ICD-10-PCS
0TY00Z1	Transplantation of Right Kidney, Syngeneic, Open Approach	Procedure	ICD-10-PCS
0TY00Z2	Transplantation of Right Kidney, Zooplastic, Open Approach	Procedure	ICD-10-PCS
0TY10Z0	Transplantation of Left Kidney, Allogeneic, Open Approach	Procedure	ICD-10-PCS
0TY10Z1	Transplantation of Left Kidney, Syngeneic, Open Approach	Procedure	ICD-10-PCS
0TY10Z2	Transplantation of Left Kidney, Zooplastic, Open Approach	Procedure	ICD-10-PCS
4052F	Hemodialysis via functioning arteriovenous (AV) fistula (ESRD)	Procedure	CPT-2
4053F	Hemodialysis via functioning arteriovenous (AV) graft (ESRD)	Procedure	CPT-2
4054F	Hemodialysis via catheter (ESRD)	Procedure	CPT-2
4055F	Patient receiving peritoneal dialysis (ESRD)	Procedure	CPT-2
A4655	Needles and syringes for dialysis	Procedure	HCPCS
A4663	Blood pressure cuff only	Procedure	HCPCS
A4672	Drainage extension line, sterile, for dialysis, each	Procedure	HCPCS
A4690	Dialyzer (artificial kidneys), all types, all sizes, for hemodialysis, each	Procedure	HCPCS
A4700	Standard dialysate solution, each	Procedure	HCPCS
A4705	Bicarbonate dialysate solution, each	Procedure	HCPCS
A4720	Dialysate solution, any concentration of dextrose, fluid volume greater than 249 cc, but less than or equal to 999 cc, for peritoneal dialysis	Procedure	HCPCS
A4721	Dialysate solution, any concentration of dextrose, fluid volume greater than 999 cc but less than or equal to 1999 cc, for peritoneal dialysis	Procedure	HCPCS
A4722	Dialysate solution, any concentration of dextrose, fluid volume greater than 1999 cc but less than or equal to 2999 cc, for peritoneal dialysis	Procedure	HCPCS
A4723	Dialysate solution, any concentration of dextrose, fluid volume greater than 2999 cc but less than or equal to 3999 cc, for peritoneal dialysis	Procedure	HCPCS
A4724	Dialysate solution, any concentration of dextrose, fluid volume greater than 3999 cc but less than or equal to 4999 cc, for peritoneal dialysis	Procedure	HCPCS
A4725	Dialysate solution, any concentration of dextrose, fluid volume greater than 4999 cc but less than or equal to 5999 cc, for peritoneal dialysis	Procedure	HCPCS
A4726	Dialysate solution, any concentration of dextrose, fluid volume greater than 5999 cc, for peritoneal dialysis	Procedure	HCPCS
A4728	Dialysate solution, nondextrose containing, 500 ml	Procedure	HCPCS
A4760	Dialysate solution test kit, for peritoneal dialysis, any type, each	Procedure	HCPCS
A4765	Dialysate concentrate, powder, additive for peritoneal dialysis, per packet	Procedure	HCPCS
A4766	Dialysate concentrate, solution, additive for peritoneal dialysis, per 10 ml	Procedure	HCPCS
A4780	Sterilizing agent for dialysis equipment, per gallon	Procedure	HCPCS
A4790	Cleansing agents for equipment for dialysis only	Procedure	HCPCS
A4800	Heparin for dialysis and antidote, any strength, porcine or beef, up to 1000 units, 10-30 ml (for parenteral use see b4216)	Procedure	HCPCS

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
A4820	Hemodialysis kit supplies	Procedure	HCPCS
A4910	Non-medical supplies for dialysis, (i.e., scale, scissors, stopwatch, etc.)	Procedure	HCPCS
A4913	Miscellaneous dialysis supplies, not otherwise specified	Procedure	HCPCS
A4919	Dialyzer holder, each	Procedure	HCPCS
A4929	Tourniquet for dialysis, each	Procedure	HCPCS
C1037	Catheter, vaxcel chronic dialysis catheter, medcomp bio flex tesio catheter, medcomp silicone tesio catheter, medcomp hemo-cath long term silicone catheter, bard niagara dual lumen catheter, bard opti-flow dual lumen catheter, medcomp ash split catheter	Procedure	HCPCS
C1750	Catheter, hemodialysis/peritoneal, long-term	Procedure	HCPCS
C1752	Catheter, hemodialysis/peritoneal, short-term	Procedure	HCPCS
C1881	Dialysis access system (implantable)	Procedure	HCPCS
E1510	Kidney, dialysate delivery system kidney machine, pump recirculating, air removal system, flowrate meter, power off, heater and temperature control with alarm, IV poles, pressure gauge, concentrate container	Procedure	HCPCS
E1570	Adjustable chair, for ESRD patients	Procedure	HCPCS
E1590	Hemodialysis machine	Procedure	HCPCS
E1592	Automatic intermittent peritoneal dialysis system	Procedure	HCPCS
E1594	Cycler dialysis machine for peritoneal dialysis	Procedure	HCPCS
E1632	Wearable artificial kidney, each	Procedure	HCPCS
E1634	Peritoneal dialysis clamps, each	Procedure	HCPCS
E1635	Compact (portable) travel hemodialyzer system	Procedure	HCPCS
E1637	Hemostats, each	Procedure	HCPCS
E1638	Heating pad, for peritoneal dialysis, any size, each	Procedure	HCPCS
E1639	Scale, each	Procedure	HCPCS
E1699	Dialysis equipment, not otherwise specified	Procedure	HCPCS
G0257	Unscheduled or emergency dialysis treatment for an ESRD patient in a hospital outpatient department that is not certified as an ESRD facility	Procedure	HCPCS
G0321	ESRD related services for home dialysis patients per full month; for patients 2 to 11 years of age to include monitoring for adequacy of nutrition, assessment of growth and development, and counseling of parents	Procedure	HCPCS
G0322	End Stage Renal disease (ESRD) related services for home dialysis patients per full month; for patients 12 to 19 years of age to include monitoring for adequacy of nutrition, assessment of growth and development, and counseling of parents	Procedure	HCPCS
G0323	End Stage Renal disease (ESRD) related services for home dialysis patients per full month; for patients 20 years of age and older	Procedure	HCPCS
G0324	ESRD related services for home dialysis (less than full month), per day; for patients under 2 years of age	Procedure	HCPCS
G0325	ESRD related services for home dialysis (less than full month), per day; for patients between 2 and 11 years of age	Procedure	HCPCS
G0326	ESRD related services for home dialysis (less than full month), per day; for patients between twelve and nineteen years of age	Procedure	HCPCS

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
G0327	ESRD related services for home dialysis (less than full month), per day; for patients twenty years of age and over	Procedure	HCPCS
G8075	ESRD patient with documented dialysis dose of URR greater than or equal to 65% (or Kt/ V greater than or equal to 1.2)	Procedure	HCPCS
G8076	ESRD patient with documented dialysis dose of URR less than 65% (or Kt/V less than 1.2)	Procedure	HCPCS
G8081	ESRD patient requiring hemodialysis vascular access documented to have received autogenous AV fistula	Procedure	HCPCS
G8082	ESRD patient requiring hemodialysis documented to have received vascular access other than autogenous AV fistula	Procedure	HCPCS
G8085	ESRD patient requiring hemodialysis vascular access was not an eligible candidate for autogenous AV fistula	Procedure	HCPCS
G8714	Hemodialysis treatment performed exactly 3 times per week > 90 days	Procedure	HCPCS
G8715	Hemodialysis treatment performed less than 3 times per week or greater than 3 times per week	Procedure	HCPCS
G8727	Patient receiving hemodialysis, peritoneal dialysis or kidney transplantation	Procedure	HCPCS
G9231	Documentation of end stage renal disease (ESRD), dialysis, renal transplant before or during the measurement period or pregnancy during the measurement period	Procedure	HCPCS
J0882	Injection, darbepoetin alfa, 1 mcg (for ESRD on dialysis)	Procedure	HCPCS
J0886	Injection, epoetin alfa, 1000 units (for ESRD on dialysis)	Procedure	HCPCS
J0887	Injection, epoetin beta, 1 mcg, (for ESRD on dialysis)	Procedure	HCPCS
K0610	Peritoneal dialysis clamp, each	Procedure	HCPCS
K0612	Drainage extension line, sterile, for dialysis, each	Procedure	HCPCS
Q0139	Injection, ferumoxytol, for treatment of iron deficiency anemia, 1 mg (for ESRD on dialysis)	Procedure	HCPCS
Q4054	Injection, darbepoetin alfa, 1 mcg (for ESRD on dialysis)	Procedure	HCPCS
Q4055	Injection, epoetin alfa, 1000 units (for ESRD on dialysis)	Procedure	HCPCS
Q4081	Injection, epoetin alfa, 100 units (for ESRD on dialysis)	Procedure	HCPCS
Q9972	Injection, epoetin beta, 1 microgram, (for ESRD on dialysis)	Procedure	HCPCS
S9335	Home therapy, hemodialysis; administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing services coded separately), per diem	Procedure	HCPCS
S9339	Home therapy; peritoneal dialysis, administrative services, professional pharmacy services, care coordination and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem	Procedure	HCPCS
0505F	Hemodialysis plan of care documented (ESRD, P-ESRD)	Procedure	CPT-4
0507F	Peritoneal dialysis plan of care documented (ESRD)	Procedure	CPT-4
36145	Introduction of needle or intracatheter; arteriovenous shunt created for dialysis (cannula, fistula, or graft)	Procedure	CPT-4
36800	Insertion of cannula for hemodialysis, other purpose (separate procedure); vein to vein	Procedure	CPT-4

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
36810	Insertion of cannula for hemodialysis, other purpose (separate procedure); arteriovenous, external (Scribner type)	Procedure	CPT-4
49421	Insertion of tunneled intraperitoneal catheter for dialysis, open	Procedure	CPT-4
90935	Hemodialysis procedure with single evaluation by a physician or other qualified health care professional	Procedure	CPT-4
90937	Hemodialysis procedure requiring repeated evaluation(s) with or without substantial revision of dialysis prescription	Procedure	CPT-4
90945	Dialysis procedure other than hemodialysis (eg, peritoneal dialysis, hemofiltration, or other continuous renal replacement therapies), with single evaluation by a physician or other qualified health care professional	Procedure	CPT-4
90947	Dialysis procedure other than hemodialysis (eg, peritoneal dialysis, hemofiltration, or other continuous renal replacement therapies) requiring repeated evaluations by a physician or other qualified health care professional, with or without substantial re	Procedure	CPT-4
90989	Dialysis training, patient, including helper where applicable, any mode, completed course	Procedure	CPT-4
90993	Dialysis training, patient, including helper where applicable, any mode, course not completed, per training session	Procedure	CPT-4
90999	Unlisted dialysis procedure, inpatient or outpatient	Procedure	CPT-4
031209D	Bypass Innominate Artery to Upper Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
031209F	Bypass Innominate Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
03120AD	Bypass Innominate Artery to Upper Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03120AF	Bypass Innominate Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03120JD	Bypass Innominate Artery to Upper Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03120JF	Bypass Innominate Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03120KD	Bypass Innominate Artery to Upper Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03120KF	Bypass Innominate Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03120ZD	Bypass Innominate Artery to Upper Arm Vein, Open Approach	Procedure	ICD-10-PCS
03120ZF	Bypass Innominate Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
031309D	Bypass Right Subclavian Artery to Upper Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
031309F	Bypass Right Subclavian Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
03130AD	Bypass Right Subclavian Artery to Upper Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
03130AF	Bypass Right Subclavian Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03130JD	Bypass Right Subclavian Artery to Upper Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03130JF	Bypass Right Subclavian Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03130KD	Bypass Right Subclavian Artery to Upper Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03130KF	Bypass Right Subclavian Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03130ZD	Bypass Right Subclavian Artery to Upper Arm Vein, Open Approach	Procedure	ICD-10-PCS
03130ZD	Bypass Right Subclavian Artery to Upper Arm Vein, Open Approach	Procedure	ICD-10-PCS
03130ZF	Bypass Right Subclavian Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
031409D	Bypass Left Subclavian Artery to Upper Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
031409F	Bypass Left Subclavian Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
03140AD	Bypass Left Subclavian Artery to Upper Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03140AF	Bypass Left Subclavian Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03140JD	Bypass Left Subclavian Artery to Upper Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03140JF	Bypass Left Subclavian Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03140KD	Bypass Left Subclavian Artery to Upper Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03140KF	Bypass Left Subclavian Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03140ZD	Bypass Left Subclavian Artery to Upper Arm Vein, Open Approach	Procedure	ICD-10-PCS
03140ZD	Bypass Left Subclavian Artery to Upper Arm Vein, Open Approach	Procedure	ICD-10-PCS
03140ZF	Bypass Left Subclavian Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
031509D	Bypass Right Axillary Artery to Upper Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
031509F	Bypass Right Axillary Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
03150AD	Bypass Right Axillary Artery to Upper Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03150AF	Bypass Right Axillary Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03150JD	Bypass Right Axillary Artery to Upper Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03150JF	Bypass Right Axillary Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
03150KD	Bypass Right Axillary Artery to Upper Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03150KF	Bypass Right Axillary Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03150ZD	Bypass Right Axillary Artery to Upper Arm Vein, Open Approach	Procedure	ICD-10-PCS
03150ZD	Bypass Right Axillary Artery to Upper Arm Vein, Open Approach	Procedure	ICD-10-PCS
03150ZF	Bypass Right Axillary Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
031609D	Bypass Left Axillary Artery to Upper Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
031609F	Bypass Left Axillary Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
03160AD	Bypass Left Axillary Artery to Upper Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03160AF	Bypass Left Axillary Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03160JD	Bypass Left Axillary Artery to Upper Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03160JF	Bypass Left Axillary Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03160KD	Bypass Left Axillary Artery to Upper Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03160KF	Bypass Left Axillary Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03160ZD	Bypass Left Axillary Artery to Upper Arm Vein, Open Approach	Procedure	ICD-10-PCS
03160ZD	Bypass Left Axillary Artery to Upper Arm Vein, Open Approach	Procedure	ICD-10-PCS
03160ZF	Bypass Left Axillary Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
031709D	Bypass Right Brachial Artery to Upper Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
031709F	Bypass Right Brachial Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
03170AD	Bypass Right Brachial Artery to Upper Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03170AF	Bypass Right Brachial Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03170JD	Bypass Right Brachial Artery to Upper Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03170JF	Bypass Right Brachial Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03170KD	Bypass Right Brachial Artery to Upper Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03170KF	Bypass Right Brachial Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03170ZD	Bypass Right Brachial Artery to Upper Arm Vein, Open Approach	Procedure	ICD-10-PCS
03170ZD	Bypass Right Brachial Artery to Upper Arm Vein, Open Approach	Procedure	ICD-10-PCS

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
03170ZF	Bypass Right Brachial Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
031809D	Bypass Left Brachial Artery to Upper Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
031809F	Bypass Left Brachial Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
03180AD	Bypass Left Brachial Artery to Upper Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03180AF	Bypass Left Brachial Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03180JD	Bypass Left Brachial Artery to Upper Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03180JF	Bypass Left Brachial Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03180KD	Bypass Left Brachial Artery to Upper Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03180KF	Bypass Left Brachial Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03180ZD	Bypass Left Brachial Artery to Upper Arm Vein, Open Approach	Procedure	ICD-10-PCS
03180ZD	Bypass Left Brachial Artery to Upper Arm Vein, Open Approach	Procedure	ICD-10-PCS
03180ZF	Bypass Left Brachial Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
031909F	Bypass Right Ulnar Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
03190AF	Bypass Right Ulnar Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
03190JF	Bypass Right Ulnar Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
03190KF	Bypass Right Ulnar Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
03190ZF	Bypass Right Ulnar Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
03190ZF	Bypass Right Ulnar Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
031A09F	Bypass Left Ulnar Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
031A0AF	Bypass Left Ulnar Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
031A0JF	Bypass Left Ulnar Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
031A0KF	Bypass Left Ulnar Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
031A0ZF	Bypass Left Ulnar Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
031A0ZF	Bypass Left Ulnar Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
031B09F	Bypass Right Radial Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
031B0AF	Bypass Right Radial Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
031B0JF	Bypass Right Radial Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
031B0KF	Bypass Right Radial Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
031B0ZF	Bypass Right Radial Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
031B0ZF	Bypass Right Radial Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
031C09F	Bypass Left Radial Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
031C0AF	Bypass Left Radial Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
031C0JF	Bypass Left Radial Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
031C0KF	Bypass Left Radial Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
031C0ZF	Bypass Left Radial Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
031C0ZF	Bypass Left Radial Artery to Lower Arm Vein, Open Approach	Procedure	ICD-10-PCS
3E1M39Z	Irrigation of Peritoneal Cavity using Dialysate, Percutaneous Approach	Procedure	ICD-10-PCS
5A1D00Z	Performance of Urinary Filtration, Single	Procedure	ICD-10-PCS
5A1D60Z	Performance of Urinary Filtration, Multiple	Procedure	ICD-10-PCS
Cancer			
C00	Malignant neoplasm of lip	Diagnosis	ICD-10-CM
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
C00.9	Malignant neoplasm of lip, unspecified	Diagnosis	ICD-10-CM
C01	Malignant neoplasm of base of tongue	Diagnosis	ICD-10-CM
C02	Malignant neoplasm of other and unspecified parts 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	Malignant neoplasm of gum	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	Malignant neoplasm of floor of mouth	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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	Malignant neoplasm of palate	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	Malignant neoplasm of other and unspecified parts of mouth	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
C06.8	Malignant neoplasm of overlapping sites of other and unspecified parts of mouth	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	Malignant neoplasm of other and unspecified major salivary glands	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	Malignant neoplasm of tonsil	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	Malignant neoplasm of oropharynx	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	Malignant neoplasm of nasopharynx	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 H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C12	Malignant neoplasm of pyriform sinus	Diagnosis	ICD-10-CM
C13	Malignant neoplasm of hypopharynx	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	Malignant neoplasm of other and ill-defined sites in the lip, oral cavity and pharynx	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	Malignant neoplasm of esophagus	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	Malignant neoplasm of stomach	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	Malignant neoplasm of small intestine	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	Malignant neoplasm of colon	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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	Malignant neoplasm of anus and anal canal	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	Malignant neoplasm of liver and intrahepatic bile ducts	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
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	Malignant neoplasm of other and unspecified parts of biliary tract	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	Malignant neoplasm of pancreas	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	Malignant neoplasm of other and ill-defined digestive organs	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	Malignant neoplasm of nasal cavity and middle ear	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	Malignant neoplasm of accessory sinuses	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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	Malignant neoplasm of larynx	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	Malignant neoplasm of bronchus and lung	Diagnosis	ICD-10-CM
C34.0	Malignant neoplasm of main bronchus	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
C34.1	Malignant neoplasm of upper lobe, bronchus or lung	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
C34.3	Malignant neoplasm of lower 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
C34.8	Malignant neoplasm of overlapping sites of bronchus and 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
C34.82	Malignant neoplasm of overlapping sites of left bronchus and lung	Diagnosis	ICD-10-CM
C34.9	Malignant neoplasm of unspecified part of bronchus or 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	Malignant neoplasm of heart, mediastinum and pleura	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	Malignant neoplasm of other and ill-defined sites in the respiratory system and intrathoracic organs	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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	Malignant neoplasm of bone and articular cartilage of limbs	Diagnosis	ICD-10-CM
C40.0	Malignant neoplasm of scapula and long bones of upper limb	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
C40.1	Malignant neoplasm of short bones of 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
C40.2	Malignant neoplasm of long bones of lower 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
C40.3	Malignant neoplasm of short bones of 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
C40.8	Malignant neoplasm of overlapping sites of bone and articular cartilage of 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
C40.9	Malignant neoplasm of unspecified bones and articular cartilage of 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	Malignant neoplasm of bone and articular cartilage of other and unspecified sites	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	Malignant melanoma of skin	Diagnosis	ICD-10-CM
C43.0	Malignant melanoma of lip	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code	
		Category	Code Type
C43.1	Malignant melanoma of eyelid, including canthus	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
C43.111	Malignant melanoma of right upper eyelid, including canthus	Diagnosis	ICD-10-CM
C43.112	Malignant melanoma of right lower eyelid, including canthus	Diagnosis	ICD-10-CM
C43.12	Malignant melanoma of left eyelid, including canthus	Diagnosis	ICD-10-CM
C43.121	Malignant melanoma of left upper eyelid, including canthus	Diagnosis	ICD-10-CM
C43.122	Malignant melanoma of left lower eyelid, including canthus	Diagnosis	ICD-10-CM
C43.2	Malignant melanoma of ear and external auricular canal	Diagnosis	ICD-10-CM
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
C43.3	Malignant melanoma of other and unspecified parts of face	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
C43.5	Malignant melanoma of trunk	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
C43.6	Malignant melanoma of upper limb, including shoulder	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
C43.7	Malignant melanoma of lower limb, including hip	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
C44	Other and unspecified malignant neoplasm of skin	Diagnosis	ICD-10-CM
C44.0	Other and unspecified malignant neoplasm of skin of lip	Diagnosis	ICD-10-CM
C44.00	Unspecified malignant neoplasm of skin of lip	Diagnosis	ICD-10-CM
C44.01	Basal cell carcinoma of skin of lip	Diagnosis	ICD-10-CM
C44.02	Squamous cell carcinoma of skin of lip	Diagnosis	ICD-10-CM
C44.09	Other specified malignant neoplasm of skin of lip	Diagnosis	ICD-10-CM
C44.1	Other and unspecified malignant neoplasm of skin of eyelid, including canthus	Diagnosis	ICD-10-CM
C44.10	Unspecified malignant neoplasm of skin of eyelid, including canthus	Diagnosis	ICD-10-CM
C44.101	Unspecified malignant neoplasm of skin of unspecified eyelid, including canthus	Diagnosis	ICD-10-CM
C44.102	Unspecified malignant neoplasm of skin of right eyelid, including canthus	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C44.1021	Unspecified malignant neoplasm of skin of right upper eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1022	Unspecified malignant neoplasm of skin of right lower eyelid, including canthus	Diagnosis	ICD-10-CM
C44.109	Unspecified malignant neoplasm of skin of left eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1091	Unspecified malignant neoplasm of skin of left upper eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1092	Unspecified malignant neoplasm of skin of left lower eyelid, including canthus	Diagnosis	ICD-10-CM
C44.11	Basal cell carcinoma of skin of eyelid, including canthus	Diagnosis	ICD-10-CM
C44.111	Basal cell carcinoma of skin of unspecified eyelid, including canthus	Diagnosis	ICD-10-CM
C44.112	Basal cell carcinoma of skin of right eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1121	Basal cell carcinoma of skin of right upper eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1122	Basal cell carcinoma of skin of right lower eyelid, including canthus	Diagnosis	ICD-10-CM
C44.119	Basal cell carcinoma of skin of left eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1191	Basal cell carcinoma of skin of left upper eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1192	Basal cell carcinoma of skin of left lower eyelid, including canthus	Diagnosis	ICD-10-CM
C44.12	Squamous cell carcinoma of skin of eyelid, including canthus	Diagnosis	ICD-10-CM
C44.121	Squamous cell carcinoma of skin of unspecified eyelid, including canthus	Diagnosis	ICD-10-CM
C44.122	Squamous cell carcinoma of skin of right eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1221	Squamous cell carcinoma of skin of right upper eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1222	Squamous cell carcinoma of skin of right lower eyelid, including canthus	Diagnosis	ICD-10-CM
C44.129	Squamous cell carcinoma of skin of left eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1291	Squamous cell carcinoma of skin of left upper eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1292	Squamous cell carcinoma of skin of left lower eyelid, including canthus	Diagnosis	ICD-10-CM
C44.13	Sebaceous cell carcinoma of skin of eyelid, including canthus	Diagnosis	ICD-10-CM
C44.131	Sebaceous cell carcinoma of skin of unspecified eyelid, including canthus	Diagnosis	ICD-10-CM
C44.132	Sebaceous cell carcinoma of skin of right eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1321	Sebaceous cell carcinoma of skin of right upper eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1322	Sebaceous cell carcinoma of skin of right lower eyelid, including canthus	Diagnosis	ICD-10-CM
C44.139	Sebaceous cell carcinoma of skin of left eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1391	Sebaceous cell carcinoma of skin of left upper eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1392	Sebaceous cell carcinoma of skin of left lower eyelid, including canthus	Diagnosis	ICD-10-CM
C44.19	Other specified malignant neoplasm of skin of eyelid, including canthus	Diagnosis	ICD-10-CM
C44.191	Other specified malignant neoplasm of skin of unspecified eyelid, including canthus	Diagnosis	ICD-10-CM
C44.192	Other specified malignant neoplasm of skin of right eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1921	Other specified malignant neoplasm of skin of right upper eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1922	Other specified malignant neoplasm of skin of right lower eyelid, including canthus	Diagnosis	ICD-10-CM
C44.199	Other specified malignant neoplasm of skin of left eyelid, including canthus	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C44.1991	Other specified malignant neoplasm of skin of left upper eyelid, including canthus	Diagnosis	ICD-10-CM
C44.1992	Other specified malignant neoplasm of skin of left lower eyelid, including canthus	Diagnosis	ICD-10-CM
C44.2	Other and unspecified malignant neoplasm of skin of ear and external auricular canal	Diagnosis	ICD-10-CM
C44.20	Unspecified malignant neoplasm of skin of ear and external auricular	Diagnosis	ICD-10-CM
C44.201	Unspecified malignant neoplasm of skin of unspecified ear and external auricular canal	Diagnosis	ICD-10-CM
C44.202	Unspecified malignant neoplasm of skin of right ear and external auricular canal	Diagnosis	ICD-10-CM
C44.209	Unspecified malignant neoplasm of skin of left ear and external auricular canal	Diagnosis	ICD-10-CM
C44.21	Basal cell carcinoma of skin of ear and external auricular canal	Diagnosis	ICD-10-CM
C44.211	Basal cell carcinoma of skin of unspecified ear and external auricular canal	Diagnosis	ICD-10-CM
C44.212	Basal cell carcinoma of skin of right ear and external auricular canal	Diagnosis	ICD-10-CM
C44.219	Basal cell carcinoma of skin of left ear and external auricular canal	Diagnosis	ICD-10-CM
C44.22	Squamous cell carcinoma of skin of ear and external auricular canal	Diagnosis	ICD-10-CM
C44.221	Squamous cell carcinoma of skin of unspecified ear and external auricular canal	Diagnosis	ICD-10-CM
C44.222	Squamous cell carcinoma of skin of right ear and external auricular canal	Diagnosis	ICD-10-CM
C44.229	Squamous cell carcinoma of skin of left ear and external auricular canal	Diagnosis	ICD-10-CM
C44.29	Other specified malignant neoplasm of skin of ear and external auricular canal	Diagnosis	ICD-10-CM
C44.291	Other specified malignant neoplasm of skin of unspecified ear and external auricular canal	Diagnosis	ICD-10-CM
C44.292	Other specified malignant neoplasm of skin of right ear and external auricular canal	Diagnosis	ICD-10-CM
C44.299	Other specified malignant neoplasm of skin of left ear and external auricular canal	Diagnosis	ICD-10-CM
C44.3	Other and unspecified malignant neoplasm of skin of other and unspecified parts of face	Diagnosis	ICD-10-CM
C44.30	Unspecified malignant neoplasm of skin of other and unspecified parts of face	Diagnosis	ICD-10-CM
C44.300	Unspecified malignant neoplasm of skin of unspecified part of face	Diagnosis	ICD-10-CM
C44.301	Unspecified malignant neoplasm of skin of nose	Diagnosis	ICD-10-CM
C44.309	Unspecified malignant neoplasm of skin of other parts of face	Diagnosis	ICD-10-CM
C44.31	Basal cell carcinoma of skin of other and unspecified parts of face	Diagnosis	ICD-10-CM
C44.310	Basal cell carcinoma of skin of unspecified parts of face	Diagnosis	ICD-10-CM
C44.311	Basal cell carcinoma of skin of nose	Diagnosis	ICD-10-CM
C44.319	Basal cell carcinoma of skin of other parts of face	Diagnosis	ICD-10-CM
C44.32	Squamous cell carcinoma of skin of other and unspecified parts of face	Diagnosis	ICD-10-CM
C44.320	Squamous cell carcinoma of skin of unspecified parts of face	Diagnosis	ICD-10-CM
C44.321	Squamous cell carcinoma of skin of nose	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C44.329	Squamous cell carcinoma of skin of other parts of face	Diagnosis	ICD-10-CM
C44.39	Other specified malignant neoplasm of skin of other and unspecified parts of face	Diagnosis	ICD-10-CM
C44.390	Other specified malignant neoplasm of skin of unspecified parts of face	Diagnosis	ICD-10-CM
C44.391	Other specified malignant neoplasm of skin of nose	Diagnosis	ICD-10-CM
C44.399	Other specified malignant neoplasm of skin of other parts of face	Diagnosis	ICD-10-CM
C44.4	Other and unspecified malignant neoplasm of skin of scalp and neck	Diagnosis	ICD-10-CM
C44.40	Unspecified malignant neoplasm of skin of scalp and neck	Diagnosis	ICD-10-CM
C44.41	Basal cell carcinoma of skin of scalp and neck	Diagnosis	ICD-10-CM
C44.42	Squamous cell carcinoma of skin of scalp and neck	Diagnosis	ICD-10-CM
C44.49	Other specified malignant neoplasm of skin of scalp and neck	Diagnosis	ICD-10-CM
C44.5	Other and unspecified malignant neoplasm of skin of trunk	Diagnosis	ICD-10-CM
C44.50	Unspecified malignant neoplasm of skin of trunk	Diagnosis	ICD-10-CM
C44.500	Unspecified malignant neoplasm of anal skin	Diagnosis	ICD-10-CM
C44.501	Unspecified malignant neoplasm of skin of breast	Diagnosis	ICD-10-CM
C44.509	Unspecified malignant neoplasm of skin of other part of trunk	Diagnosis	ICD-10-CM
C44.51	Basal cell carcinoma of skin of trunk	Diagnosis	ICD-10-CM
C44.510	Basal cell carcinoma of anal skin	Diagnosis	ICD-10-CM
C44.511	Basal cell carcinoma of skin of breast	Diagnosis	ICD-10-CM
C44.519	Basal cell carcinoma of skin of other part of trunk	Diagnosis	ICD-10-CM
C44.52	Squamous cell carcinoma of skin of trunk	Diagnosis	ICD-10-CM
C44.520	Squamous cell carcinoma of anal skin	Diagnosis	ICD-10-CM
C44.521	Squamous cell carcinoma of skin of breast	Diagnosis	ICD-10-CM
C44.529	Squamous cell carcinoma of skin of other part of trunk	Diagnosis	ICD-10-CM
C44.59	Other specified malignant neoplasm of skin of trunk	Diagnosis	ICD-10-CM
C44.590	Other specified malignant neoplasm of anal skin	Diagnosis	ICD-10-CM
C44.591	Other specified malignant neoplasm of skin of breast	Diagnosis	ICD-10-CM
C44.599	Other specified malignant neoplasm of skin of other part of trunk	Diagnosis	ICD-10-CM
C44.6	Other and unspecified malignant neoplasm of skin of upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.60	Unspecified malignant neoplasm of skin of upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.601	Unspecified malignant neoplasm of skin of unspecified upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.602	Unspecified malignant neoplasm of skin of right upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.609	Unspecified malignant neoplasm of skin of left upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.61	Basal cell carcinoma of skin of upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.611	Basal cell carcinoma of skin of unspecified upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.612	Basal cell carcinoma of skin of right upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.619	Basal cell carcinoma of skin of left upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.62	Squamous cell carcinoma of skin of upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.621	Squamous cell carcinoma of skin of unspecified upper limb, including shoulder	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C44.622	Squamous cell carcinoma of skin of right upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.629	Squamous cell carcinoma of skin of left upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.69	Other specified malignant neoplasm of skin of upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.691	Other specified malignant neoplasm of skin of unspecified upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.692	Other specified malignant neoplasm of skin of right upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.699	Other specified malignant neoplasm of skin of left upper limb, including shoulder	Diagnosis	ICD-10-CM
C44.7	Other and unspecified malignant neoplasm of skin of lower limb, including hip	Diagnosis	ICD-10-CM
C44.70	Unspecified malignant neoplasm of skin of lower limb, including hip	Diagnosis	ICD-10-CM
C44.701	Unspecified malignant neoplasm of skin of unspecified lower limb, including hip	Diagnosis	ICD-10-CM
C44.702	Unspecified malignant neoplasm of skin of right lower limb, including hip	Diagnosis	ICD-10-CM
C44.709	Unspecified malignant neoplasm of skin of left lower limb, including hip	Diagnosis	ICD-10-CM
C44.71	Basal cell carcinoma of skin of lower limb, including hip	Diagnosis	ICD-10-CM
C44.711	Basal cell carcinoma of skin of unspecified lower limb, including hip	Diagnosis	ICD-10-CM
C44.712	Basal cell carcinoma of skin of right lower limb, including hip	Diagnosis	ICD-10-CM
C44.719	Basal cell carcinoma of skin of left lower limb, including hip	Diagnosis	ICD-10-CM
C44.72	Squamous cell carcinoma of skin of lower limb, including hip	Diagnosis	ICD-10-CM
C44.721	Squamous cell carcinoma of skin of unspecified lower limb, including hip	Diagnosis	ICD-10-CM
C44.722	Squamous cell carcinoma of skin of right lower limb, including hip	Diagnosis	ICD-10-CM
C44.729	Squamous cell carcinoma of skin of left lower limb, including hip	Diagnosis	ICD-10-CM
C44.79	Other specified malignant neoplasm of skin of lower limb, including hip	Diagnosis	ICD-10-CM
C44.791	Other specified malignant neoplasm of skin of unspecified lower limb, including hip	Diagnosis	ICD-10-CM
C44.792	Other specified malignant neoplasm of skin of right lower limb, including hip	Diagnosis	ICD-10-CM
C44.799	Other specified malignant neoplasm of skin of left lower limb, including hip	Diagnosis	ICD-10-CM
C44.8	Other and unspecified malignant neoplasm of overlapping sites of skin	Diagnosis	ICD-10-CM
C44.80	Unspecified malignant neoplasm of overlapping sites of skin	Diagnosis	ICD-10-CM
C44.81	Basal cell carcinoma of overlapping sites of skin	Diagnosis	ICD-10-CM
C44.82	Squamous cell carcinoma of overlapping sites of skin	Diagnosis	ICD-10-CM
C44.89	Other specified malignant neoplasm of overlapping sites of skin	Diagnosis	ICD-10-CM
C44.9	Other and unspecified malignant neoplasm of skin, unspecified	Diagnosis	ICD-10-CM
C44.90	Unspecified malignant neoplasm of skin, unspecified	Diagnosis	ICD-10-CM
C44.91	Basal cell carcinoma of skin, unspecified	Diagnosis	ICD-10-CM
C44.92	Squamous cell carcinoma of skin, unspecified	Diagnosis	ICD-10-CM
C44.99	Other specified malignant neoplasm of skin, unspecified	Diagnosis	ICD-10-CM
C45	Mesothelioma	Diagnosis	ICD-10-CM
C45.0	Mesothelioma of pleura	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code	
		Category	Code Type
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	Kaposi's sarcoma	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
C46.5	Kaposi's sarcoma of lung	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	Malignant neoplasm of peripheral nerves and autonomic nervous system	Diagnosis	ICD-10-CM
C47.0	Malignant neoplasm of peripheral nerves of head, face and neck	Diagnosis	ICD-10-CM
C47.1	Malignant neoplasm of peripheral nerves of upper limb, including shoulder	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
C47.2	Malignant neoplasm of peripheral nerves of lower limb, including hip	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
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	Malignant neoplasm of retroperitoneum and peritoneum	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C48.8	Malignant neoplasm of overlapping sites of retroperitoneum and peritoneum	Diagnosis	ICD-10-CM
C49	Malignant neoplasm of other connective and soft tissue	Diagnosis	ICD-10-CM
C49.0	Malignant neoplasm of connective and soft tissue of head, face and neck	Diagnosis	ICD-10-CM
C49.1	Malignant neoplasm of connective and soft tissue of upper limb, including shoulder	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
C49.2	Malignant neoplasm of connective and soft tissue of lower limb, including hip	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.A	Gastrointestinal stromal tumor	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	Merkel cell carcinoma	Diagnosis	ICD-10-CM
C4A.0	Merkel cell carcinoma of lip	Diagnosis	ICD-10-CM
C4A.1	Merkel cell carcinoma of eyelid, including canthus	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.111	Merkel cell carcinoma of right upper eyelid, including canthus	Diagnosis	ICD-10-CM
C4A.112	Merkel cell carcinoma of right lower eyelid, including canthus	Diagnosis	ICD-10-CM
C4A.12	Merkel cell carcinoma of left eyelid, including canthus	Diagnosis	ICD-10-CM
C4A.121	Merkel cell carcinoma of left upper eyelid, including canthus	Diagnosis	ICD-10-CM
C4A.122	Merkel cell carcinoma of left lower eyelid, including canthus	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C4A.2	Merkel cell carcinoma of ear and external auricular canal	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.3	Merkel cell carcinoma of other and unspecified parts of face	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
C4A.5	Merkel cell carcinoma of trunk	Diagnosis	ICD-10-CM
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.6	Merkel cell carcinoma of upper limb, including shoulder	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.7	Merkel cell carcinoma of lower limb, including hip	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	Malignant neoplasm of breast	Diagnosis	ICD-10-CM
C50.0	Malignant neoplasm of nipple and areola	Diagnosis	ICD-10-CM
C50.01	Malignant neoplasm of nipple and areola, female	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
C50.02	Malignant neoplasm of nipple and areola, male	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
C50.1	Malignant neoplasm of central portion of breast	Diagnosis	ICD-10-CM
C50.11	Malignant neoplasm of central portion of breast, female	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
C50.12	Malignant neoplasm of central portion of breast, male	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
C50.2	Malignant neoplasm of upper-inner quadrant of breast	Diagnosis	ICD-10-CM
C50.21	Malignant neoplasm of upper-inner quadrant of breast, female	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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	Diagnosis	ICD-10-CM
C50.22	Malignant neoplasm of upper-inner quadrant of breast, male	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
C50.3	Malignant neoplasm of lower-inner quadrant of breast	Diagnosis	ICD-10-CM
C50.31	Malignant neoplasm of lower-inner quadrant of breast, female	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
C50.32	Malignant neoplasm of lower-inner quadrant of breast, male	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
C50.4	Malignant neoplasm of upper-outer quadrant of breast	Diagnosis	ICD-10-CM
C50.41	Malignant neoplasm of upper-outer quadrant of breast, female	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	Diagnosis	ICD-10-CM
C50.42	Malignant neoplasm of upper-outer quadrant of breast, male	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
C50.5	Malignant neoplasm of lower-outer quadrant of breast	Diagnosis	ICD-10-CM
C50.51	Malignant neoplasm of lower-outer quadrant of breast, female	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	Diagnosis	ICD-10-CM
C50.52	Malignant neoplasm of lower-outer quadrant of breast, male	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
C50.6	Malignant neoplasm of axillary tail of breast	Diagnosis	ICD-10-CM
C50.61	Malignant neoplasm of axillary tail of breast, female	Diagnosis	ICD-10-CM
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
C50.62	Malignant neoplasm of axillary tail of breast, male	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
C50.8	Malignant neoplasm of overlapping sites of breast	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code	
		Category	Code Type
C50.81	Malignant neoplasm of overlapping sites of breast, female	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
C50.82	Malignant neoplasm of overlapping sites of breast, male	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
C50.9	Malignant neoplasm of breast of unspecified site	Diagnosis	ICD-10-CM
C50.91	Malignant neoplasm of breast of unspecified site, female	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
C50.92	Malignant neoplasm of breast of unspecified site, male	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	Malignant neoplasm of vulva	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	Malignant neoplasm of cervix uteri	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	Malignant neoplasm of corpus uteri	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	Malignant neoplasm of ovary	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
C56.3	Malignant neoplasm of bilateral ovaries	Diagnosis	ICD-10-CM
C56.9	Malignant neoplasm of unspecified ovary	Diagnosis	ICD-10-CM
C57	Malignant neoplasm of other and unspecified female genital organs	Diagnosis	ICD-10-CM
C57.0	Malignant neoplasm of fallopian tube	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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
C57.1	Malignant neoplasm of broad ligament	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
C57.2	Malignant neoplasm of round 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
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	Malignant neoplasm of penis	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	Malignant neoplasm of testis	Diagnosis	ICD-10-CM
C62.0	Malignant neoplasm of undescended testis	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
C62.1	Malignant neoplasm of descended 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
C62.9	Malignant neoplasm of testis, unspecified whether descended or undescended	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	Malignant neoplasm of other and unspecified male genital organs	Diagnosis	ICD-10-CM
C63.0	Malignant neoplasm of epididymis	Diagnosis	ICD-10-CM
C63.00	Malignant neoplasm of unspecified epididymis	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C63.01	Malignant neoplasm of right epididymis	Diagnosis	ICD-10-CM
C63.02	Malignant neoplasm of left epididymis	Diagnosis	ICD-10-CM
C63.1	Malignant neoplasm of spermatic cord	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	Malignant neoplasm of kidney, except renal pelvis	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	Malignant neoplasm of 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	Malignant neoplasm of ureter	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	Malignant neoplasm of bladder	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
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	Malignant neoplasm of other and unspecified urinary organs	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	Malignant neoplasm of eye and adnexa	Diagnosis	ICD-10-CM
C69.0	Malignant neoplasm of conjunctiva	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
C69.1	Malignant neoplasm of cornea	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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
C69.2	Malignant neoplasm of retina	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
C69.3	Malignant neoplasm of choroid	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
C69.4	Malignant neoplasm of ciliary body	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
C69.5	Malignant neoplasm of lacrimal gland and duct	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
C69.6	Malignant neoplasm of orbit	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
C69.8	Malignant neoplasm of overlapping sites of eye and adnexa	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
C69.9	Malignant neoplasm of unspecified site of eye	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	Malignant neoplasm of meninges	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	Malignant neoplasm of brain	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code	
		Category	Code Type
C71.8	Malignant neoplasm of overlapping sites of brain	Diagnosis	ICD-10-CM
C71.9	Malignant neoplasm of brain, unspecified	Diagnosis	ICD-10-CM
C72	Malignant neoplasm of spinal cord, cranial nerves and other parts of central nervous system	Diagnosis	ICD-10-CM
C72.0	Malignant neoplasm of spinal cord	Diagnosis	ICD-10-CM
C72.1	Malignant neoplasm of cauda equina	Diagnosis	ICD-10-CM
C72.2	Malignant neoplasm of olfactory nerve	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
C72.3	Malignant neoplasm of optic 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
C72.4	Malignant neoplasm of acoustic 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
C72.5	Malignant neoplasm of other and unspecified cranial nerves	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	Malignant neoplasm of adrenal gland	Diagnosis	ICD-10-CM
C74.0	Malignant neoplasm of cortex of adrenal 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
C74.1	Malignant neoplasm of medulla of 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
C74.9	Malignant neoplasm of unspecified part of 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	Malignant neoplasm of other endocrine glands and related structures	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C75.9	Malignant neoplasm of endocrine gland, unspecified	Diagnosis	ICD-10-CM
C76	Malignant neoplasm of other and ill-defined sites	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
C76.4	Malignant neoplasm of upper limb	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
C76.5	Malignant neoplasm of lower 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	Secondary and unspecified malignant neoplasm of lymph nodes	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
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	Secondary malignant neoplasm of respiratory and digestive organs	Diagnosis	ICD-10-CM
C78.0	Secondary malignant neoplasm of lung	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
C78.3	Secondary malignant neoplasm of other and unspecified respiratory organs	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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
C78.8	Secondary malignant neoplasm of other and unspecified digestive organs	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	Secondary malignant neoplasm of other and unspecified sites	Diagnosis	ICD-10-CM
C79.0	Secondary malignant neoplasm of kidney and renal pelvis	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
C79.1	Secondary malignant neoplasm of bladder and other and unspecified urinary organs	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
C79.2	Secondary malignant neoplasm of skin	Diagnosis	ICD-10-CM
C79.3	Secondary malignant neoplasm of brain and cerebral meninges	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
C79.4	Secondary malignant neoplasm of other and unspecified parts of nervous system	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
C79.5	Secondary malignant neoplasm of bone and bone marrow	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
C79.6	Secondary malignant neoplasm of ovary	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
C79.63	Secondary malignant neoplasm of bilateral ovaries	Diagnosis	ICD-10-CM
C79.7	Secondary malignant neoplasm of adrenal gland	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
C79.8	Secondary malignant neoplasm of other specified sites	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	Malignant neuroendocrine tumors	Diagnosis	ICD-10-CM
C7A.0	Malignant carcinoid tumors	Diagnosis	ICD-10-CM
C7A.00	Malignant carcinoid tumor of unspecified site	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C7A.01	Malignant carcinoid tumors of the small intestine	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
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.02	Malignant carcinoid tumors of the appendix, large intestine, and rectum	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.09	Malignant carcinoid tumors of other sites	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	Secondary neuroendocrine tumors	Diagnosis	ICD-10-CM
C7B.0	Secondary carcinoid 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	Malignant neoplasm without specification of site	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	Hodgkin lymphoma	Diagnosis	ICD-10-CM
C81.0	Nodular lymphocyte predominant Hodgkin lymphoma	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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
C81.09	Nodular lymphocyte predominant Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C81.1	Nodular sclerosis Hodgkin lymphoma	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
C81.2	Mixed cellularity Hodgkin lymphoma	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
C81.3	Lymphocyte depleted Hodgkin lymphoma	Diagnosis	ICD-10-CM
C81.30	Lymphocyte depleted Hodgkin lymphoma, unspecified site	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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
C81.4	Lymphocyte-rich Hodgkin lymphoma	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
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
C81.7	Other Hodgkin lymphoma	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
C81.9	Hodgkin lymphoma, unspecified	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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	Follicular lymphoma	Diagnosis	ICD-10-CM
C82.0	Follicular lymphoma grade I	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
C82.1	Follicular lymphoma grade II	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
C82.2	Follicular lymphoma grade III, unspecified	Diagnosis	ICD-10-CM
C82.20	Follicular lymphoma grade III, unspecified, unspecified site	Diagnosis	ICD-10-CM
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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C82.29	Follicular lymphoma grade III, unspecified, extranodal and solid organ	Diagnosis	ICD-10-CM
C82.3	Follicular lymphoma grade IIIa	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
C82.4	Follicular lymphoma grade IIIb	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
C82.5	Diffuse follicle center lymphoma	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
C82.6	Cutaneous follicle center lymphoma	Diagnosis	ICD-10-CM
C82.60	Cutaneous follicle center lymphoma, unspecified site	Diagnosis	ICD-10-CM
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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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
C82.8	Other types of follicular lymphoma	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
C82.9	Follicular lymphoma, unspecified	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	Non-follicular lymphoma	Diagnosis	ICD-10-CM
C83.0	Small cell B-cell lymphoma	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
C83.1	Mantle cell lymphoma	Diagnosis	ICD-10-CM
C83.10	Mantle cell lymphoma, unspecified site	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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
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
C83.3	Diffuse large B-cell lymphoma	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
C83.5	Lymphoblastic (diffuse) lymphoma	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
C83.7	Burkitt lymphoma	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C83.8	Other non-follicular lymphoma	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
C83.89	Other non-follicular lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C83.9	Non-follicular (diffuse) lymphoma, unspecified	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	Mature T/NK-cell lymphomas	Diagnosis	ICD-10-CM
C84.0	Mycosis fungoides	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
C84.1	Sezary disease	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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
C84.4	Peripheral T-cell lymphoma, not classified	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
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	Diagnosis	ICD-10-CM
C84.6	Anaplastic large cell lymphoma, ALK-positive	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
C84.7	Anaplastic large cell lymphoma, ALK-negative	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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
C84.7A	Anaplastic large cell lymphoma, ALK-negative, breast	Diagnosis	ICD-10-CM
C84.9	Mature T/NK-cell lymphomas, unspecified	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
C84.99	Mature T/NK-cell lymphomas, unspecified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.A	Cutaneous T-cell lymphoma, unspecified	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.Z	Other mature T/NK-cell lymphomas	Diagnosis	ICD-10-CM
C84.Z0	Other mature T/NK-cell lymphomas, unspecified site	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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	Other specified and unspecified types of non-Hodgkin lymphoma	Diagnosis	ICD-10-CM
C85.1	Unspecified B-cell lymphoma	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
C85.2	Mediastinal (thymic) large B-cell lymphoma	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
C85.29	Mediastinal (thymic) large B-cell lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C85.8	Other specified types of non-Hodgkin lymphoma	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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
C85.9	Non-Hodgkin lymphoma, unspecified	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	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	Other specified types of T/NK-cell lymphoma	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	Malignant immunoproliferative diseases and certain other B-cell lymphomas	Diagnosis	ICD-10-CM
C88.0	Waldenstrom macroglobulinemia	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	Multiple myeloma and malignant plasma cell neoplasms	Diagnosis	ICD-10-CM
C90.0	Multiple myeloma	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code	
		Category	Code Type
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
C90.1	Plasma cell leukemia	Diagnosis	ICD-10-CM
C90.10	Plasma cell leukemia not having achieved remission	Diagnosis	ICD-10-CM
C90.11	Plasma cell leukemia in remission	Diagnosis	ICD-10-CM
C90.12	Plasma cell leukemia in relapse	Diagnosis	ICD-10-CM
C90.2	Extramedullary plasmacytoma	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
C90.3	Solitary plasmacytoma	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	Lymphoid leukemia	Diagnosis	ICD-10-CM
C91.0	Acute lymphoblastic leukemia [ALL]	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
C91.1	Chronic lymphocytic leukemia of B-cell type	Diagnosis	ICD-10-CM
C91.10	Chronic lymphocytic leukemia of B-cell type not having achieved	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
C91.3	Prolymphocytic leukemia of B-cell type	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
C91.4	Hairy cell leukemia	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
C91.5	Adult T-cell lymphoma/leukemia (HTLV-1-associated)	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
C91.6	Prolymphocytic leukemia of T-cell type	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
C91.9	Lymphoid leukemia, unspecified	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C91.92	Lymphoid leukemia, unspecified, in relapse	Diagnosis	ICD-10-CM
C91.A	Mature B-cell leukemia Burkitt-type	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.Z	Other lymphoid leukemia	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	Myeloid leukemia	Diagnosis	ICD-10-CM
C92.0	Acute myeloblastic leukemia	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
C92.1	Chronic myeloid leukemia, BCR/ABL-positive	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
C92.2	Atypical chronic myeloid leukemia, BCR/ABL-negative	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
C92.3	Myeloid sarcoma	Diagnosis	ICD-10-CM
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
C92.4	Acute promyelocytic leukemia	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
C92.5	Acute myelomonocytic leukemia	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
C92.6	Acute myeloid leukemia with 11q23-abnormality	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
C92.9	Myeloid leukemia, unspecified	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
C92.92	Myeloid leukemia, unspecified in relapse	Diagnosis	ICD-10-CM
C92.A	Acute myeloid leukemia with multilineage dysplasia	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.Z	Other myeloid leukemia	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	Monocytic leukemia	Diagnosis	ICD-10-CM
C93.0	Acute monoblastic/monocytic leukemia	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
C93.1	Chronic myelomonocytic leukemia	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
C93.3	Juvenile myelomonocytic leukemia	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
C93.9	Monocytic leukemia, unspecified	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.Z	Other monocytic leukemia	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	Other leukemias of specified cell type	Diagnosis	ICD-10-CM
C94.0	Acute erythroid leukemia	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
C94.2	Acute megakaryoblastic leukemia	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
C94.3	Mast cell leukemia	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code	
		Category	Code Type
C94.4	Acute panmyelosis with myelofibrosis	Diagnosis	ICD-10-CM
C94.40	Acute panmyelosis with myelofibrosis not having achieved remission	Diagnosis	ICD-10-CM
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
C94.8	Other specified leukemias	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	Leukemia of unspecified cell type	Diagnosis	ICD-10-CM
C95.0	Acute leukemia of unspecified cell type	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
C95.1	Chronic leukemia of unspecified cell type	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
C95.9	Leukemia, unspecified	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	Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue	Diagnosis	ICD-10-CM
C96.0	Multifocal and multisystemic (disseminated) Langerhans-cell histiocytosis	Diagnosis	ICD-10-CM
C96.2	Malignant mast cell neoplasm	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
C96.5	Multifocal and unisystemic Langerhans-cell histiocytosis	Diagnosis	ICD-10-CM
C96.6	Unifocal Langerhans-cell histiocytosis	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	Carcinoma in situ of oral cavity, esophagus and stomach	Diagnosis	ICD-10-CM
D00.0	Carcinoma in situ of lip, oral cavity and pharynx	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code	
		Category	Code Type
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	Carcinoma in situ of other and unspecified digestive organs	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
D01.4	Carcinoma in situ of other and unspecified parts of intestine	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	Carcinoma in situ of middle ear and respiratory system	Diagnosis	ICD-10-CM
D02.0	Carcinoma in situ of larynx	Diagnosis	ICD-10-CM
D02.1	Carcinoma in situ of trachea	Diagnosis	ICD-10-CM
D02.2	Carcinoma in situ of bronchus and lung	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	Melanoma in situ	Diagnosis	ICD-10-CM
D03.0	Melanoma in situ of lip	Diagnosis	ICD-10-CM
D03.1	Melanoma in situ of eyelid, including canthus	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
D03.111	Melanoma in situ of right upper eyelid, including canthus	Diagnosis	ICD-10-CM
D03.112	Melanoma in situ of right lower eyelid, including canthus	Diagnosis	ICD-10-CM
D03.12	Melanoma in situ of left eyelid, including canthus	Diagnosis	ICD-10-CM
D03.121	Melanoma in situ of left upper eyelid, including canthus	Diagnosis	ICD-10-CM
D03.122	Melanoma in situ of left lower eyelid, including canthus	Diagnosis	ICD-10-CM
D03.2	Melanoma in situ of ear and external auricular canal	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
D03.3	Melanoma in situ of other and unspecified parts of face	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code	
		Category	Code Type
D03.4	Melanoma in situ of scalp and neck	Diagnosis	ICD-10-CM
D03.5	Melanoma in situ of trunk	Diagnosis	ICD-10-CM
D03.51	Melanoma in situ of anal skin	Diagnosis	ICD-10-CM
D03.52	Melanoma in situ of breast (skin) (soft tissue)	Diagnosis	ICD-10-CM
D03.59	Melanoma in situ of other part of trunk	Diagnosis	ICD-10-CM
D03.6	Melanoma in situ of upper limb, including shoulder	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
D03.7	Melanoma in situ of lower limb, including hip	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
D04	Carcinoma in situ of skin	Diagnosis	ICD-10-CM
D04.0	Carcinoma in situ of skin of lip	Diagnosis	ICD-10-CM
D04.1	Carcinoma in situ of skin of eyelid, including canthus	Diagnosis	ICD-10-CM
D04.10	Carcinoma in situ of skin of unspecified eyelid, including canthus	Diagnosis	ICD-10-CM
D04.11	Carcinoma in situ of skin of right eyelid, including canthus	Diagnosis	ICD-10-CM
D04.111	Carcinoma in situ of skin of right upper eyelid, including canthus	Diagnosis	ICD-10-CM
D04.112	Carcinoma in situ of skin of right lower eyelid, including canthus	Diagnosis	ICD-10-CM
D04.12	Carcinoma in situ of skin of left eyelid, including canthus	Diagnosis	ICD-10-CM
D04.121	Carcinoma in situ of skin of left upper eyelid, including canthus	Diagnosis	ICD-10-CM
D04.122	Carcinoma in situ of skin of left lower eyelid, including canthus	Diagnosis	ICD-10-CM
D04.2	Carcinoma in situ of skin of ear and external auricular canal	Diagnosis	ICD-10-CM
D04.20	Carcinoma in situ of skin of unspecified ear and external auricular canal	Diagnosis	ICD-10-CM
D04.21	Carcinoma in situ of skin of right ear and external auricular canal	Diagnosis	ICD-10-CM
D04.22	Carcinoma in situ of skin of left ear and external auricular canal	Diagnosis	ICD-10-CM
D04.3	Carcinoma in situ of skin of other and unspecified parts of face	Diagnosis	ICD-10-CM
D04.30	Carcinoma in situ of skin of unspecified part of face	Diagnosis	ICD-10-CM
D04.39	Carcinoma in situ of skin of other parts of face	Diagnosis	ICD-10-CM
D04.4	Carcinoma in situ of skin of scalp and neck	Diagnosis	ICD-10-CM
D04.5	Carcinoma in situ of skin of trunk	Diagnosis	ICD-10-CM
D04.6	Carcinoma in situ of skin of upper limb, including shoulder	Diagnosis	ICD-10-CM
D04.60	Carcinoma in situ of skin of unspecified upper limb, including shoulder	Diagnosis	ICD-10-CM
D04.61	Carcinoma in situ of skin of right upper limb, including shoulder	Diagnosis	ICD-10-CM
D04.62	Carcinoma in situ of skin of left upper limb, including shoulder	Diagnosis	ICD-10-CM
D04.7	Carcinoma in situ of skin of lower limb, including hip	Diagnosis	ICD-10-CM
D04.70	Carcinoma in situ of skin of unspecified lower limb, including hip	Diagnosis	ICD-10-CM
D04.71	Carcinoma in situ of skin of right lower limb, including hip	Diagnosis	ICD-10-CM
D04.72	Carcinoma in situ of skin of left lower limb, including hip	Diagnosis	ICD-10-CM
D04.8	Carcinoma in situ of skin of other sites	Diagnosis	ICD-10-CM
D04.9	Carcinoma in situ of skin, unspecified	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
D05	Carcinoma in situ of breast	Diagnosis	ICD-10-CM
D05.0	Lobular carcinoma in situ of breast	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
D05.1	Intraductal carcinoma in situ of 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
D05.8	Other specified type of carcinoma in situ of 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
D05.9	Unspecified type of carcinoma in situ of 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	Carcinoma in situ of cervix uteri	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	Carcinoma in situ of other and unspecified genital organs	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
D07.3	Carcinoma in situ of other and unspecified female genital organs	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
D07.6	Carcinoma in situ of other and unspecified male genital organs	Diagnosis	ICD-10-CM
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	Carcinoma in situ of other and unspecified sites	Diagnosis	ICD-10-CM
D09.0	Carcinoma in situ of bladder	Diagnosis	ICD-10-CM
D09.1	Carcinoma in situ of other and unspecified urinary organs	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
D09.2	Carcinoma in situ of eye	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code	
		Category	Code Type
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
D37	Neoplasm of uncertain behavior of oral cavity and digestive organs	Diagnosis	ICD-10-CM
D37.0	Neoplasm of uncertain behavior of lip, oral cavity and pharynx	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
D37.03	Neoplasm of uncertain behavior of the major salivary glands	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	Neoplasm of uncertain behavior of middle ear and respiratory and intrathoracic organs	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	Neoplasm of uncertain behavior of female genital organs	Diagnosis	ICD-10-CM
D39.0	Neoplasm of uncertain behavior of uterus	Diagnosis	ICD-10-CM
D39.1	Neoplasm of uncertain behavior of ovary	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
D40	Neoplasm of uncertain behavior of male genital organs	Diagnosis	ICD-10-CM
D40.0	Neoplasm of uncertain behavior of prostate	Diagnosis	ICD-10-CM
D40.1	Neoplasm of uncertain behavior of testis	Diagnosis	ICD-10-CM

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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	Neoplasm of uncertain behavior of urinary organs	Diagnosis	ICD-10-CM
D41.0	Neoplasm of uncertain behavior of 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
D41.1	Neoplasm of uncertain behavior of renal pelvis	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
D41.2	Neoplasm of uncertain behavior of ureter	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	Neoplasm of uncertain behavior of meninges	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	Neoplasm of uncertain behavior of brain and central nervous system	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
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	Neoplasm of uncertain behavior of endocrine glands	Diagnosis	ICD-10-CM
D44.0	Neoplasm of uncertain behavior of thyroid gland	Diagnosis	ICD-10-CM
D44.1	Neoplasm of uncertain behavior of adrenal 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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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	Myelodysplastic syndromes	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
D46.2	Refractory anemia with excess of blasts [RAEB]	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
D48	Neoplasm of uncertain behavior of other and unspecified sites	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
D48.5	Neoplasm of uncertain behavior of skin	Diagnosis	ICD-10-CM
D48.6	Neoplasm of uncertain behavior of breast	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
D48.9	Neoplasm of uncertain behavior, unspecified	Diagnosis	ICD-10-CM
D49	Neoplasms of unspecified behavior	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
D49.2	Neoplasm of unspecified behavior of bone, soft tissue, and skin	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
D49.5	Neoplasm of unspecified behavior of other genitourinary organs	Diagnosis	ICD-10-CM
D49.51	Neoplasm of unspecified behavior of kidney	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

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
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
D49.8	Neoplasm of unspecified behavior of other specified sites	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
C9205	Injection, oxaliplatin, per 5 mg	Procedure	HCPCS
C9207	Injection, bortezomib, per 3.5 mg	Procedure	HCPCS
J8501	Aprepitant, oral, 5 mg	Procedure	HCPCS
J8510	Busulfan; oral, 2 mg	Procedure	HCPCS
J8520	Capecitabine, oral, 150 mg	Procedure	HCPCS
J8521	Capecitabine, oral, 500 mg	Procedure	HCPCS
J8560	Etoposide, oral, 50 mg	Procedure	HCPCS
J8565	Gefitinib, oral, 250 mg	Procedure	HCPCS
J8600	Melphalan, oral 2 mg	Procedure	HCPCS
J8700	Temozolomide, oral, 5 mg	Procedure	HCPCS
J8999	Prescription drug, oral, chemotherapeutic, nos	Procedure	HCPCS
J9000	Injection, doxorubicin HCl, 10 mg	Procedure	HCPCS
J9001	Injection, doxorubicin HCl, all lipid formulations, 10 mg	Procedure	HCPCS
J9010	Injection, alemtuzumab, 10 mg	Procedure	HCPCS
J9015	Injection, aldesleukin, per single use vial	Procedure	HCPCS
J9040	Injection, bleomycin sulfate, 15 units	Procedure	HCPCS
J9045	Injection, carboplatin, 50 mg	Procedure	HCPCS
J9050	Injection, carmustine, 100 mg	Procedure	HCPCS
J9060	Injection, cisplatin, powder or solution, 10 mg	Procedure	HCPCS
J9062	Cisplatin, 50 mg	Procedure	HCPCS
J9065	Injection, cladribine, per 1 mg	Procedure	HCPCS
J9098	Injection, cytarabine liposome, 10 mg	Procedure	HCPCS
J9100	Cytarabine, 100 mg	Procedure	HCPCS
J9110	Injection, cytarabine, 500 mg	Procedure	HCPCS
J9120	Injection, dactinomycin, 0.5 mg	Procedure	HCPCS
J9130	Dacarbazine, 100 mg	Procedure	HCPCS
J9140	Dacarbazine, 200 mg	Procedure	HCPCS
J9150	Injection, daunorubicin, 10 mg	Procedure	HCPCS
J9151	Injection, daunorubicin citrate, liposomal formulation, 10 mg	Procedure	HCPCS
J9160	Injection, denileukin diftitox, 300 mcg	Procedure	HCPCS
J9170	Injection, docetaxel, 20 mg	Procedure	HCPCS
J9178	Injection, epirubicin HCl, 2 mg	Procedure	HCPCS
J9180	Epirubicin HCl, 50 mg	Procedure	HCPCS
J9181	Injection, etoposide, 10 mg	Procedure	HCPCS
J9182	Etoposide, 100 mg	Procedure	HCPCS
J9185	Injection, fludarabine phosphate, 50 mg	Procedure	HCPCS

Appendix H. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision Procedural Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition Codes Used to Define Exclusions in this Request

Code	Description	Code	
		Category	Code Type
J9190	Injection, fluorouracil, 500 mg	Procedure	HCPCS
J9200	Floxuridine, 500 mg	Procedure	HCPCS
J9201	Injection, gemcitabine HCl, not otherwise specified, 200 mg	Procedure	HCPCS
J9206	Injection, irinotecan, 20 mg	Procedure	HCPCS
J9208	Injection, ifosfamide, 1 g	Procedure	HCPCS
J9211	Idarubicin HCl, 5 mg	Procedure	HCPCS
J9230	Injection, mechlorethamine HCl, (nitrogen mustard), 10 mg	Procedure	HCPCS
J9245	Injection, melphalan hydrochloride, not otherwise specified, 50 mg	Procedure	HCPCS
J9263	Injection, oxaliplatin, 0.5 mg	Procedure	HCPCS
J9265	Injection, paclitaxel, 30 mg	Procedure	HCPCS
J9268	Pentostatin, per 10 mg	Procedure	HCPCS
J9270	Plicamycin, 2.5 mg	Procedure	HCPCS
J9280	Mitomycin, 5 mg	Procedure	HCPCS
J9290	Mitomycin, 20 mg	Procedure	HCPCS
J9291	Mitomycin, 40 mg	Procedure	HCPCS
J9293	Injection, mitoxantrone HCl, per 5 mg	Procedure	HCPCS
J9300	Injection, gemtuzumab ozogamicin, 5 mg	Procedure	HCPCS
J9320	Streptozocin, 1 g	Procedure	HCPCS
J9340	Thiotepa, 15 mg	Procedure	HCPCS
J9350	Injection, topotecan, 4 mg	Procedure	HCPCS
J9355	Injection, trastuzumab, 10 mg	Procedure	HCPCS
J9357	Injection, valrubicin, intravesical, 200 mg	Procedure	HCPCS
J9360	Injection, vinblastine sulfate, 1 mg	Procedure	HCPCS
J9390	Vinorelbine tartrate, per 10 mg	Procedure	HCPCS
Q2017	Injection, teniposide, 50 mg	Procedure	HCPCS
S0088	Imatinib, 100 mg	Procedure	HCPCS
S0115	Bortezomib, 3.5 mg	Procedure	HCPCS

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
Gout Medication	
triamcinolone acetonide	Kenalog
triamcinolone acetonide	Kenalog-80
naproxen sodium	Anaprox
naproxen sodium	Anaprox DS
naproxen	Naprosyn
naproxen	EC-Naprosyn
methylprednisolone sodium succinate/PF	Solu-Medrol (PF)
hydrocortisone sodium succinate/PF	Solu-Cortef Act-O-Vial (PF)
hydrocortisone	Cortef
methylprednisolone	Medrol
methylprednisolone	Medrol (Pak)
methylprednisolone acetate	Depo-Medrol
methylprednisolone sodium succinate	Solu-Medrol
hydrocortisone sod succinate	Solu-Cortef
fluorometholone	FML S.O.P.
ketorolac tromethamine	Acular
dexamethasone	Ozurdex
ketorolac tromethamine/PF	Acuvail (PF)
flurandrenolide	Cordran Tape Large Roll
ketorolac tromethamine	Acular LS
rasburicase	Elitek
oxaprozin	Daypro
diclofenac sodium/misoprostol	Arthrotec 50
diclofenac sodium/misoprostol	Arthrotec 75
celecoxib	Celebrex
hydrocortisone acetate/pramoxine HCl	Proctofoam HC
hydrocortisone acetate/pramoxine HCl	Epifoam
hydrocortisone acetate	Cortifoam
flunisolide	Aerospan
ibuprofen	Children's Motrin
ibuprofen	Motrin IB
prednisone	prednisone
meloxicam	meloxicam
febuxostat	febuxostat
dexamethasone	Dexamethasone Intensol
dexamethasone	dexamethasone
fluticasone propionate	fluticasone propionate
naproxen	naproxen
prednisone	Prednisone Intensol
nepafenac	Nevanac
fluorometholone acetate	Flarex
triamcinolone acetonide/PF	Triesence (PF)
rimexolone	Vexol
prednisolone acetate	Omnipred
nepafenac	Ilevro
ciprofloxacin HCl/hydrocortisone	Cipro HC
ciprofloxacin HCl/dexamethasone	Ciprodex
difluprednate	Durezol
diclofenac sodium	Voltaren Arthritis Pain
piroxicam	Feldene
diclofenac sodium	Voltaren-XR
mometasone furoate	Elocon
betamethasone dipropionate/propylene glycol	Diprolene AF
betamethasone acetate/betamethasone sodium phosphate	Celestone Soluspan
betamethasone dipropionate/propylene glycol	Diprolene (augmented)

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
mometasone furoate	Nasonex
mometasone furoate	Asmanex Twisthaler
mometasone furoate	Asmanex HFA
fluocinonide	fluocinonide
fluocinonide/emollient base	Fluocinonide-E
ketorolac tromethamine	ketorolac
naproxen sodium	naproxen sodium
flurbiprofen	flurbiprofen
piroxicam	piroxicam
etodolac	etodolac
oxaprozin	oxaprozin
diclofenac potassium	diclofenac potassium
nabumetone	nabumetone
diclofenac sodium	diclofenac sodium
tolmetin sodium	tolmetin
triamcinolone acetonide	triamcinolone acetonide
ketoprofen	ketoprofen
diclofenac epolamine	diclofenac epolamine
indomethacin	indomethacin
prednisolone	prednisolone
budesonide	budesonide
celecoxib	celecoxib
ibuprofen/famotidine	ibuprofen-famotidine
clobetasol propionate	Cormax
dexamethasone	DexPak 10 day
dexamethasone	DexPak 13 Day
dexamethasone	DexPak 6 Day
hydrocortisone	Aquanil HC
ibuprofen/diphenhydramine citrate	Ibuprofen PM
ibuprofen	Infant's Ibuprofen
ibuprofen	ibuprofen
ibuprofen	Children's Ibuprofen
naproxen sodium	All Day Pain Relief
triamcinolone acetonide	Nasal Allergy
ibuprofen	Ibuprofen Jr Strength
hydrocortisone	Anti-Itch (HC)
diclofenac sodium	Arthritis Pain (diclofenac)
mometasone furoate	mometasone
betamethasone dipropionate/propylene glycol	betamethasone, augmented
desonide	desonide
hydrocortisone	hydrocortisone
fluocinonide/emollient base	fluocinonide-emollient
fludrocortisone acetate	fludrocortisone
prednisolone sodium phosphate	prednisolone sodium phosphate
fluticasone propionate	Flonase Allergy Relief
fluticasone propionate	Children's Flonase Allergy Rlf
fluticasone furoate	Flonase Sensimist
fluticasone furoate	Children's Flonase Sensimist
colchicine	colchicine
allopurinol sodium	allopurinol sodium
cortisone acetate	cortisone
methylprednisolone sodium succinate	methylprednisolone sodium succ
betamethasone valerate	betamethasone valerate
betamethasone dipropionate	betamethasone dipropionate
fluocinolone acetonide	fluocinolone
desoximetasone	desoximetasone

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
clobetasol propionate	clobetasol
alclometasone dipropionate	alclometasone
amcinonide	amcinonide
clobetasol propionate/emollient base	clobetasol-emollient
halobetasol propionate	halobetasol propionate
prednicarbate	prednicarbate
beclomethasone dipropionate	Beconase AQ
fluticasone propionate	Flovent Diskus
fluticasone propionate	Flovent HFA
fluticasone furoate	Veramyst
fluticasone furoate	Arnuity Ellipta
hydrocortisone	Texacort
hydrocortisone/aloe vera	hydrocortisone-aloe vera
hydrocortisone acetate	hydrocortisone acetate
budesonide	Entocort EC
budesonide	Pulmicort Flexhaler
budesonide	Rhinocort Aqua
budesonide	Pulmicort
halobetasol propionate	Bryhali
prednicarbate	Dermatop
hydrocortisone/skin cleanser combination no.25	Aqua Glycolic HC
fenopropfen calcium	fenopropfen
mefenamic acid	mefenamic acid
fluticasone propionate	ClariSpray
clobetasol propionate	Clobex
fluocinolone acetonide	Capex
desonide	DesOwen
lesinurad	Zurampic
hydrocortisone	Ala-Cort
hydrocortisone	Ala-Scalp
triamcinolone acetonide	Triderm
hydrocortisone/skin cleanser combination no.35	Dermasorb HC Complete Kit
triamcinolone acetonide/emollient combination no.86	Dermasorb TA Complete Kit
fluticasone propionate	24 Hour Allergy Relief
ibuprofen	Wal-Profen
naproxen sodium	Wal-Proxen
triamcinolone acetonide	24 Hour Nasal Allergy
hydrocortisone/aloe vera	Hydrocortisone Plus
allopurinol	allopurinol
probenecid	probenecid
sulindac	sulindac
meclofenamate sodium	meclofenamate
naproxen/esomeprazole magnesium	naproxen-esomeprazole
bromfenac sodium	bromfenac
halcinonide	halcinonide
clobetasol propionate/emollient base	Olux-E
clobetasol propionate	Olux
betamethasone valerate	Luxiq
hydrocortisone	hydrocortisone (bulk)
ibuprofen	ibuprofen (bulk)
diclofenac sodium	diclofenac sodium (bulk)
flurbiprofen	flurbiprofen (bulk)
fluticasone propionate, micronized	fluticasone prop, micro (bulk)
ketoprofen	ketoprofen (bulk)
indomethacin	indomethacin (bulk)
budesonide, micronized	budesonide, micronized (bulk)

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
dexamethasone sodium phosphate	dexamethasone sod phos (bulk)
meloxicam	meloxicam (bulk)
piroxicam	piroxicam (bulk)
prednisone micronized	prednisone micronized (bulk)
ketorolac tromethamine	ketorolac (bulk)
diclofenac sodium	Dyloject
indomethacin sodium	indomethacin sodium
hydrocortisone sod succinate	A-Hydrocort
ibuprofen	Infant's Motrin
ibuprofen/diphenhydramine citrate	Motrin PM
budesonide	Rhinocort Allergy
hydrocortisone butyrate/emollient base	hydrocortisone butyr-emollient
hydrocortisone/acetic acid	Acetasol HC
betamethasone acetate/betamethasone sodium phosphate	betamethasone acet,sod phos
ketorolac tromethamine	Sprix
naproxen sodium	All Day Relief
hydrocortisone/aloe vera	HydroSkin with Aloe
hydrocortisone	HydroSkin
ibuprofen/acetaminophen	Advil Dual Action
ibuprofen	Advil
ibuprofen/diphenhydramine citrate	Advil PM
ibuprofen/diphenhydramine HCl	Advil PM Liqui-Gels
ibuprofen	Advil Migraine
ibuprofen	Advil Liqui-Gel
ibuprofen	Children's Advil
ibuprofen	Advil Junior Strength
ibuprofen	Infant's Advil
hydrocortisone	Preparation H Hydrocortisone
hydrocortisone acetate	hydrocortisone acetate (bulk)
hydrocortisone	Colocort
diclofenac sodium/misoprostol	diclofenac-misoprostol
methylprednisolone	methylprednisolone
probenecid/colchicine	probenecid-colchicine
meloxicam	Mobic
dexamethasone sodium phosphate	dexamethasone sodium phosphate
methylprednisolone acetate	methylprednisolone acetate
hydrocortisone acetate	Anucort-HC
hydrocortisone valerate	hydrocortisone valerate
triamcinolone hexacetonide	Aristospan Intralesional
triamcinolone hexacetonide	Aristospan Intra-Articular
difluprednate	difluprednate
ciprofloxacin HCl/dexamethasone	ciprofloxacin-dexamethasone
ibuprofen	IBU-200
dexamethasone	Maxidex
hydrocortisone	Cortaid
hydrocortisone/colloidal oatmeal/aloe/vitamin E	Aveeno Anti-Itch (hydrocortsn)
hydrocortisone probutate	Pandel
clobetasol propionate	Temovate
fluticasone propionate	Cutivate
diflorasone diacetate/emollient base	ApexiCon E
diclofenac sodium	Solaraze
halcinonide	Halog
halobetasol propionate	Ultravate
halobetasol propionate/lactic acid	Ultravate X
hydrocortisone	Proctosol HC
methylprednisolone acetate, micronized	methylprednisolon ac,mic(bulk)

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
mometasone furoate	mometasone furoate (bulk)
ibuprofen	Ibuprofen IB
ibuprofen	Children's Ibu-Drops
fluticasone propionate	Allergy Relief (fluticasone)
hydrocortisone	Recort Plus
hydrocortisone/aloe vera/vit E acet/vitamins A and D	Anti-Itch (HC) with Aloe-Vit E
prednisolone acetate	Pred Mild
prednisolone acetate	Pred Forte
fluorometholone	FML Liquifilm
fluorometholone	FML Forte
flurbiprofen sodium	Ocufen
hydrocortisone	Neosporin Anti-Itch
naproxen sodium	Midol (naproxen)
diclofenac potassium	Zipsor
diclofenac potassium	Cambia
lidocaine HCl/hydrocortisone acetate	lidocaine HCl-hydrocortison ac
hydrocortisone acetate/lidocaine HCl/aloe vera	lidocaine-hydrocortisone-aloe
fluocinolone acetonide/shower cap	fluocinolone and shower cap
fluocinolone acetonide oil	fluocinolone acetonide oil
hydrocortisone butyrate/emollient base	Locoid Lipocream
hydrocortisone acetate/aloe vera	Nucort
dexamethasone	HiDex
nabumetone	Relafen DS
diclofenac potassium	Lofena
naproxen	naproxen (bulk)
diclofenac sodium/benzalkonium chloride	DS Prep Pak
flurandrenolide	Cordran
desonide	Verdeso
hydrocortisone acetate	Hemmorex-HC
hydrocortisone butyrate	Locoid
loteprednol etabonate	loteprednol etabonate
prednisolone	Millipred
prednisolone	Millipred DP
prednisolone sodium phosphate	Veripred 20
loteprednol etabonate	Lotemax
flurbiprofen sodium	flurbiprofen sodium
flunisolide	flunisolide
loteprednol etabonate	Alrex
fluocinolone acetonide	Retisert
loteprednol etabonate	Lotemax SM
bromfenac sodium	Prolensa
neomycin sulfate/polymyxin B sulfate/hydrocortisone	neomycin-polymyxin-HC
ciprofloxacin HCl/fluocinolone acetonide	Otovel
hydrocortisone/emollient combination no.45	Pediaderm HC
triamcinolone acetonide/emollient combination no.45	Pediaderm TA
flurandrenolide	flurandrenolide
naproxen sodium	Aleve
naproxen sodium/diphenhydramine HCl	Aleve PM
naproxen sodium	Flanax (naproxen)
fluticasone propionate	Childrens 24 Hr Allergy Relief
hydrocortisone butyrate	hydrocortisone butyrate
diclofenac epolamine	Flector
diclofenac sodium	Voltaren
hydrocortisone/aloe vera	Anti-Itch(hydrocortisone)-Aloe
ibuprofen	Child Ibuprofen
ibuprofen	Infants Ibu-Drops

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
ibuprofen	Ibu-Drops
betamethasone acetate, micronized	betamethasone acet,micro(bulk)
betamethasone sodium phosphate	betamethasone sod phos (bulk)
fluticasone propionate	fluticasone propionate (bulk)
betamethasone valerate	betamethasone valerate (bulk)
triamcinolone acetonide	triamcinolone acetonide (bulk)
betamethasone dipropionate	betamethasone dipropion (bulk)
fluocinolone acetonide	fluocinolone acetonide (bulk)
triamcinolone	triamcinolone (bulk)
fludrocortisone acetate	fludrocortisone (bulk)
prednisolone, micronized	prednisolone, micro (bulk)
prednisolone acetate, micronized	prednisolone ac, micro (bulk)
prednisolone sodium phosphate	prednisolone sod phos (bulk)
triamcinolone diacetate	triamcinolone diacetate (bulk)
desonide, micronized	desonide, micronized (bulk)
beclomethasone dipropionate	beclomethasone diprop (bulk)
clobetasol propionate	clobetasol propionate (bulk)
dexamethasone, micronized	dexamethasone,micronized(bulk)
mefenamic acid	mefenamic acid (bulk)
corticotropin	corticotropin (bulk)
dexamethasone acetate, micronized	dexamethasone ac, micro (bulk)
diclofenac sodium, micronized	diclofenac sod, micro (bulk)
nabumetone	nabumetone (bulk)
ketoprofen, micronized	ketoprofen, micronized (bulk)
fluocinolone acetonide oil	Flac Otic Oil
ibuprofen lysine/PF	ibuprofen lysine (PF)
ibuprofen/diphenhydramine HCl	ibuprofen-diphenhydramine HCl
hydrocortisone	Scalp Relief
hydrocortisone	Cortizone-10
hydrocortisone/aloe vera	Cortizone-10 with aloe
hydrocortisone	Cortizone-10 Plus
triamcinolone acetonide	Nasacort
triamcinolone acetonide	Children's Nasacort
triamcinolone acetonide	Nasacort Allergy
hydrocortisone	Hydrocream
ibuprofen	Children's Profen IB
ibuprofen	Infants ProfenIB
neomycin sulf/colistin sul/hydrocortisone ac/thonzonium brom	Coly-Mycin S
neomycin sulf/colistin sul/hydrocortisone ac/thonzonium brom	Cortisporin-TC
hydrocortisone acetate/pramoxine HCl	hydrocortisone-pramoxine
hydrocortisone acetate/pramoxine/emollient/pramoxine cmb	hydrocortisone-pramox-e-pram.1
hydrocortisone acetate/lidocaine HCl/aloe vera	Ana-Lex Kit
dexamethasone	TaperDex
ciprofloxacin HCl/fluocinolone acetonide	ciprofloxacin-fluocinolone
dexamethasone	ZoDex
fenoprofen calcium	Nalfon
fenoprofen calcium, dihydrate	fenoprofen calcium dihyd(bulk)
indomethacin	Indocin
indomethacin, submicronized	Tivorbex
diclofenac submicronized	Zorvolex
meloxicam, submicronized	Vivlodex
deflazacort	Emflaza
ibuprofen/irritants counter-irritants combination no.2	Comfort Pac-Ibuprofen
meloxicam/irritants counter-irritants combination no.2	Comfort Pac-Meloxicam
febuxostat	Uloric
colchicine	Colcrys

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
fluocinolone acetonide	Synalar
fluocinolone acetonide/emollient combination no.65	Synalar Cream Kit
fluocinolone acetonide/emollient combination no.65	Synalar Ointment Kit
fluocinolone acetonide/skin cleanser comb no.28	Synalar TS
clobetasol propionate	Clodan
clobetasol propionate/skin cleanser combination no.28	Clodan Kit
clobetasol propionate/emollient base	Tovet Emollient
clobetasol propionate/emollient combination no.65	Tovet Kit
fluticasone propionate	Beser
fluticasone propionate/emollient combination no.65	Beser Kit
clocortolone pivalate	clocortolone pivalate
hydrocortisone	Scalacort
hydrocortisone/salicylic acid/sulfur/shampoo no. 1	Scalacort DK
desonide	DesRx
triamcinolone acetonide	Tritocin
hydrocortisone acetate	Vanicream HC
dexamethasone sodium phosphate/PF	Active Injection Kit D (PF)
hydrocortisone/acetic acid	hydrocortisone-acetic acid
aldosterone	aldosterone (bulk)
celecoxib	celecoxib (bulk)
cortisone acetate	cortisone (bulk)
bromfenac sodium	bromfenac sodium (bulk)
colchicine	colchicine (bulk)
hydrocortisone/mineral oil/petrolatum,white	hydrocortisone-min oil-wht pet
ibuprofen	I-Prin
naproxen sodium	Mediproxen
ibuprofen	Addaprin
hydrocortisone/aloe vera/vit E acet/vitamins A and D	Anti-Itch Plus
allopurinol	allopurinol (bulk)
fluocinolone acetonide, micronized	fluocinolone acet, micro(bulk)
fluocinonide, micronized	fluocinonide, micronized(bulk)
methylprednisolone, micronized	methylprednisolone, mic (bulk)
naproxen sodium	naproxen sodium (bulk)
triamcinolone hexacetonide	triamcinolone hexaceton (bulk)
clobetasol propionate	Impeklo
bromfenac sodium	BromSite
triamcinolone/norflurane and pentafluoropropane (HFC 245fa)	P-Care K40G
triamcinolone acetonide	P-Care K40
triamcinolone acetonide	P-Care K80
triamcinolone/norflurane and pentafluoropropane (HFC 245fa)	P-Care K80G
methylprednisolone acetate	P-Care D40
methylprednisolone acetate/norflurane/HFC 245fa	P-Care D40G
methylprednisolone acetate	P-Care D80
methylprednisolone acetate/norflurane/HFC 245fa	P-Care D80G
betamethasone acetate/betamethasone sodium phosphate	Pod-Care 100C
betamethasone acetate and sodium phosph/norflurane/HFC	Pod-Care 100CG
triamcinolone acetonide	Pod-Care 100K
triamcinolone/norflurane and pentafluoropropane (HFC 245fa)	Pod-Care 100KG
hydrocortisone acetate/pramoxine HCl	PramCort
prednisolone acetate	prednisolone acetate
hydrocortisone	Procto-Med HC
beclomethasone dipropionate	Qvar
beclomethasone dipropionate	Qvar RediHaler
desonide	Desonate
hydrocortisone	Cortisone (hydrocortisone)
hydrocortisone/aloe vera	Cortisone with Aloe

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
hydrocortisone	Cortisone Cooling
ibuprofen/diphenhydramine citrate	ibuprofen-diphenhydramine cit
hydrocortisone	Eczema Anti-Itch
ibuprofen	Children's Motrin Jr Strength
hydrocortisone acetate/pramoxine HCl	Procort
diclofenac sodium	Vopac MDS
diclofenac sodium/capsicum oleoresin	Diclofex DC
dexamethasone acetate	dexamethasone acetate (bulk)
prednisone	prednisone (bulk)
diflorasone diacetate	diflorasone
triamcinolone acetonide	Oralone
prednisolone acetate	Flo-Pred
hydrocortisone acetate/urea	U-Cort
desoximetasone	Topicort
diflorasone diacetate	Psorcon
halobetasol propionate	Lexette
hydrocortisone	Corticool
phenylbutazone	phenylbutazone (bulk)
prednisolone	prednisolone (bulk)
desoximetasone, micronized	desoximetasone, micro (bulk)
desoxycorticosterone acetate	desoxycorticosterone ac (bulk)
flunisolide	flunisolide (bulk)
sulindac	sulindac (bulk)
dexamethasone isonicotinate	dexamethasone isonic (bulk)
nabumetone, micronized	nabumetone, micronized (bulk)
naproxen sodium	Naprelan CR
flurandrenolide	Cordran Tape Small Roll
hydrocortisone acetate/pramoxine HCl	Analpram-HC
hydrocortisone	Beta-HC
triamcinolone acetonide	ReadySharp Triamcinolone
methylprednisolone acetate	ReadySharp Methylprednisolone
ketorolac tromethamine	ReadySharp ketorolac
dexamethasone sodium phosphate	ReadySharp dexamethasone
betamethasone acetate/betamethasone sodium phosphate	ReadySharp Betamethasone
hydrocortisone acetate	GRx HiCort 25
fenoprofen calcium	Fenortho
hydrocortisone	Advanced Allergy Collect Kit
hydrocortisone acetate/pramoxine HCl/emollient base	Pramosone E
hydrocortisone acetate/pramoxine HCl	Pramosone
hydrocortisone/pramoxine/diosmin1/aloe polysac 1/policosanol	Analpram Advanced
hydrocortisone acetate/pramoxine/emollient/pramoxine cmb	Analpram E
hydrocortisone acetate/pramoxine HCl	Analpram-HC Singles
hydrocortisone acetate	MiCort-HC
allopurinol	Zyloprim
hydrocortisone	Proctozone-HC
fluocinolone acetonide/shower cap	Derma-Smoother/FS Scalp Oil
ciclesonide	Alvesco
ciclesonide	Omnaris
fluocinonide	Vanos
ibuprofen	IBU
dexamethasone sodium phosphate/PF	dexamethasone sodium phos (PF)
naproxen/irritant counter-irritant combination no.2	Comfort Pac-Naproxen
mefenamic acid	Ponstel
ibuprofen lysine/PF	NeoProfen (ibuprofen lysn)(PF)
budesonide	Ortikos
flurandrenolide	Nolix

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
dexamethasone	Decadron
diclofenac sodium/capsicum oleoresin	Inflamacin
triamcinolone acetonide/dimethicone/silicone, adhesive	DermacinRx SilaPak
diclofenac sodium/capsicum oleoresin	DermacinRx Lexitral
triamcinolone acetonide/lidocaine/prilocaine	DermacinRx Cinlone-I CPI
triamcinolone acetonide/silicones	DermacinRx SilaZone
diclofenac sodium/kinesiology tape	Xrylix (diclofenac-kines tape)
diclofenac sodium	Klofensaid II
fluticasone propionate/sodium chloride/sodium bicarbonate	Ticanase
triamcinolone acetonide/silicones	Silazone-II
lidocaine HCl/hydrocortisone acetate	Lidocort
diclofenac sodium	VennGel One
diclofenac sodium/menthol/camphor	Dicloretx
diclofenac sodium/kinesiology tape	Clofenax
triamcinolone acetonide/gauze bandage/silicone, adhesive	Sila III
clobetasol propionate/gauze bandage/silicone, adhesive	Tasoprol
fluocinonide/dimethicone	Fluopar
ibuprofen/glycerin	Ibupak
clobetasol propionate/desloratadine	Clobetex
triamcinolone acetonide/dimethicone	Ellzia Pak
triamcinolone hexacetonide	Hexatrione
prednisolone sodium phosphate	Orapred ODT
fluticasone propionate	ArmonAir Digihaler
beclomethasone dipropionate	QNASL
fluticasone propionate	ArmonAir RespiClick
celecoxib	Elyxyb
colchicine	Mitigare
fluorometholone	fluorometholone
pegloticase	Krystexxa
triamcinolone acetonide	Arze-Ject-A
dexamethasone sodium phosphate in 0.9 % sodium chloride	dexamethasone-0.9 % sod. chlor
naproxen sodium/diphenhydramine HCl	Naproxen PM
hydrocortisone	Obagi Nu-Derm Tolereen
ibuprofen	Provil
phenylephrine HCl/ketorolac tromethamine	Omidria
hydrocortisone	Cortenema
corticotropin	Cortrophin Gel
triamcinolone hexacetonide, micronized	triamcin hexacet, micro (bulk)
corticotropin	Acthar
naproxen sodium/menthol	NaproPak Cool
ciclesonide	Zetonna
naproxen	EC-Naproxen
hydrocortisone	Dermarest Eczema (hydrocort)
hydrocortisone	Monistat Care (hydrocortisone)
hydrocortisone	Scalpicin Anti-Itch
fluticasone propionate	Aller-Flo
triamcinolone acetonide	Aller-Cort
NAPROXEN	Naproderm
hydrocortisone	Procto-Pak
HYDROCORTISONE	First-Hydrocortisone
hydrocortisone	Anusol-HC
hydrocortisone	Proctocort
budesonide	Uceris
ibuprofen	Caldolor
fenopfen calcium	ProFeno
allopurinol sodium	Aloprim

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
clocortolone pivalate	Cloderm
triamcinolone acetonide	Trianex
betamethasone dipropionate	Sernivo
hydrocortisone acetate/pramoxine HCl/skin cleanser no.16	Zypram
clobetasol propionate	Impoyz
meloxicam, submicronized	meloxicam submicronized
fluocinolone acetonide	Iluvien
prednisolone sodium phosphate	Pediapred
fluocinolone acetonide	Derma-Smoothe/FS Body Oil
fluocinolone acetonide oil	DermOtic Oil
naproxen/capsaicin/menthol/methyl salicylate	Pain Relief Collection
etodolac	Lodine
betamethasone acetate/betamethasone sodium phosphate	BSP-0820
triamcinolone acetonide	Pro-C-Dure 5
triamcinolone acetonide	Pro-C-Dure 6
betamethasone acetate/betamethasone sodium phosphate	Beta-1
triamcinolone acetonide/dimethicone/silicone, adhesive	DermaSilkRx SDS
triamcinolone acetonide/dimethicone/silicone, adhesive	DermaWerx SDS
diclofenac sodium/capsicum oleoresin	DermaSilkRx DicloPak
diclofenac sodium/capsicum oleoresin	Diclotral
diclofenac sodium/capsaicin	Flexipak
diclofenac sodium/capsaicin	Diclopak
diclofenac sodium	Diclozor
diclofenac sodium/capsaicin	CapsFenac Pak
desonide	Tridesilon
naproxen/capsaicin/menthol	NaproxenPax
naproxen/capsaicin/menthol	NaproPax
diclofenac sodium/capsicum oleoresin	Xenaflamm
diclofenac sodium/capsicum oleoresin	Xelitral
diclofenac sodium/kinesiology tape	Lexixryl
fluticasone propionate/sodium chloride/sodium bicarbonate	Ticaspray
triamcinolone acetonide/silicones	Dermazone
triamcinolone acetonide/dimethicone/silicone, adhesive	Tri-Sila
diclofenac sodium/lidocaine HCl/kinesiology tape	TriXylitral
diclofenac sodium	Diclo Gel
diclofenac sodium/kinesiology tape	Diclo Gel-Xrylix Sheet
triamcinolone acetonide/silicones	SilaLite Pak
hydrocortisone acetate/pramoxine HCl	Novacort
prednisone	Deltasone
celecoxib/capsaicin/menthol	CapXib
celecoxib/lidocaine/menthol	LidoXib
dexamethasone sodium phosphate/PF	MAS Care-Pak (PF)
triamcinolone acetonide/dimethicone/silicone, adhesive	Whytederm TDPak
triamcinolone acetonide/dimethicone/silicone, adhesive	Whytederm Trilasil Pak
triamcinolone acetonide/dimethicone/silicone, adhesive	Sure Result Tac Pak
diclofenac sodium/capsicum oleoresin	Sure Result DSS Premium Pack
prednisolone acetate/bromfenac sodium	prednisolone acetate-bromfenac
diclofenac sodium/methyl salicylate/menthol/camphor	Inflamma-K
fluocinolone acetonide/urea/silicone, adhesive	Noxipak
fluocinolone acetonide/skin cleanser no.10/silicone, tape	Xilapak
dexamethasone	Dxevo
dexamethasone	Dextenza
meloxicam	Qmiiz ODT
lesinurad/allopurinol	Duzallo
triamcinolone acetonide	Zilretta
triamcinolone acetonide/dimethicone/silicone, adhesive	NuTriRx

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
diclofenac sodium/capsaicin	NuDiclo SoluPAK
diclofenac sodium/capsaicin	NuDiclo TabPAK
celecoxib/capsaicin/methyl salicylate/menthol	NuDroxiPAK
ibuprofen/capsaicin/methyl salicylate/menthol	NuDroxiPAK I-800
nabumetone/capsaicin/methyl salicylate/menthol	NuDroxiPAK N-500
diclofenac sodium/capsaicin/methyl salicylate/menthol	NuDroxiPAK DSDR-50
diclofenac sodium/capsaicin/methyl salicylate/menthol	NuDroxiPAK DSDR-75
etodolac/capsaicin/methyl salicylate/menthol	NuDroxiPAK E-400
dexamethasone	ZonaCort
diclofenac sodium/capsicum oleoresin	Kapzin DC
diclofenac sodium/capsicum oleoresin	Diclosaicin
diclofenac sodium/capsicum oleoresin	Iclofenac CP
fluticasone propionate	Xhance
diclofenac sodium/menthol	DiThol
betamethasone sodium phosph in sterile water for injection	betamethasone sod phosph-water
triamcinolone acetonide/0.9% sodium chloride/PF	triamcinol ac (PF) in 0.9%NaCl
methylprednisolone acetate in sterile water for injection	methylprednisolone acet-water
betamethasone acetate and sodium phos in sterile water/PF	betameth ac,sod phos(PF)-water
betamethasone acetate/betamethasone sodium	betamethasone ace,sod phos-wtr
dexamethasone acetate and sodium phosphate in sterile water	dexamethasone ac, sod ph-water
methylprednisolone acetate/bupivacaine HCl in sterile water	methylprednisol ac-bupivac-wat
methylprednisolone acetate in sodium chloride,iso-osmotic/PF	methylpred ac(PF)-NaCl,iso-osm
triamcinolone diacetate in 0.9 % sodium chloride	triamcinolone diacet-0.9% NaCl
triamcinolone diacetate in 0.9 % sodium chloride/PF	triamcinolone dia(PF)-0.9%NaCl
dexamethasone acetate in sodium chloride, iso-osmotic	dexamethasone ace-NaCl,iso-osm
triamcinolone acetonide/bupivacaine/in 0.9% sodium chloride	triamcinol ace-bupiv-0.9% NaCl
triamcinolone acetonide in 0.9 % sodium chloride	triamcinolone aceton-0.9% NaCl
dexamethasone	LoCort
ketoprofen	Frotek
triamcinolone acetonide/lidocaine HCl	Lidocilone I
dexamethasone sodium phosphate/lidocaine HCl	Lidocidex-I
dexamethasone sodium phosphate	Dexonto
diclofenac sodium	Diclofono
loteprednol etabonate/chondroitin sulfate A sodium/PF	Klarity-L (lotepred-chond)(PF)
prednisolone acetate/nepafenac	prednisolone acetate-nepafenac
prednisolone acetate/PF	prednisolone acetate (PF)
prednisolone sodium phosphate/bromfenac sodium	prednisolone sod ph-bromfenac
betamethasone sodium phos/chondroitin sulfate A sodium/PF	Klarity-B (betameth-chond)(PF)
tropicamide/proparacaine/phenylephrine/ketorolac in water	tropic-proparacai-pe-ketor-wat
tropicamide/proparacaine/phenylephrine/ketorolac in water	Mydriatic4(trop-prop-PE-ktrlc)
diclofenac sodium/methyl salicylate/menthol	DicloPR
bupivacaine HCl/dexamethasone sodium phos in sterile water	bupivacaine-dexameth in water
meloxicam	Anjeso
triamcinolone acetonide/PF	Xipere (PF)
loteprednol etabonate	Inveltys
loteprednol etabonate	Eysuvis
hydrocortisone acetate/pramoxine HCl	Mezparox-HC
diclofenac epolamine	Licart
hydrocortisone	Alkindi Sprinkle
dexamethasone/PF	Dexycu (PF)
fluocinolone acetonide	Yutiq
diclofenac sodium/menthol/kinesiology tape	DiMentho
dexamethasone	Dexabliss
hydrocortisone	Aquaphor Itch Relief
methylprednisolone	Methylpred DP
diclofenac sodium/lidocaine/methyl salicylate/camphor	Diclovix

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
fluocinonide/silicone, adhesive	Fluovix
diclofenac sodium/silicone, adhesive	Solaravix
diclofenac sodium/lidocaine	Lidovix
triamcinolone acetonide/dimethicone/silicone, adhesive	Trivix
clobetasol propionate/hydrocolloid dressing	Clobetavix
fluocinonide/silicone, adhesive	Fluovix Plus
diclofenac sodium/menthol/kinesiology tape	Diclovix M
diclofenac sodium/capsaicin	Inavix
diclofenac sodium/capsaicin	Pensaicin
diclofenac sodium/methyl salicylate/menthol	Varophen (diclofenac)
mometasone furoate/ammonium lactate	Quinosone
diclofenac sodium/trolamine salicylate	Inflatherm (diclofenac-trolam)
mometasone furoate/dimethicone	Quinixil
diclofenac sodium/menthol/camphor	Inflatherm(diclofenac-menthol)
dexamethasone	Hemady
diclofenac sodium/hyaluronate sodium/niacinamide	diclofenac-hyaluronate-niacin
diclofenac sodium/hyaluronate sodium/niacinamide	Roaxia
clobetasol propionate/niacinamide	clobetasol-niacinamide
fluocinolone acetonide/niacinamide	fluocinolone-niacinamide
triamcinolone acetonide/niacinamide	triamcinolone-niacinamide
clobetasol propionate/niacinamide	Chlooxia
clobetasol propionate/calcipotriene	clobetasol-calcipotriene
clobetasol propionate/calcipotriene	Diochloy
desoximetasone/niacinamide	desoximetasone-niacinamide
clobetasol propionate/levocetirizine dihydrochloride	clobetasol-levocetirizine
diclofenac sodium/capsicum oleoresin	Capsinac
indomethacin, submicronized	indomethacin submicronized
diclofenac submicronized	diclofenac submicronized
diclofenac sodium/capsicum oleoresin	Ziclopro
nabumetone	Relafen
diclofenac potassium	Cataflam
triamcinolone acetonide/dimethicone/silicone, adhesive	SanaDermRx
diclofenac sodium/capsicum oleoresin	PrevidolRx Plus Analgesic Pak
lidocaine HCl/hydrocortisone acetate	Ana-Lex
colchicine	Gloperba
ibuprofen/famotidine	Duexis
prednisone	Rayos
naproxen/esomeprazole magnesium	Vimovo
diclofenac sodium	Pennsaid
triamcinolone acetonide	Kenalog-40
triamcinolone/norflurane and pentafluoropropane (HFC 245fa)	Triloan SUIK
triamcinolone/norflurane and pentafluoropropane (HFC 245fa)	Triloan II SUIK
betamethasone acetate and sodium phosph/norflurane/HFC	Betaloan SUIK
ketorolac/norflurane and pentafluoropropane (HFC 245fa)	Toronova SUIK
ketorolac/norflurane and pentafluoropropane (HFC 245fa)	Toronova II SUIK
methylprednisolone acetate/norflurane/HFC 245fa	Medroloan SUIK
methylprednisolone acetate/norflurane/HFC 245fa	Medroloan II SUIK
dexamethasone/PF/norflurane/pentafluoropropane (HFC 245fa)	DMT SUIK
methylprednisolone acetate/bupivacaine HCl	Physicians EZ Use M-Pred
triamcinolone acetonide/lidocaine HCl	EZ Use Joint-Tunnel-Trigger
dexamethasone sodium phosphate/PF	DoubleDex (PF)
NAPROXEN	Napro
dexamethasone	ZCort
budesonide	Tarpeyo
diclofenac sodium/capsaicin	Dicloheal-60
triamcinolone acetonide/dimethicone/silicone, adhesive	TriHeal-80

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
triamcinolone acetonide/dimethicone/silicone, adhesive	TriaDime-80
diclofenac sodium	Dicloprep-100
hydrocortisone	Noble Formula HC
Oxicam Medication	
hydrochlorothiazide	hydrochlorothiazide
temazepam	temazepam
temazepam	Restoril
bupivacaine/meloxicam	Zynrelef
hydrochlorothiazide	hydrochlorothiazide (bulk)
hydrochlorothiazide	Microzide
Sertraline	
sertraline HCl	Zoloft
sertraline HCl	sertraline
sertraline HCl	sertraline (bulk)
Sulfonamides	
polymyxin B sulfate/trimethoprim	Polytrim
trimethoprim	trimethoprim
sulfamethoxazole/trimethoprim	sulfamethoxazole-trimethoprim
sulfamethoxazole/trimethoprim	Sulfatrim
sulfadiazine	sulfadiazine
silver sulfadiazine/foam bandage	Allewyn Ag Adhesive
silver sulfadiazine/foam bandage	Allewyn Ag
silver sulfadiazine/foam bandage	Allewyn Ag Gentle Dressing
silver sulfadiazine	silver sulfadiazine
sulfamethoxazole/trimethoprim	Bactrim
sulfamethoxazole/trimethoprim	Bactrim DS
trimethoprim	Primsol
polymyxin B sulfate/trimethoprim	polymyxin B sulf-trimethoprim
silver sulfadiazine	SSD
trimethoprim	trimethoprim (bulk)
sulfadiazine	sulfadiazine (bulk)
sulfadiazine sodium	sulfadiazine sodium (bulk)
trimethoprim, micronized	trimethoprim, micro (bulk)
silver sulfadiazine	Silvadene
silver sulfadiazine	silver sulfadiazine (bulk)
sulfisoxazole	sulfisoxazole (bulk)
silver sulfadiazine	Thermazene
trimethoprim	Trimplex
Insulin	
insulin lispro	Admelog SoloStar U-100 Insulin
insulin lispro	Admelog U-100 Insulin lispro
insulin regular, human	Afrezza
insulin glulisine	Apidra SoloStar U-100 Insulin
insulin glulisine	Apidra U-100 Insulin
insulin glargine, human recombinant analog	Basaglar KwikPen U-100 Insulin
insulin aspart (niacinamide)	Fiasp FlexTouch U-100 Insulin
insulin aspart (niacinamide)	Fiasp Penfill U-100 Insulin
insulin aspart (niacinamide)	Fiasp U-100 Insulin
insulin lispro	Humalog Junior KwikPen U-100
insulin lispro	Humalog KwikPen Insulin
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	Humalog U-100 Insulin
insulin NPH human isophane/insulin regular, human	Humulin 70/30 U-100 Insulin

Appendix I. Generic and Brand Names of Medical Products Used to Define Baseline Covariates in this Request

Generic Name	Brand Name
insulin NPH human isophane/insulin regular, human	Humulin 70/30 U-100 KwikPen
insulin NPH human isophane	Humulin N NPH Insulin KwikPen
insulin NPH human isophane	Humulin N NPH U-100 Insulin
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 aspart protamine human/insulin aspart	insulin asp prt-insulin aspart
insulin aspart	insulin aspart U-100
insulin glargine-yfgn	insulin glargine-yfgn
insulin lispro	insulin lispro
insulin lispro protamine and insulin lispro	insulin lispro protamin-lispro
insulin glargine,human recombinant analog	Lantus Solostar U-100 Insulin
insulin glargine,human recombinant analog	Lantus U-100 Insulin
insulin detemir	Levemir FlexTouch U-100 Insulin
insulin detemir	Levemir U-100 Insulin
insulin lispro-aabc	Lyumjev KwikPen U-100 Insulin
insulin lispro-aabc	Lyumjev KwikPen U-200 Insulin
insulin lispro-aabc	Lyumjev U-100 Insulin
insulin regular, human in 0.9 % sodium chloride	Myxredlin
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 NPH human isophane	Novolin N Flexpen
insulin NPH human isophane	Novolin N NPH U-100 Insulin
insulin regular, human	Novolin R Flexpen
insulin regular, human	Novolin R Regular U-100 Insulin
insulin aspart	Novolog Flexpen U-100 Insulin
insulin aspart protamine human/insulin aspart	Novolog Mix 70-30 U-100 Insulin
insulin aspart protamine human/insulin aspart	Novolog Mix 70-30FlexPen U-100
insulin aspart	Novolog PenFill U-100 Insulin
insulin aspart	Novolog U-100 Insulin aspart
insulin glargine,human recombinant analog	Semglee Pen U-100 Insulin
insulin glargine,human recombinant analog	Semglee U-100 Insulin
insulin glargine-yfgn	Semglee(insulin glarg-yfgn)Pen
insulin glargine-yfgn	Semglee(insulin glargine-yfgn)
insulin glargine,human recombinant analog/lixisenatide	Soliqua 100/33
insulin glargine,human recombinant analog	Toujeo Max U-300 SoloStar
insulin glargine,human recombinant analog	Toujeo SoloStar U-300 Insulin
insulin degludec	Tresiba FlexTouch U-100
insulin degludec	Tresiba FlexTouch U-200
insulin degludec	Tresiba U-100 Insulin
insulin degludec/liraglutide	Xultophy 100/3.6

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

Code	Description	Code Category	Code Type
ADHD			
F63.3	Trichotillomania	Diagnosis	ICD-10-CM
F63.1	Pyromania	Diagnosis	ICD-10-CM
F63.0	Pathological gambling	Diagnosis	ICD-10-CM
F63.89	Other impulse disorders	Diagnosis	ICD-10-CM
F91.8	Other conduct disorders	Diagnosis	ICD-10-CM
F91.3	Oppositional defiant disorder	Diagnosis	ICD-10-CM
F63.2	Kleptomania	Diagnosis	ICD-10-CM
F63.81	Intermittent explosive disorder	Diagnosis	ICD-10-CM
F63.9	Impulse disorder, unspecified	Diagnosis	ICD-10-CM
F91.9	Conduct disorder, unspecified	Diagnosis	ICD-10-CM
F91.1	Conduct disorder, childhood-onset type	Diagnosis	ICD-10-CM
F91.2	Conduct disorder, adolescent-onset type	Diagnosis	ICD-10-CM
F91.0	Conduct disorder confined to family context	Diagnosis	ICD-10-CM
F90.9	Attention-deficit hyperactivity disorder, unspecified type	Diagnosis	ICD-10-CM
F90.0	Attention-deficit hyperactivity disorder, predominantly inattentive type	Diagnosis	ICD-10-CM
F90.1	Attention-deficit hyperactivity disorder, predominantly hyperactive type	Diagnosis	ICD-10-CM
F90.8	Attention-deficit hyperactivity disorder, other type	Diagnosis	ICD-10-CM
F90.2	Attention-deficit hyperactivity disorder, combined type	Diagnosis	ICD-10-CM
Alcohol Use			
T51.0X4A	Toxic effect of ethanol, undetermined, initial encounter	Diagnosis	ICD-10-CM
T51.0X2A	Toxic effect of ethanol, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T51.0X3A	Toxic effect of ethanol, assault, initial encounter	Diagnosis	ICD-10-CM
T51.0X1A	Toxic effect of ethanol, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
P04.3	Newborn affected by maternal use of alcohol	Diagnosis	ICD-10-CM
Q86.0	Fetal alcohol syndrome (dysmorphic)	Diagnosis	ICD-10-CM
Z71.42	Counseling for family member of alcoholic	Diagnosis	ICD-10-CM
G62.1	Alcoholic polyneuropathy	Diagnosis	ICD-10-CM
K70.9	Alcoholic liver disease, unspecified	Diagnosis	ICD-10-CM
K70.10	Alcoholic hepatitis without ascites	Diagnosis	ICD-10-CM
K70.11	Alcoholic hepatitis with ascites	Diagnosis	ICD-10-CM
K70.40	Alcoholic hepatic failure without coma	Diagnosis	ICD-10-CM
K70.41	Alcoholic hepatic failure with coma	Diagnosis	ICD-10-CM
K29.20	Alcoholic gastritis without bleeding	Diagnosis	ICD-10-CM
K29.21	Alcoholic gastritis with bleeding	Diagnosis	ICD-10-CM
K70.2	Alcoholic fibrosis and sclerosis of liver	Diagnosis	ICD-10-CM
K70.0	Alcoholic fatty liver	Diagnosis	ICD-10-CM
K70.30	Alcoholic cirrhosis of liver without ascites	Diagnosis	ICD-10-CM
K70.31	Alcoholic cirrhosis of liver with ascites	Diagnosis	ICD-10-CM
I42.6	Alcoholic cardiomyopathy	Diagnosis	ICD-10-CM
F10.939	Alcohol use, unspecified with withdrawal, unspecified	Diagnosis	ICD-10-CM
F10.930	Alcohol use, unspecified with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F10.932	Alcohol use, unspecified with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F10.931	Alcohol use, unspecified with withdrawal delirium	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F10.99	Alcohol use, unspecified with unspecified alcohol-induced disorder	Diagnosis	ICD-10-CM
F10.988	Alcohol use, unspecified with other alcohol-induced disorder	Diagnosis	ICD-10-CM
F10.929	Alcohol use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F10.920	Alcohol use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F10.921	Alcohol use, unspecified with intoxication delirium	Diagnosis	ICD-10-CM
F10.982	Alcohol use, unspecified with alcohol-induced sleep disorder	Diagnosis	ICD-10-CM
F10.981	Alcohol use, unspecified with alcohol-induced sexual dysfunction	Diagnosis	ICD-10-CM
F10.959	Alcohol use, unspecified with alcohol-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F10.951	Alcohol use, unspecified with alcohol-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F10.950	Alcohol use, unspecified with alcohol-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F10.97	Alcohol use, unspecified with alcohol-induced persisting dementia	Diagnosis	ICD-10-CM
F10.96	Alcohol use, unspecified with alcohol-induced persisting amnestic	Diagnosis	ICD-10-CM
F10.94	Alcohol use, unspecified with alcohol-induced mood disorder	Diagnosis	ICD-10-CM
F10.980	Alcohol use, unspecified with alcohol-induced anxiety disorder	Diagnosis	ICD-10-CM
F10.20	Alcohol dependence, uncomplicated	Diagnosis	ICD-10-CM
F10.239	Alcohol dependence with withdrawal, unspecified	Diagnosis	ICD-10-CM
F10.230	Alcohol dependence with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F10.232	Alcohol dependence with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F10.231	Alcohol dependence with withdrawal delirium	Diagnosis	ICD-10-CM
F10.29	Alcohol dependence with unspecified alcohol-induced disorder	Diagnosis	ICD-10-CM
F10.288	Alcohol dependence with other alcohol-induced disorder	Diagnosis	ICD-10-CM
F10.229	Alcohol dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F10.220	Alcohol dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F10.221	Alcohol dependence with intoxication delirium	Diagnosis	ICD-10-CM
F10.282	Alcohol dependence with alcohol-induced sleep disorder	Diagnosis	ICD-10-CM
F10.281	Alcohol dependence with alcohol-induced sexual dysfunction	Diagnosis	ICD-10-CM
F10.259	Alcohol dependence with alcohol-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F10.251	Alcohol dependence with alcohol-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F10.250	Alcohol dependence with alcohol-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F10.27	Alcohol dependence with alcohol-induced persisting dementia	Diagnosis	ICD-10-CM
F10.26	Alcohol dependence with alcohol-induced persisting amnestic disorder	Diagnosis	ICD-10-CM
F10.24	Alcohol dependence with alcohol-induced mood disorder	Diagnosis	ICD-10-CM
F10.280	Alcohol dependence with alcohol-induced anxiety disorder	Diagnosis	ICD-10-CM
F10.10	Alcohol abuse, uncomplicated	Diagnosis	ICD-10-CM
F10.139	Alcohol abuse with withdrawal, unspecified	Diagnosis	ICD-10-CM
F10.130	Alcohol abuse with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F10.132	Alcohol abuse with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F10.131	Alcohol abuse with withdrawal delirium	Diagnosis	ICD-10-CM
F10.19	Alcohol abuse with unspecified alcohol-induced disorder	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F10.188	Alcohol abuse with other alcohol-induced disorder	Diagnosis	ICD-10-CM
F10.129	Alcohol abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F10.120	Alcohol abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F10.121	Alcohol abuse with intoxication delirium	Diagnosis	ICD-10-CM
F10.182	Alcohol abuse with alcohol-induced sleep disorder	Diagnosis	ICD-10-CM
F10.181	Alcohol abuse with alcohol-induced sexual dysfunction	Diagnosis	ICD-10-CM
F10.159	Alcohol abuse with alcohol-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F10.151	Alcohol abuse with alcohol-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F10.150	Alcohol abuse with alcohol-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F10.14	Alcohol abuse with alcohol-induced mood disorder	Diagnosis	ICD-10-CM
F10.180	Alcohol abuse with alcohol-induced anxiety disorder	Diagnosis	ICD-10-CM
Z71.41	Alcohol abuse counseling and surveillance of alcoholic	Diagnosis	ICD-10-CM
HZ2ZZZZ	Detoxification Services for Substance Abuse Treatment	Procedure	ICD-10-PCS
HZ40ZZZ	Group Counseling for Substance Abuse Treatment, Cognitive	Procedure	ICD-10-PCS
HZ37ZZZ	Individual Counseling for Substance Abuse Treatment, Motivational Enhancement	Procedure	ICD-10-PCS
HZ30ZZZ	Individual Counseling for Substance Abuse Treatment, Cognitive	Procedure	ICD-10-PCS
HZ31ZZZ	Individual Counseling for Substance Abuse Treatment, Behavioral	Procedure	ICD-10-PCS
HZ3BZZZ	Individual Counseling for Substance Abuse Treatment, Spiritual	Procedure	ICD-10-PCS
HZ35ZZZ	Individual Counseling for Substance Abuse Treatment, Vocational	Procedure	ICD-10-PCS
HZ33ZZZ	Individual Counseling for Substance Abuse Treatment, 12-Step	Procedure	ICD-10-PCS
HZ39ZZZ	Individual Counseling for Substance Abuse Treatment, Continuing Care	Procedure	ICD-10-PCS
HZ32ZZZ	Individual Counseling for Substance Abuse Treatment, Cognitive-Behavioral	Procedure	ICD-10-PCS
HZ38ZZZ	Individual Counseling for Substance Abuse Treatment, Confrontational	Procedure	ICD-10-PCS
HZ36ZZZ	Individual Counseling for Substance Abuse Treatment, Psychoeducation	Procedure	ICD-10-PCS
HZ34ZZZ	Individual Counseling for Substance Abuse Treatment, Interpersonal	Procedure	ICD-10-PCS
HZ93ZZZ	Pharmacotherapy for Substance Abuse Treatment, Antabuse	Procedure	ICD-10-PCS
HZ96ZZZ	Pharmacotherapy for Substance Abuse Treatment, Clonidine	Procedure	ICD-10-PCS
Alzheimer's Disease			
G30.8	Other Alzheimer's disease	Diagnosis	ICD-10-CM
G30.9	Alzheimer's disease, unspecified	Diagnosis	ICD-10-CM
G30.1	Alzheimer's disease with late onset	Diagnosis	ICD-10-CM
G30.0	Alzheimer's disease with early onset	Diagnosis	ICD-10-CM
Acute Myocardial Infarction			
I21.9	Acute myocardial infarction, unspecified	Diagnosis	ICD-10-CM
I23.1	Atrial septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.0	Hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I21.A1	Myocardial infarction type 2	Diagnosis	ICD-10-CM
I21.4	Non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I23.8	Other current complications following acute myocardial infarction	Diagnosis	ICD-10-CM
I21.A9	Other myocardial infarction type	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I23.7	Postinfarction angina	Diagnosis	ICD-10-CM
I23.3	Rupture of cardiac wall without hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.4	Rupture of chordae tendineae as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.5	Rupture of papillary muscle as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery	Diagnosis	ICD-10-CM
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery	Diagnosis	ICD-10-CM
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery	Diagnosis	ICD-10-CM
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall	Diagnosis	ICD-10-CM
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall	Diagnosis	ICD-10-CM
I21.29	ST elevation (STEMI) myocardial infarction involving other sites	Diagnosis	ICD-10-CM
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery	Diagnosis	ICD-10-CM
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall	Diagnosis	ICD-10-CM
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall	Diagnosis	ICD-10-CM
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites	Diagnosis	ICD-10-CM
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
I23.6	Thrombosis of atrium, auricular appendage, and ventricle as current complications following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.2	Ventricular septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
Anemia			
D59.11	Warm autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D51.9	Vitamin B12 deficiency anemia, unspecified	Diagnosis	ICD-10-CM
D51.1	Vitamin B12 deficiency anemia due to selective vitamin B12 malabsorption with proteinuria	Diagnosis	ICD-10-CM
D51.0	Vitamin B12 deficiency anemia due to intrinsic factor deficiency	Diagnosis	ICD-10-CM
D60.1	Transient acquired pure red cell aplasia	Diagnosis	ICD-10-CM
D51.2	Transcobalamin II deficiency	Diagnosis	ICD-10-CM
D56.9	Thalassemia, unspecified	Diagnosis	ICD-10-CM
D56.3	Thalassemia minor	Diagnosis	ICD-10-CM
D50.1	Sideropenic dysphagia	Diagnosis	ICD-10-CM
D57.20	Sickle-cell/Hb-C disease without crisis	Diagnosis	ICD-10-CM
D57.212	Sickle-cell/Hb-C disease with splenic sequestration	Diagnosis	ICD-10-CM
D57.219	Sickle-cell/Hb-C disease with crisis, unspecified	Diagnosis	ICD-10-CM
D57.211	Sickle-cell/Hb-C disease with acute chest syndrome	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
D57.3	Sickle-cell trait	Diagnosis	ICD-10-CM
D57.412	Sickle-cell thalassemia, unspecified, with splenic sequestration	Diagnosis	ICD-10-CM
D57.418	Sickle-cell thalassemia, unspecified, with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.419	Sickle-cell thalassemia, unspecified, with crisis	Diagnosis	ICD-10-CM
D57.413	Sickle-cell thalassemia, unspecified, with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.411	Sickle-cell thalassemia, unspecified, with acute chest syndrome	Diagnosis	ICD-10-CM
D57.40	Sickle-cell thalassemia without crisis	Diagnosis	ICD-10-CM
D57.42	Sickle-cell thalassemia beta zero without crisis	Diagnosis	ICD-10-CM
D57.432	Sickle-cell thalassemia beta zero with splenic sequestration	Diagnosis	ICD-10-CM
D57.439	Sickle-cell thalassemia beta zero with crisis, unspecified	Diagnosis	ICD-10-CM
D57.438	Sickle-cell thalassemia beta zero with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.433	Sickle-cell thalassemia beta zero with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.431	Sickle-cell thalassemia beta zero with acute chest syndrome	Diagnosis	ICD-10-CM
D57.44	Sickle-cell thalassemia beta plus without crisis	Diagnosis	ICD-10-CM
D57.452	Sickle-cell thalassemia beta plus with splenic sequestration	Diagnosis	ICD-10-CM
D57.459	Sickle-cell thalassemia beta plus with crisis, unspecified	Diagnosis	ICD-10-CM
D57.458	Sickle-cell thalassemia beta plus with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.453	Sickle-cell thalassemia beta plus with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.451	Sickle-cell thalassemia beta plus with acute chest syndrome	Diagnosis	ICD-10-CM
D57.1	Sickle-cell disease without crisis	Diagnosis	ICD-10-CM
D64.2	Secondary sideroblastic anemia due to drugs and toxins	Diagnosis	ICD-10-CM
D64.1	Secondary sideroblastic anemia due to disease	Diagnosis	ICD-10-CM
D53.2	Scorbutic anemia	Diagnosis	ICD-10-CM
D46.B	Refractory cytopenia with multilineage dysplasia and ring sideroblasts	Diagnosis	ICD-10-CM
D46.A	Refractory cytopenia with multilineage dysplasia	Diagnosis	ICD-10-CM
D46.4	Refractory anemia, unspecified	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
D46.22	Refractory anemia with excess of blasts 2	Diagnosis	ICD-10-CM
D46.21	Refractory anemia with excess of blasts 1	Diagnosis	ICD-10-CM
D53.0	Protein deficiency anemia	Diagnosis	ICD-10-CM
D59.5	Paroxysmal nocturnal hemoglobinuria [Marchiafava-Micheli]	Diagnosis	ICD-10-CM
D51.8	Other vitamin B12 deficiency anemias	Diagnosis	ICD-10-CM
D56.8	Other thalassemias	Diagnosis	ICD-10-CM
D53.8	Other specified nutritional anemias	Diagnosis	ICD-10-CM
D58.8	Other specified hereditary hemolytic anemias	Diagnosis	ICD-10-CM
D61.89	Other specified aplastic anemias and other bone marrow failure	Diagnosis	ICD-10-CM
D64.89	Other specified anemias	Diagnosis	ICD-10-CM
D64.3	Other sideroblastic anemias	Diagnosis	ICD-10-CM
D57.80	Other sickle-cell disorders without crisis	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
D57.812	Other sickle-cell disorders with splenic sequestration	Diagnosis	ICD-10-CM
D57.819	Other sickle-cell disorders with crisis, unspecified	Diagnosis	ICD-10-CM
D57.818	Other sickle-cell disorders with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.813	Other sickle-cell disorders with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.811	Other sickle-cell disorders with acute chest syndrome	Diagnosis	ICD-10-CM
D61.818	Other pancytopenia	Diagnosis	ICD-10-CM
D59.4	Other nonautoimmune hemolytic anemias	Diagnosis	ICD-10-CM
D46.Z	Other myelodysplastic syndromes	Diagnosis	ICD-10-CM
D53.1	Other megaloblastic anemias, not elsewhere classified	Diagnosis	ICD-10-CM
D50.8	Other iron deficiency anemias	Diagnosis	ICD-10-CM
D58.2	Other hemoglobinopathies	Diagnosis	ICD-10-CM
D52.8	Other folate deficiency anemias	Diagnosis	ICD-10-CM
D61.811	Other drug-induced pancytopenia	Diagnosis	ICD-10-CM
D51.3	Other dietary vitamin B12 deficiency anemia	Diagnosis	ICD-10-CM
D61.09	Other constitutional aplastic anemia	Diagnosis	ICD-10-CM
D59.1	Other autoimmune hemolytic anemias	Diagnosis	ICD-10-CM
D59.19	Other autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D55.8	Other anemias due to enzyme disorders	Diagnosis	ICD-10-CM
D60.8	Other acquired pure red cell aplasias	Diagnosis	ICD-10-CM
D59.8	Other acquired hemolytic anemias	Diagnosis	ICD-10-CM
D47.4	Osteomyelofibrosis	Diagnosis	ICD-10-CM
D53.9	Nutritional anemia, unspecified	Diagnosis	ICD-10-CM
D61.82	Myelophthisis	Diagnosis	ICD-10-CM
D75.81	Myelofibrosis	Diagnosis	ICD-10-CM
D46.9	Myelodysplastic syndrome, unspecified	Diagnosis	ICD-10-CM
D46.C	Myelodysplastic syndrome with isolated del(5q) chromosomal	Diagnosis	ICD-10-CM
C94.6	Myelodysplastic disease, not classified	Diagnosis	ICD-10-CM
D59.13	Mixed type autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D50.9	Iron deficiency anemia, unspecified	Diagnosis	ICD-10-CM
D50.0	Iron deficiency anemia secondary to blood loss (chronic)	Diagnosis	ICD-10-CM
D61.3	Idiopathic aplastic anemia	Diagnosis	ICD-10-CM
D58.0	Hereditary spherocytosis	Diagnosis	ICD-10-CM
D64.0	Hereditary sideroblastic anemia	Diagnosis	ICD-10-CM
D56.4	Hereditary persistence of fetal hemoglobin [HPFH]	Diagnosis	ICD-10-CM
D58.9	Hereditary hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
D58.1	Hereditary elliptocytosis	Diagnosis	ICD-10-CM
D59.3	Hemolytic-uremic syndrome	Diagnosis	ICD-10-CM
D59.6	Hemoglobinuria due to hemolysis from other external causes	Diagnosis	ICD-10-CM
D56.5	Hemoglobin E-beta thalassemia	Diagnosis	ICD-10-CM
D57.02	Hb-SS disease with splenic sequestration	Diagnosis	ICD-10-CM
D57.00	Hb-SS disease with crisis, unspecified	Diagnosis	ICD-10-CM
D57.01	Hb-SS disease with acute chest syndrome	Diagnosis	ICD-10-CM
D52.9	Folate deficiency anemia, unspecified	Diagnosis	ICD-10-CM
D59.2	Drug-induced nonautoimmune hemolytic anemia	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
D52.1	Drug-induced folate deficiency anemia	Diagnosis	ICD-10-CM
D59.0	Drug-induced autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D61.1	Drug-induced aplastic anemia	Diagnosis	ICD-10-CM
D52.0	Dietary folate deficiency anemia	Diagnosis	ICD-10-CM
D56.2	Delta-beta thalassemia	Diagnosis	ICD-10-CM
D61.01	Constitutional (pure) red blood cell aplasia	Diagnosis	ICD-10-CM
D64.4	Congenital dyserythropoietic anemia	Diagnosis	ICD-10-CM
D59.12	Cold autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D60.0	Chronic acquired pure red cell aplasia	Diagnosis	ICD-10-CM
D56.1	Beta thalassemia	Diagnosis	ICD-10-CM
D59.10	Autoimmune hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
D61.9	Aplastic anemia, unspecified	Diagnosis	ICD-10-CM
D61.2	Aplastic anemia due to other external agents	Diagnosis	ICD-10-CM
D61.810	Antineoplastic chemotherapy induced pancytopenia	Diagnosis	ICD-10-CM
D64.9	Anemia, unspecified	Diagnosis	ICD-10-CM
D63.8	Anemia in other chronic diseases classified elsewhere	Diagnosis	ICD-10-CM
D63.0	Anemia in neoplastic disease	Diagnosis	ICD-10-CM
D63.1	Anemia in chronic kidney disease	Diagnosis	ICD-10-CM
D55.21	Anemia due to pyruvate kinase deficiency	Diagnosis	ICD-10-CM
D55.29	Anemia due to other disorders of glycolytic enzymes	Diagnosis	ICD-10-CM
D55.1	Anemia due to other disorders of glutathione metabolism	Diagnosis	ICD-10-CM
D55.0	Anemia due to glucose-6-phosphate dehydrogenase [G6PD] deficiency	Diagnosis	ICD-10-CM
D55.9	Anemia due to enzyme disorder, unspecified	Diagnosis	ICD-10-CM
D55.3	Anemia due to disorders of nucleotide metabolism	Diagnosis	ICD-10-CM
D55.2	Anemia due to disorders of glycolytic enzymes	Diagnosis	ICD-10-CM
D64.81	Anemia due to antineoplastic chemotherapy	Diagnosis	ICD-10-CM
D56.0	Alpha thalassemia	Diagnosis	ICD-10-CM
D60.9	Acquired pure red cell aplasia, unspecified	Diagnosis	ICD-10-CM
D59.9	Acquired hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
Anxiety Disorders			
R45.6	Violent behavior	Diagnosis	ICD-10-CM
R45.2	Unhappiness	Diagnosis	ICD-10-CM
R45.7	State of emotional shock and stress, unspecified	Diagnosis	ICD-10-CM
F40.10	Social phobia, unspecified	Diagnosis	ICD-10-CM
F40.11	Social phobia, generalized	Diagnosis	ICD-10-CM
F43.10	Post-traumatic stress disorder, unspecified	Diagnosis	ICD-10-CM
F43.12	Post-traumatic stress disorder, chronic	Diagnosis	ICD-10-CM
F43.11	Post-traumatic stress disorder, acute	Diagnosis	ICD-10-CM
F40.9	Phobic anxiety disorder, unspecified	Diagnosis	ICD-10-CM
F41.0	Panic disorder [episodic paroxysmal anxiety]	Diagnosis	ICD-10-CM
F40.298	Other specified phobia	Diagnosis	ICD-10-CM
F48.8	Other specified nonpsychotic mental disorders	Diagnosis	ICD-10-CM
F41.8	Other specified anxiety disorders	Diagnosis	ICD-10-CM
F45.8	Other somatoform disorders	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F40.248	Other situational type phobia	Diagnosis	ICD-10-CM
F40.8	Other phobic anxiety disorders	Diagnosis	ICD-10-CM
F42.8	Other obsessive-compulsive disorder	Diagnosis	ICD-10-CM
F40.228	Other natural environment type phobia	Diagnosis	ICD-10-CM
F41.3	Other mixed anxiety disorders	Diagnosis	ICD-10-CM
F93.8	Other childhood emotional disorders	Diagnosis	ICD-10-CM
F40.218	Other animal type phobia	Diagnosis	ICD-10-CM
F42.9	Obsessive-compulsive disorder, unspecified	Diagnosis	ICD-10-CM
F42	Obsessive-compulsive disorder	Diagnosis	ICD-10-CM
F48.9	Nonpsychotic mental disorder, unspecified	Diagnosis	ICD-10-CM
F42.2	Mixed obsessional thoughts and acts	Diagnosis	ICD-10-CM
F99	Mental disorder, not otherwise specified	Diagnosis	ICD-10-CM
R45.5	Hostility	Diagnosis	ICD-10-CM
F42.3	Hoarding disorder	Diagnosis	ICD-10-CM
F40.291	Gynephobia	Diagnosis	ICD-10-CM
F41.1	Generalized anxiety disorder	Diagnosis	ICD-10-CM
F40.220	Fear of thunderstorms	Diagnosis	ICD-10-CM
F40.232	Fear of other medical care	Diagnosis	ICD-10-CM
F40.233	Fear of injury	Diagnosis	ICD-10-CM
F40.231	Fear of injections and transfusions	Diagnosis	ICD-10-CM
F40.243	Fear of flying	Diagnosis	ICD-10-CM
F40.242	Fear of bridges	Diagnosis	ICD-10-CM
F40.230	Fear of blood	Diagnosis	ICD-10-CM
F42.4	Excoriation (skin-picking) disorder	Diagnosis	ICD-10-CM
F44.9	Dissociative and conversion disorder, unspecified	Diagnosis	ICD-10-CM
F40.240	Claustrophobia	Diagnosis	ICD-10-CM
F40.210	Arachnophobia	Diagnosis	ICD-10-CM
F41.9	Anxiety disorder, unspecified	Diagnosis	ICD-10-CM
F06.4	Anxiety disorder due to known physiological condition	Diagnosis	ICD-10-CM
F40.290	Androphobia	Diagnosis	ICD-10-CM
F40.00	Agoraphobia, unspecified	Diagnosis	ICD-10-CM
F40.02	Agoraphobia without panic disorder	Diagnosis	ICD-10-CM
F40.01	Agoraphobia with panic disorder	Diagnosis	ICD-10-CM
F43.0	Acute stress reaction	Diagnosis	ICD-10-CM
F40.241	Acrophobia	Diagnosis	ICD-10-CM
Arrhythmia			
I44.0	Atrioventricular block, first degree	Diagnosis	ICD-10-CM
I44.1	Atrioventricular block, second degree	Diagnosis	ICD-10-CM
I44.30	Unspecified atrioventricular block	Diagnosis	ICD-10-CM
I44.39	Other atrioventricular block	Diagnosis	ICD-10-CM
I44.4	Left anterior fascicular block	Diagnosis	ICD-10-CM
I44.5	Left posterior fascicular block	Diagnosis	ICD-10-CM
I44.60	Unspecified fascicular block	Diagnosis	ICD-10-CM
I44.69	Other fascicular block	Diagnosis	ICD-10-CM

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

Code	Description	Code	
		Category	Code Type
I44.7	Left bundle-branch block, unspecified	Diagnosis	ICD-10-CM
I45.0	Right fascicular block	Diagnosis	ICD-10-CM
I45.10	Unspecified right bundle-branch block	Diagnosis	ICD-10-CM
I45.19	Other right bundle-branch block	Diagnosis	ICD-10-CM
I45.2	Bifascicular block	Diagnosis	ICD-10-CM
I45.4	Nonspecific intraventricular block	Diagnosis	ICD-10-CM
I45.5	Other specified heart block	Diagnosis	ICD-10-CM
I45.6	Pre-excitation syndrome	Diagnosis	ICD-10-CM
I45.81	Long QT syndrome	Diagnosis	ICD-10-CM
I45.89	Other specified conduction disorders	Diagnosis	ICD-10-CM
I47.1	Supraventricular tachycardia	Diagnosis	ICD-10-CM
I47.9	Paroxysmal tachycardia, unspecified	Diagnosis	ICD-10-CM
I48.0	Paroxysmal atrial fibrillation	Diagnosis	ICD-10-CM
I48.1	Persistent atrial fibrillation	Diagnosis	ICD-10-CM
I48.2	Chronic atrial fibrillation	Diagnosis	ICD-10-CM
I48.91	Unspecified atrial fibrillation	Diagnosis	ICD-10-CM
I49.2	Junctional premature depolarization	Diagnosis	ICD-10-CM
I49.40	Unspecified premature depolarization	Diagnosis	ICD-10-CM
I49.9	Cardiac arrhythmia, unspecified	Diagnosis	ICD-10-CM
R00.0	Tachycardia, unspecified	Diagnosis	ICD-10-CM
Z45.010	Encounter for checking and testing of cardiac pacemaker pulse generator [battery]	Diagnosis	ICD-10-CM
Z45.018	Encounter for adjustment and management of other part of cardiac pacemaker	Diagnosis	ICD-10-CM
Z45.02	Encounter for adjustment and management of automatic implantable cardiac defibrillator	Diagnosis	ICD-10-CM
Z45.09	Encounter for adjustment and management of other cardiac device	Diagnosis	ICD-10-CM
Z95.0	Presence of cardiac pacemaker	Diagnosis	ICD-10-CM
Z95.810	Presence of automatic (implantable) cardiac defibrillator	Diagnosis	ICD-10-CM
Z95.818	Presence of other cardiac implants and grafts	Diagnosis	ICD-10-CM
Z95.9	Presence of cardiac and vascular implant and graft, unspecified	Diagnosis	ICD-10-CM
I48.3	Typical atrial flutter	Diagnosis	ICD-10-CM
I48.21	Permanent atrial fibrillation	Diagnosis	ICD-10-CM
I48.19	Other persistent atrial fibrillation	Diagnosis	ICD-10-CM
I48.11	Longstanding persistent atrial fibrillation	Diagnosis	ICD-10-CM
I48.20	Chronic atrial fibrillation, unspecified	Diagnosis	ICD-10-CM
I48.4	Atypical atrial flutter	Diagnosis	ICD-10-CM
Asthma			
J45.909	Unspecified asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.902	Unspecified asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.901	Unspecified asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.50	Severe persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.52	Severe persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.51	Severe persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
J45.998	Other asthma	Diagnosis	ICD-10-CM
J45.40	Moderate persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.42	Moderate persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.41	Moderate persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.30	Mild persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.32	Mild persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.31	Mild persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.20	Mild intermittent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.22	Mild intermittent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.21	Mild intermittent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.990	Exercise induced bronchospasm	Diagnosis	ICD-10-CM
J45.991	Cough variant asthma	Diagnosis	ICD-10-CM
Autism			
F84.9	Pervasive developmental disorder, unspecified	Diagnosis	ICD-10-CM
F84.8	Other pervasive developmental disorders	Diagnosis	ICD-10-CM
F84.3	Other childhood disintegrative disorder	Diagnosis	ICD-10-CM
F84.0	Autistic disorder	Diagnosis	ICD-10-CM
F84.5	Asperger's syndrome	Diagnosis	ICD-10-CM
Autoimmune Disease			
I73.1	Thromboangiitis obliterans [Buerger's disease]	Diagnosis	ICD-10-CM
M30.0	Polyarteritis nodosa	Diagnosis	ICD-10-CM
M30.1	Polyarteritis with lung involvement [Churg-Strauss]	Diagnosis	ICD-10-CM
M30.2	Juvenile polyarteritis	Diagnosis	ICD-10-CM
M30.3	Mucocutaneous lymph node syndrome [Kawasaki]	Diagnosis	ICD-10-CM
M30.8	Other conditions related to polyarteritis nodosa	Diagnosis	ICD-10-CM
M31.0	Hypersensitivity angiitis	Diagnosis	ICD-10-CM
M31.1	Thrombotic microangiopathy	Diagnosis	ICD-10-CM
M31.2	Lethal midline granuloma	Diagnosis	ICD-10-CM
M31.30	Wegener's granulomatosis without renal involvement	Diagnosis	ICD-10-CM
M31.31	Wegener's granulomatosis with renal involvement	Diagnosis	ICD-10-CM
M31.4	Aortic arch syndrome [Takayasu]	Diagnosis	ICD-10-CM
M31.5	Giant cell arteritis with polymyalgia rheumatica	Diagnosis	ICD-10-CM
M31.6	Other giant cell arteritis	Diagnosis	ICD-10-CM
M31.7	Microscopic polyangiitis	Diagnosis	ICD-10-CM
M35.2	Behcet's disease	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
E10.21	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
E10.311	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

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

Code	Description	Code Category	Code Type
E10.3211	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
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
E10.3291	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
E10.3311	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
E10.3391	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
E10.3411	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
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
E10.3491	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

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

Code	Description	Code Category	Code Type
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
E10.3511	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
E10.3521	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
E10.3531	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
E10.3539	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E10.3541	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
E10.3551	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

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

Code	Description	Code Category	Code Type
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
E10.3591	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
E10.37X1	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
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
E10.51	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	Diagnosis	ICD-10-CM
E10.59	Type 1 diabetes mellitus with other circulatory complications	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
E10.620	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
E10.630	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
E10.641	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

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

Code	Description	Code Category	Code Type
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
M05.00	Felty's syndrome, unspecified site	Diagnosis	ICD-10-CM
M05.011	Felty's syndrome, right shoulder	Diagnosis	ICD-10-CM
M05.012	Felty's syndrome, left shoulder	Diagnosis	ICD-10-CM
M05.019	Felty's syndrome, unspecified shoulder	Diagnosis	ICD-10-CM
M05.021	Felty's syndrome, right elbow	Diagnosis	ICD-10-CM
M05.022	Felty's syndrome, left elbow	Diagnosis	ICD-10-CM
M05.029	Felty's syndrome, unspecified elbow	Diagnosis	ICD-10-CM
M05.031	Felty's syndrome, right wrist	Diagnosis	ICD-10-CM
M05.032	Felty's syndrome, left wrist	Diagnosis	ICD-10-CM
M05.039	Felty's syndrome, unspecified wrist	Diagnosis	ICD-10-CM
M05.041	Felty's syndrome, right hand	Diagnosis	ICD-10-CM
M05.042	Felty's syndrome, left hand	Diagnosis	ICD-10-CM
M05.049	Felty's syndrome, unspecified hand	Diagnosis	ICD-10-CM
M05.051	Felty's syndrome, right hip	Diagnosis	ICD-10-CM
M05.052	Felty's syndrome, left hip	Diagnosis	ICD-10-CM
M05.059	Felty's syndrome, unspecified hip	Diagnosis	ICD-10-CM
M05.061	Felty's syndrome, right knee	Diagnosis	ICD-10-CM
M05.062	Felty's syndrome, left knee	Diagnosis	ICD-10-CM
M05.069	Felty's syndrome, unspecified knee	Diagnosis	ICD-10-CM
M05.071	Felty's syndrome, right ankle and foot	Diagnosis	ICD-10-CM
M05.072	Felty's syndrome, left ankle and foot	Diagnosis	ICD-10-CM
M05.079	Felty's syndrome, unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.09	Felty's syndrome, multiple sites	Diagnosis	ICD-10-CM
M05.10	Rheumatoid lung disease with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.111	Rheumatoid lung disease with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.112	Rheumatoid lung disease with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.119	Rheumatoid lung disease with rheumatoid arthritis of unspecified	Diagnosis	ICD-10-CM
M05.121	Rheumatoid lung disease with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.122	Rheumatoid lung disease with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.129	Rheumatoid lung disease with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.131	Rheumatoid lung disease with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.132	Rheumatoid lung disease with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.139	Rheumatoid lung disease with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.141	Rheumatoid lung disease with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.142	Rheumatoid lung disease with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.149	Rheumatoid lung disease with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.151	Rheumatoid lung disease with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.152	Rheumatoid lung disease with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.159	Rheumatoid lung disease with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.161	Rheumatoid lung disease with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.162	Rheumatoid lung disease with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.169	Rheumatoid lung disease with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M05.171	Rheumatoid lung disease with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.172	Rheumatoid lung disease with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.179	Rheumatoid lung disease with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.19	Rheumatoid lung disease with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.20	Rheumatoid vasculitis with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.211	Rheumatoid vasculitis with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.212	Rheumatoid vasculitis with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.219	Rheumatoid vasculitis with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.221	Rheumatoid vasculitis with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.222	Rheumatoid vasculitis with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.229	Rheumatoid vasculitis with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.231	Rheumatoid vasculitis with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.232	Rheumatoid vasculitis with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.239	Rheumatoid vasculitis with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.241	Rheumatoid vasculitis with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.242	Rheumatoid vasculitis with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.249	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.251	Rheumatoid vasculitis with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.252	Rheumatoid vasculitis with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.259	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.261	Rheumatoid vasculitis with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.262	Rheumatoid vasculitis with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.269	Rheumatoid vasculitis with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.271	Rheumatoid vasculitis with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.272	Rheumatoid vasculitis with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.279	Rheumatoid vasculitis with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.29	Rheumatoid vasculitis with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.30	Rheumatoid heart disease with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.311	Rheumatoid heart disease with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.312	Rheumatoid heart disease with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.319	Rheumatoid heart disease with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.321	Rheumatoid heart disease with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.322	Rheumatoid heart disease with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.329	Rheumatoid heart disease with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.331	Rheumatoid heart disease with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.332	Rheumatoid heart disease with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.339	Rheumatoid heart disease with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.341	Rheumatoid heart disease with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.342	Rheumatoid heart disease with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.349	Rheumatoid heart disease with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.351	Rheumatoid heart disease with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M05.352	Rheumatoid heart disease with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.359	Rheumatoid heart disease with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.361	Rheumatoid heart disease with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.362	Rheumatoid heart disease with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.369	Rheumatoid heart disease with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.371	Rheumatoid heart disease with rheumatoid arthritis of right ankle and	Diagnosis	ICD-10-CM
M05.372	Rheumatoid heart disease with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.379	Rheumatoid heart disease with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.39	Rheumatoid heart disease with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.40	Rheumatoid myopathy with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.411	Rheumatoid myopathy with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.412	Rheumatoid myopathy with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.419	Rheumatoid myopathy with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.421	Rheumatoid myopathy with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.422	Rheumatoid myopathy with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.429	Rheumatoid myopathy with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.431	Rheumatoid myopathy with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.432	Rheumatoid myopathy with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.439	Rheumatoid myopathy with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.441	Rheumatoid myopathy with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.442	Rheumatoid myopathy with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.449	Rheumatoid myopathy with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.451	Rheumatoid myopathy with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.452	Rheumatoid myopathy with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.459	Rheumatoid myopathy with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.461	Rheumatoid myopathy with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.462	Rheumatoid myopathy with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.469	Rheumatoid myopathy with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.471	Rheumatoid myopathy with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.472	Rheumatoid myopathy with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.479	Rheumatoid myopathy with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.49	Rheumatoid myopathy with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.50	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.511	Rheumatoid polyneuropathy with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.512	Rheumatoid polyneuropathy with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.519	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.521	Rheumatoid polyneuropathy with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.522	Rheumatoid polyneuropathy with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.529	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.531	Rheumatoid polyneuropathy with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M05.532	Rheumatoid polyneuropathy with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.539	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified	Diagnosis	ICD-10-CM
M05.541	Rheumatoid polyneuropathy with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.542	Rheumatoid polyneuropathy with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.549	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified	Diagnosis	ICD-10-CM
M05.551	Rheumatoid polyneuropathy with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.552	Rheumatoid polyneuropathy with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.559	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.561	Rheumatoid polyneuropathy with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.562	Rheumatoid polyneuropathy with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.569	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified	Diagnosis	ICD-10-CM
M05.571	Rheumatoid polyneuropathy with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.572	Rheumatoid polyneuropathy with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.579	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.59	Rheumatoid polyneuropathy with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.60	Rheumatoid arthritis of unspecified site with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.611	Rheumatoid arthritis of right shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.612	Rheumatoid arthritis of left shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.619	Rheumatoid arthritis of unspecified shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.621	Rheumatoid arthritis of right elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.622	Rheumatoid arthritis of left elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.629	Rheumatoid arthritis of unspecified elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.631	Rheumatoid arthritis of right wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.632	Rheumatoid arthritis of left wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.639	Rheumatoid arthritis of unspecified wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.641	Rheumatoid arthritis of right hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.642	Rheumatoid arthritis of left hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.649	Rheumatoid arthritis of unspecified hand with involvement of other organs and systems	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M05.651	Rheumatoid arthritis of right hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.652	Rheumatoid arthritis of left hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.659	Rheumatoid arthritis of unspecified hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.661	Rheumatoid arthritis of right knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.662	Rheumatoid arthritis of left knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.669	Rheumatoid arthritis of unspecified knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.671	Rheumatoid arthritis of right ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.672	Rheumatoid arthritis of left ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.679	Rheumatoid arthritis of unspecified ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.69	Rheumatoid arthritis of multiple sites with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.70	Rheumatoid arthritis with rheumatoid factor of unspecified site without organ or systems involvement	Diagnosis	ICD-10-CM
M05.711	Rheumatoid arthritis with rheumatoid factor of right shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05.712	Rheumatoid arthritis with rheumatoid factor of left shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05.719	Rheumatoid arthritis with rheumatoid factor of unspecified shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05.721	Rheumatoid arthritis with rheumatoid factor of right elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M05.722	Rheumatoid arthritis with rheumatoid factor of left elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M05.729	Rheumatoid arthritis with rheumatoid factor of unspecified elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M05.731	Rheumatoid arthritis with rheumatoid factor of right wrist without organ or systems involvement	Diagnosis	ICD-10-CM
M05.732	Rheumatoid arthritis with rheumatoid factor of left wrist without organ or systems involvement	Diagnosis	ICD-10-CM
M05.739	Rheumatoid arthritis with rheumatoid factor of unspecified wrist without organ or systems involvement	Diagnosis	ICD-10-CM
M05.741	Rheumatoid arthritis with rheumatoid factor of right hand without organ or systems involvement	Diagnosis	ICD-10-CM
M05.742	Rheumatoid arthritis with rheumatoid factor of left hand without organ or systems involvement	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M05.749	Rheumatoid arthritis with rheumatoid factor of unspecified hand without organ or systems involvement	Diagnosis	ICD-10-CM
M05.751	Rheumatoid arthritis with rheumatoid factor of right hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.752	Rheumatoid arthritis with rheumatoid factor of left hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.759	Rheumatoid arthritis with rheumatoid factor of unspecified hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.761	Rheumatoid arthritis with rheumatoid factor of right knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05.762	Rheumatoid arthritis with rheumatoid factor of left knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05.769	Rheumatoid arthritis with rheumatoid factor of unspecified knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05.771	Rheumatoid arthritis with rheumatoid factor of right ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05.772	Rheumatoid arthritis with rheumatoid factor of left ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05.779	Rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05.79	Rheumatoid arthritis with rheumatoid factor of multiple sites without organ or systems involvement	Diagnosis	ICD-10-CM
M05.80	Other rheumatoid arthritis with rheumatoid factor of unspecified site	Diagnosis	ICD-10-CM
M05.811	Other rheumatoid arthritis with rheumatoid factor of right shoulder	Diagnosis	ICD-10-CM
M05.812	Other rheumatoid arthritis with rheumatoid factor of left shoulder	Diagnosis	ICD-10-CM
M05.819	Other rheumatoid arthritis with rheumatoid factor of unspecified	Diagnosis	ICD-10-CM
M05.821	Other rheumatoid arthritis with rheumatoid factor of right elbow	Diagnosis	ICD-10-CM
M05.822	Other rheumatoid arthritis with rheumatoid factor of left elbow	Diagnosis	ICD-10-CM
M05.829	Other rheumatoid arthritis with rheumatoid factor of unspecified elbow	Diagnosis	ICD-10-CM
M05.831	Other rheumatoid arthritis with rheumatoid factor of right wrist	Diagnosis	ICD-10-CM
M05.832	Other rheumatoid arthritis with rheumatoid factor of left wrist	Diagnosis	ICD-10-CM
M05.839	Other rheumatoid arthritis with rheumatoid factor of unspecified wrist	Diagnosis	ICD-10-CM
M05.841	Other rheumatoid arthritis with rheumatoid factor of right hand	Diagnosis	ICD-10-CM
M05.842	Other rheumatoid arthritis with rheumatoid factor of left hand	Diagnosis	ICD-10-CM
M05.849	Other rheumatoid arthritis with rheumatoid factor of unspecified hand	Diagnosis	ICD-10-CM
M05.851	Other rheumatoid arthritis with rheumatoid factor of right hip	Diagnosis	ICD-10-CM
M05.852	Other rheumatoid arthritis with rheumatoid factor of left hip	Diagnosis	ICD-10-CM
M05.859	Other rheumatoid arthritis with rheumatoid factor of unspecified hip	Diagnosis	ICD-10-CM
M05.861	Other rheumatoid arthritis with rheumatoid factor of right knee	Diagnosis	ICD-10-CM
M05.862	Other rheumatoid arthritis with rheumatoid factor of left knee	Diagnosis	ICD-10-CM
M05.869	Other rheumatoid arthritis with rheumatoid factor of unspecified knee	Diagnosis	ICD-10-CM
M05.871	Other rheumatoid arthritis with rheumatoid factor of right ankle and foot	Diagnosis	ICD-10-CM
M05.872	Other rheumatoid arthritis with rheumatoid factor of left ankle and foot	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M05.879	Other rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.89	Other rheumatoid arthritis with rheumatoid factor of multiple sites	Diagnosis	ICD-10-CM
M05.9	Rheumatoid arthritis with rheumatoid factor, unspecified	Diagnosis	ICD-10-CM
M06.00	Rheumatoid arthritis without rheumatoid factor, unspecified site	Diagnosis	ICD-10-CM
M06.011	Rheumatoid arthritis without rheumatoid factor, right shoulder	Diagnosis	ICD-10-CM
M06.012	Rheumatoid arthritis without rheumatoid factor, left shoulder	Diagnosis	ICD-10-CM
M06.019	Rheumatoid arthritis without rheumatoid factor, unspecified shoulder	Diagnosis	ICD-10-CM
M06.021	Rheumatoid arthritis without rheumatoid factor, right elbow	Diagnosis	ICD-10-CM
M06.022	Rheumatoid arthritis without rheumatoid factor, left elbow	Diagnosis	ICD-10-CM
M06.029	Rheumatoid arthritis without rheumatoid factor, unspecified elbow	Diagnosis	ICD-10-CM
M06.031	Rheumatoid arthritis without rheumatoid factor, right wrist	Diagnosis	ICD-10-CM
M06.032	Rheumatoid arthritis without rheumatoid factor, left wrist	Diagnosis	ICD-10-CM
M06.039	Rheumatoid arthritis without rheumatoid factor, unspecified wrist	Diagnosis	ICD-10-CM
M06.041	Rheumatoid arthritis without rheumatoid factor, right hand	Diagnosis	ICD-10-CM
M06.042	Rheumatoid arthritis without rheumatoid factor, left hand	Diagnosis	ICD-10-CM
M06.049	Rheumatoid arthritis without rheumatoid factor, unspecified hand	Diagnosis	ICD-10-CM
M06.051	Rheumatoid arthritis without rheumatoid factor, right hip	Diagnosis	ICD-10-CM
M06.052	Rheumatoid arthritis without rheumatoid factor, left hip	Diagnosis	ICD-10-CM
M06.059	Rheumatoid arthritis without rheumatoid factor, unspecified hip	Diagnosis	ICD-10-CM
M06.061	Rheumatoid arthritis without rheumatoid factor, right knee	Diagnosis	ICD-10-CM
M06.062	Rheumatoid arthritis without rheumatoid factor, left knee	Diagnosis	ICD-10-CM
M06.069	Rheumatoid arthritis without rheumatoid factor, unspecified knee	Diagnosis	ICD-10-CM
M06.071	Rheumatoid arthritis without rheumatoid factor, right ankle and foot	Diagnosis	ICD-10-CM
M06.072	Rheumatoid arthritis without rheumatoid factor, left ankle and foot	Diagnosis	ICD-10-CM
M06.079	Rheumatoid arthritis without rheumatoid factor, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.08	Rheumatoid arthritis without rheumatoid factor, vertebrae	Diagnosis	ICD-10-CM
M06.09	Rheumatoid arthritis without rheumatoid factor, multiple sites	Diagnosis	ICD-10-CM
M06.1	Adult-onset Still's disease	Diagnosis	ICD-10-CM
M06.20	Rheumatoid bursitis, unspecified site	Diagnosis	ICD-10-CM
M06.211	Rheumatoid bursitis, right shoulder	Diagnosis	ICD-10-CM
M06.212	Rheumatoid bursitis, left shoulder	Diagnosis	ICD-10-CM
M06.219	Rheumatoid bursitis, unspecified shoulder	Diagnosis	ICD-10-CM
M06.221	Rheumatoid bursitis, right elbow	Diagnosis	ICD-10-CM
M06.222	Rheumatoid bursitis, left elbow	Diagnosis	ICD-10-CM
M06.229	Rheumatoid bursitis, unspecified elbow	Diagnosis	ICD-10-CM
M06.231	Rheumatoid bursitis, right wrist	Diagnosis	ICD-10-CM
M06.232	Rheumatoid bursitis, left wrist	Diagnosis	ICD-10-CM
M06.239	Rheumatoid bursitis, unspecified wrist	Diagnosis	ICD-10-CM
M06.241	Rheumatoid bursitis, right hand	Diagnosis	ICD-10-CM
M06.242	Rheumatoid bursitis, left hand	Diagnosis	ICD-10-CM
M06.249	Rheumatoid bursitis, unspecified hand	Diagnosis	ICD-10-CM
M06.251	Rheumatoid bursitis, right hip	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M06.252	Rheumatoid bursitis, left hip	Diagnosis	ICD-10-CM
M06.259	Rheumatoid bursitis, unspecified hip	Diagnosis	ICD-10-CM
M06.261	Rheumatoid bursitis, right knee	Diagnosis	ICD-10-CM
M06.262	Rheumatoid bursitis, left knee	Diagnosis	ICD-10-CM
M06.269	Rheumatoid bursitis, unspecified knee	Diagnosis	ICD-10-CM
M06.271	Rheumatoid bursitis, right ankle and foot	Diagnosis	ICD-10-CM
M06.272	Rheumatoid bursitis, left ankle and foot	Diagnosis	ICD-10-CM
M06.279	Rheumatoid bursitis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.28	Rheumatoid bursitis, vertebrae	Diagnosis	ICD-10-CM
M06.29	Rheumatoid bursitis, multiple sites	Diagnosis	ICD-10-CM
M06.30	Rheumatoid nodule, unspecified site	Diagnosis	ICD-10-CM
M06.311	Rheumatoid nodule, right shoulder	Diagnosis	ICD-10-CM
M06.312	Rheumatoid nodule, left shoulder	Diagnosis	ICD-10-CM
M06.319	Rheumatoid nodule, unspecified shoulder	Diagnosis	ICD-10-CM
M06.321	Rheumatoid nodule, right elbow	Diagnosis	ICD-10-CM
M06.322	Rheumatoid nodule, left elbow	Diagnosis	ICD-10-CM
M06.329	Rheumatoid nodule, unspecified elbow	Diagnosis	ICD-10-CM
M06.331	Rheumatoid nodule, right wrist	Diagnosis	ICD-10-CM
M06.332	Rheumatoid nodule, left wrist	Diagnosis	ICD-10-CM
M06.339	Rheumatoid nodule, unspecified wrist	Diagnosis	ICD-10-CM
M06.341	Rheumatoid nodule, right hand	Diagnosis	ICD-10-CM
M06.342	Rheumatoid nodule, left hand	Diagnosis	ICD-10-CM
M06.349	Rheumatoid nodule, unspecified hand	Diagnosis	ICD-10-CM
M06.351	Rheumatoid nodule, right hip	Diagnosis	ICD-10-CM
M06.352	Rheumatoid nodule, left hip	Diagnosis	ICD-10-CM
M06.359	Rheumatoid nodule, unspecified hip	Diagnosis	ICD-10-CM
M06.361	Rheumatoid nodule, right knee	Diagnosis	ICD-10-CM
M06.362	Rheumatoid nodule, left knee	Diagnosis	ICD-10-CM
M06.369	Rheumatoid nodule, unspecified knee	Diagnosis	ICD-10-CM
M06.371	Rheumatoid nodule, right ankle and foot	Diagnosis	ICD-10-CM
M06.372	Rheumatoid nodule, left ankle and foot	Diagnosis	ICD-10-CM
M06.379	Rheumatoid nodule, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.38	Rheumatoid nodule, vertebrae	Diagnosis	ICD-10-CM
M06.39	Rheumatoid nodule, multiple sites	Diagnosis	ICD-10-CM
M06.4	Inflammatory polyarthropathy	Diagnosis	ICD-10-CM
M06.80	Other specified rheumatoid arthritis, unspecified site	Diagnosis	ICD-10-CM
M06.811	Other specified rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M06.812	Other specified rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M06.819	Other specified rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M06.821	Other specified rheumatoid arthritis, right elbow	Diagnosis	ICD-10-CM
M06.822	Other specified rheumatoid arthritis, left elbow	Diagnosis	ICD-10-CM
M06.829	Other specified rheumatoid arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M06.831	Other specified rheumatoid arthritis, right wrist	Diagnosis	ICD-10-CM
M06.832	Other specified rheumatoid arthritis, left wrist	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M06.839	Other specified rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M06.841	Other specified rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM
M06.842	Other specified rheumatoid arthritis, left hand	Diagnosis	ICD-10-CM
M06.849	Other specified rheumatoid arthritis, unspecified hand	Diagnosis	ICD-10-CM
M06.851	Other specified rheumatoid arthritis, right hip	Diagnosis	ICD-10-CM
M06.852	Other specified rheumatoid arthritis, left hip	Diagnosis	ICD-10-CM
M06.859	Other specified rheumatoid arthritis, unspecified hip	Diagnosis	ICD-10-CM
M06.861	Other specified rheumatoid arthritis, right knee	Diagnosis	ICD-10-CM
M06.862	Other specified rheumatoid arthritis, left knee	Diagnosis	ICD-10-CM
M06.869	Other specified rheumatoid arthritis, unspecified knee	Diagnosis	ICD-10-CM
M06.871	Other specified rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M06.872	Other specified rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M06.879	Other specified rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.88	Other specified rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M06.89	Other specified rheumatoid arthritis, multiple sites	Diagnosis	ICD-10-CM
M06.9	Rheumatoid arthritis, unspecified	Diagnosis	ICD-10-CM
M08.00	Unspecified juvenile rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M08.011	Unspecified juvenile rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M08.012	Unspecified juvenile rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M08.019	Unspecified juvenile rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M08.021	Unspecified juvenile rheumatoid arthritis, right elbow	Diagnosis	ICD-10-CM
M08.022	Unspecified juvenile rheumatoid arthritis, left elbow	Diagnosis	ICD-10-CM
M08.029	Unspecified juvenile rheumatoid arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M08.031	Unspecified juvenile rheumatoid arthritis, right wrist	Diagnosis	ICD-10-CM
M08.032	Unspecified juvenile rheumatoid arthritis, left wrist	Diagnosis	ICD-10-CM
M08.039	Unspecified juvenile rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M08.041	Unspecified juvenile rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM
M08.042	Unspecified juvenile rheumatoid arthritis, left hand	Diagnosis	ICD-10-CM
M08.049	Unspecified juvenile rheumatoid arthritis, unspecified hand	Diagnosis	ICD-10-CM
M08.051	Unspecified juvenile rheumatoid arthritis, right hip	Diagnosis	ICD-10-CM
M08.052	Unspecified juvenile rheumatoid arthritis, left hip	Diagnosis	ICD-10-CM
M08.059	Unspecified juvenile rheumatoid arthritis, unspecified hip	Diagnosis	ICD-10-CM
M08.061	Unspecified juvenile rheumatoid arthritis, right knee	Diagnosis	ICD-10-CM
M08.062	Unspecified juvenile rheumatoid arthritis, left knee	Diagnosis	ICD-10-CM
M08.069	Unspecified juvenile rheumatoid arthritis, unspecified knee	Diagnosis	ICD-10-CM
M08.071	Unspecified juvenile rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M08.072	Unspecified juvenile rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M08.079	Unspecified juvenile rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.08	Unspecified juvenile rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M08.09	Unspecified juvenile rheumatoid arthritis, multiple sites	Diagnosis	ICD-10-CM
M08.20	Juvenile rheumatoid arthritis with systemic onset, unspecified site	Diagnosis	ICD-10-CM
M08.211	Juvenile rheumatoid arthritis with systemic onset, right shoulder	Diagnosis	ICD-10-CM
M08.212	Juvenile rheumatoid arthritis with systemic onset, left shoulder	Diagnosis	ICD-10-CM
M08.219	Juvenile rheumatoid arthritis with systemic onset, unspecified shoulder	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M08.221	Juvenile rheumatoid arthritis with systemic onset, right elbow	Diagnosis	ICD-10-CM
M08.222	Juvenile rheumatoid arthritis with systemic onset, left elbow	Diagnosis	ICD-10-CM
M08.229	Juvenile rheumatoid arthritis with systemic onset, unspecified elbow	Diagnosis	ICD-10-CM
M08.231	Juvenile rheumatoid arthritis with systemic onset, right wrist	Diagnosis	ICD-10-CM
M08.232	Juvenile rheumatoid arthritis with systemic onset, left wrist	Diagnosis	ICD-10-CM
M08.239	Juvenile rheumatoid arthritis with systemic onset, unspecified wrist	Diagnosis	ICD-10-CM
M08.241	Juvenile rheumatoid arthritis with systemic onset, right hand	Diagnosis	ICD-10-CM
M08.242	Juvenile rheumatoid arthritis with systemic onset, left hand	Diagnosis	ICD-10-CM
M08.249	Juvenile rheumatoid arthritis with systemic onset, unspecified hand	Diagnosis	ICD-10-CM
M08.251	Juvenile rheumatoid arthritis with systemic onset, right hip	Diagnosis	ICD-10-CM
M08.252	Juvenile rheumatoid arthritis with systemic onset, left hip	Diagnosis	ICD-10-CM
M08.259	Juvenile rheumatoid arthritis with systemic onset, unspecified hip	Diagnosis	ICD-10-CM
M08.261	Juvenile rheumatoid arthritis with systemic onset, right knee	Diagnosis	ICD-10-CM
M08.262	Juvenile rheumatoid arthritis with systemic onset, left knee	Diagnosis	ICD-10-CM
M08.269	Juvenile rheumatoid arthritis with systemic onset, unspecified knee	Diagnosis	ICD-10-CM
M08.271	Juvenile rheumatoid arthritis with systemic onset, right ankle and foot	Diagnosis	ICD-10-CM
M08.272	Juvenile rheumatoid arthritis with systemic onset, left ankle and foot	Diagnosis	ICD-10-CM
M08.279	Juvenile rheumatoid arthritis with systemic onset, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.28	Juvenile rheumatoid arthritis with systemic onset, vertebrae	Diagnosis	ICD-10-CM
M08.29	Juvenile rheumatoid arthritis with systemic onset, multiple sites	Diagnosis	ICD-10-CM
M08.3	Juvenile rheumatoid polyarthritis (seronegative)	Diagnosis	ICD-10-CM
M08.40	Pauciarticular juvenile rheumatoid arthritis, unspecified site	Diagnosis	ICD-10-CM
M08.411	Pauciarticular juvenile rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M08.412	Pauciarticular juvenile rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M08.419	Pauciarticular juvenile rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M08.421	Pauciarticular juvenile rheumatoid arthritis, right elbow	Diagnosis	ICD-10-CM
M08.422	Pauciarticular juvenile rheumatoid arthritis, left elbow	Diagnosis	ICD-10-CM
M08.429	Pauciarticular juvenile rheumatoid arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M08.431	Pauciarticular juvenile rheumatoid arthritis, right wrist	Diagnosis	ICD-10-CM
M08.432	Pauciarticular juvenile rheumatoid arthritis, left wrist	Diagnosis	ICD-10-CM
M08.439	Pauciarticular juvenile rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M08.441	Pauciarticular juvenile rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM
M08.442	Pauciarticular juvenile rheumatoid arthritis, left hand	Diagnosis	ICD-10-CM
M08.449	Pauciarticular juvenile rheumatoid arthritis, unspecified hand	Diagnosis	ICD-10-CM
M08.451	Pauciarticular juvenile rheumatoid arthritis, right hip	Diagnosis	ICD-10-CM
M08.452	Pauciarticular juvenile rheumatoid arthritis, left hip	Diagnosis	ICD-10-CM
M08.459	Pauciarticular juvenile rheumatoid arthritis, unspecified hip	Diagnosis	ICD-10-CM
M08.461	Pauciarticular juvenile rheumatoid arthritis, right knee	Diagnosis	ICD-10-CM
M08.462	Pauciarticular juvenile rheumatoid arthritis, left knee	Diagnosis	ICD-10-CM
M08.469	Pauciarticular juvenile rheumatoid arthritis, unspecified knee	Diagnosis	ICD-10-CM
M08.471	Pauciarticular juvenile rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M08.472	Pauciarticular juvenile rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M08.479	Pauciarticular juvenile rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M08.48	Pauciarticular juvenile rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M08.80	Other juvenile arthritis, unspecified site	Diagnosis	ICD-10-CM
M08.811	Other juvenile arthritis, right shoulder	Diagnosis	ICD-10-CM
M08.812	Other juvenile arthritis, left shoulder	Diagnosis	ICD-10-CM
M08.819	Other juvenile arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M08.821	Other juvenile arthritis, right elbow	Diagnosis	ICD-10-CM
M08.822	Other juvenile arthritis, left elbow	Diagnosis	ICD-10-CM
M08.829	Other juvenile arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M08.831	Other juvenile arthritis, right wrist	Diagnosis	ICD-10-CM
M08.832	Other juvenile arthritis, left wrist	Diagnosis	ICD-10-CM
M08.839	Other juvenile arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M08.841	Other juvenile arthritis, right hand	Diagnosis	ICD-10-CM
M08.842	Other juvenile arthritis, left hand	Diagnosis	ICD-10-CM
M08.849	Other juvenile arthritis, unspecified hand	Diagnosis	ICD-10-CM
M08.851	Other juvenile arthritis, right hip	Diagnosis	ICD-10-CM
M08.852	Other juvenile arthritis, left hip	Diagnosis	ICD-10-CM
M08.859	Other juvenile arthritis, unspecified hip	Diagnosis	ICD-10-CM
M08.861	Other juvenile arthritis, right knee	Diagnosis	ICD-10-CM
M08.862	Other juvenile arthritis, left knee	Diagnosis	ICD-10-CM
M08.869	Other juvenile arthritis, unspecified knee	Diagnosis	ICD-10-CM
M08.871	Other juvenile arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M08.872	Other juvenile arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M08.879	Other juvenile arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.88	Other juvenile arthritis, other specified site	Diagnosis	ICD-10-CM
M08.89	Other juvenile arthritis, multiple sites	Diagnosis	ICD-10-CM
M08.90	Juvenile arthritis, unspecified, unspecified site	Diagnosis	ICD-10-CM
M08.911	Juvenile arthritis, unspecified, right shoulder	Diagnosis	ICD-10-CM
M08.912	Juvenile arthritis, unspecified, left shoulder	Diagnosis	ICD-10-CM
M08.919	Juvenile arthritis, unspecified, unspecified shoulder	Diagnosis	ICD-10-CM
M08.921	Juvenile arthritis, unspecified, right elbow	Diagnosis	ICD-10-CM
M08.922	Juvenile arthritis, unspecified, left elbow	Diagnosis	ICD-10-CM
M08.929	Juvenile arthritis, unspecified, unspecified elbow	Diagnosis	ICD-10-CM
M08.931	Juvenile arthritis, unspecified, right wrist	Diagnosis	ICD-10-CM
M08.932	Juvenile arthritis, unspecified, left wrist	Diagnosis	ICD-10-CM
M08.939	Juvenile arthritis, unspecified, unspecified wrist	Diagnosis	ICD-10-CM
M08.941	Juvenile arthritis, unspecified, right hand	Diagnosis	ICD-10-CM
M08.942	Juvenile arthritis, unspecified, left hand	Diagnosis	ICD-10-CM
M08.949	Juvenile arthritis, unspecified, unspecified hand	Diagnosis	ICD-10-CM
M08.951	Juvenile arthritis, unspecified, right hip	Diagnosis	ICD-10-CM
M08.952	Juvenile arthritis, unspecified, left hip	Diagnosis	ICD-10-CM
M08.959	Juvenile arthritis, unspecified, unspecified hip	Diagnosis	ICD-10-CM
M08.961	Juvenile arthritis, unspecified, right knee	Diagnosis	ICD-10-CM
M08.962	Juvenile arthritis, unspecified, left knee	Diagnosis	ICD-10-CM
M08.969	Juvenile arthritis, unspecified, unspecified knee	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M08.971	Juvenile arthritis, unspecified, right ankle and foot	Diagnosis	ICD-10-CM
M08.972	Juvenile arthritis, unspecified, left ankle and foot	Diagnosis	ICD-10-CM
M08.979	Juvenile arthritis, unspecified, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.98	Juvenile arthritis, unspecified, vertebrae	Diagnosis	ICD-10-CM
M08.99	Juvenile arthritis, unspecified, multiple sites	Diagnosis	ICD-10-CM
M12.00	Chronic postrheumatic arthropathy [Jaccoud], unspecified site	Diagnosis	ICD-10-CM
M12.011	Chronic postrheumatic arthropathy [Jaccoud], right shoulder	Diagnosis	ICD-10-CM
M12.012	Chronic postrheumatic arthropathy [Jaccoud], left shoulder	Diagnosis	ICD-10-CM
M12.019	Chronic postrheumatic arthropathy [Jaccoud], unspecified shoulder	Diagnosis	ICD-10-CM
M12.021	Chronic postrheumatic arthropathy [Jaccoud], right elbow	Diagnosis	ICD-10-CM
M12.022	Chronic postrheumatic arthropathy [Jaccoud], left elbow	Diagnosis	ICD-10-CM
M12.029	Chronic postrheumatic arthropathy [Jaccoud], unspecified elbow	Diagnosis	ICD-10-CM
M12.031	Chronic postrheumatic arthropathy [Jaccoud], right wrist	Diagnosis	ICD-10-CM
M12.032	Chronic postrheumatic arthropathy [Jaccoud], left wrist	Diagnosis	ICD-10-CM
M12.039	Chronic postrheumatic arthropathy [Jaccoud], unspecified wrist	Diagnosis	ICD-10-CM
M12.041	Chronic postrheumatic arthropathy [Jaccoud], right hand	Diagnosis	ICD-10-CM
M12.042	Chronic postrheumatic arthropathy [Jaccoud], left hand	Diagnosis	ICD-10-CM
M12.049	Chronic postrheumatic arthropathy [Jaccoud], unspecified hand	Diagnosis	ICD-10-CM
M12.051	Chronic postrheumatic arthropathy [Jaccoud], right hip	Diagnosis	ICD-10-CM
M12.052	Chronic postrheumatic arthropathy [Jaccoud], left hip	Diagnosis	ICD-10-CM
M12.059	Chronic postrheumatic arthropathy [Jaccoud], unspecified hip	Diagnosis	ICD-10-CM
M12.061	Chronic postrheumatic arthropathy [Jaccoud], right knee	Diagnosis	ICD-10-CM
M12.062	Chronic postrheumatic arthropathy [Jaccoud], left knee	Diagnosis	ICD-10-CM
M12.069	Chronic postrheumatic arthropathy [Jaccoud], unspecified knee	Diagnosis	ICD-10-CM
M12.071	Chronic postrheumatic arthropathy [Jaccoud], right ankle and foot	Diagnosis	ICD-10-CM
M12.072	Chronic postrheumatic arthropathy [Jaccoud], left ankle and foot	Diagnosis	ICD-10-CM
M12.079	Chronic postrheumatic arthropathy [Jaccoud], unspecified ankle and foot	Diagnosis	ICD-10-CM
M12.08	Chronic postrheumatic arthropathy [Jaccoud], other specified site	Diagnosis	ICD-10-CM
M12.09	Chronic postrheumatic arthropathy [Jaccoud], multiple sites	Diagnosis	ICD-10-CM
L40.50	Arthropathic psoriasis, unspecified	Diagnosis	ICD-10-CM
L40.51	Distal interphalangeal psoriatic arthropathy	Diagnosis	ICD-10-CM
L40.52	Psoriatic arthritis mutilans	Diagnosis	ICD-10-CM
L40.53	Psoriatic spondylitis	Diagnosis	ICD-10-CM
L40.54	Psoriatic juvenile arthropathy	Diagnosis	ICD-10-CM
L40.59	Other psoriatic arthropathy	Diagnosis	ICD-10-CM
G70.00	Myasthenia gravis without (acute) exacerbation	Diagnosis	ICD-10-CM
G70.01	Myasthenia gravis with (acute) exacerbation	Diagnosis	ICD-10-CM
G35	Multiple sclerosis	Diagnosis	ICD-10-CM
M32.0	Drug-induced systemic lupus erythematosus	Diagnosis	ICD-10-CM
M32.10	Systemic lupus erythematosus, organ or system involvement unspecified	Diagnosis	ICD-10-CM
M32.11	Endocarditis in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M32.12	Pericarditis in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M32.13	Lung involvement in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M32.14	Glomerular disease in systemic lupus erythematosus	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M32.15	Tubulo-interstitial nephropathy in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M32.19	Other organ or system involvement in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M32.8	Other forms of systemic lupus erythematosus	Diagnosis	ICD-10-CM
M32.9	Systemic lupus erythematosus, unspecified	Diagnosis	ICD-10-CM
K50.00	Crohn's disease of small intestine without complications	Diagnosis	ICD-10-CM
K50.011	Crohn's disease of small intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.012	Crohn's disease of small intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.013	Crohn's disease of small intestine with fistula	Diagnosis	ICD-10-CM
K50.014	Crohn's disease of small intestine with abscess	Diagnosis	ICD-10-CM
K50.018	Crohn's disease of small intestine with other complication	Diagnosis	ICD-10-CM
K50.019	Crohn's disease of small intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.10	Crohn's disease of large intestine without complications	Diagnosis	ICD-10-CM
K50.111	Crohn's disease of large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.112	Crohn's disease of large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.113	Crohn's disease of large intestine with fistula	Diagnosis	ICD-10-CM
K50.114	Crohn's disease of large intestine with abscess	Diagnosis	ICD-10-CM
K50.118	Crohn's disease of large intestine with other complication	Diagnosis	ICD-10-CM
K50.119	Crohn's disease of large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.80	Crohn's disease of both small and large intestine without complications	Diagnosis	ICD-10-CM
K50.811	Crohn's disease of both small and large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.812	Crohn's disease of both small and large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.813	Crohn's disease of both small and large intestine with fistula	Diagnosis	ICD-10-CM
K50.814	Crohn's disease of both small and large intestine with abscess	Diagnosis	ICD-10-CM
K50.818	Crohn's disease of both small and large intestine with other complication	Diagnosis	ICD-10-CM
K50.819	Crohn's disease of both small and large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.90	Crohn's disease, unspecified, without complications	Diagnosis	ICD-10-CM
K50.911	Crohn's disease, unspecified, with rectal bleeding	Diagnosis	ICD-10-CM
K50.912	Crohn's disease, unspecified, with intestinal obstruction	Diagnosis	ICD-10-CM
K50.913	Crohn's disease, unspecified, with fistula	Diagnosis	ICD-10-CM
K50.914	Crohn's disease, unspecified, with abscess	Diagnosis	ICD-10-CM
K50.918	Crohn's disease, unspecified, with other complication	Diagnosis	ICD-10-CM
K50.919	Crohn's disease, unspecified, with unspecified complications	Diagnosis	ICD-10-CM
K51.00	Ulcerative (chronic) pancolitis without complications	Diagnosis	ICD-10-CM
K51.011	Ulcerative (chronic) pancolitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.012	Ulcerative (chronic) pancolitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.013	Ulcerative (chronic) pancolitis with fistula	Diagnosis	ICD-10-CM
K51.014	Ulcerative (chronic) pancolitis with abscess	Diagnosis	ICD-10-CM
K51.018	Ulcerative (chronic) pancolitis with other complication	Diagnosis	ICD-10-CM
K51.019	Ulcerative (chronic) pancolitis with unspecified complications	Diagnosis	ICD-10-CM
K51.20	Ulcerative (chronic) proctitis without complications	Diagnosis	ICD-10-CM
K51.211	Ulcerative (chronic) proctitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.212	Ulcerative (chronic) proctitis with intestinal obstruction	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
K51.213	Ulcerative (chronic) proctitis with fistula	Diagnosis	ICD-10-CM
K51.214	Ulcerative (chronic) proctitis with abscess	Diagnosis	ICD-10-CM
K51.218	Ulcerative (chronic) proctitis with other complication	Diagnosis	ICD-10-CM
K51.219	Ulcerative (chronic) proctitis with unspecified complications	Diagnosis	ICD-10-CM
K51.30	Ulcerative (chronic) rectosigmoiditis without complications	Diagnosis	ICD-10-CM
K51.311	Ulcerative (chronic) rectosigmoiditis with rectal bleeding	Diagnosis	ICD-10-CM
K51.312	Ulcerative (chronic) rectosigmoiditis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.313	Ulcerative (chronic) rectosigmoiditis with fistula	Diagnosis	ICD-10-CM
K51.314	Ulcerative (chronic) rectosigmoiditis with abscess	Diagnosis	ICD-10-CM
K51.318	Ulcerative (chronic) rectosigmoiditis with other complication	Diagnosis	ICD-10-CM
K51.319	Ulcerative (chronic) rectosigmoiditis with unspecified complications	Diagnosis	ICD-10-CM
K51.40	Inflammatory polyps of colon without complications	Diagnosis	ICD-10-CM
K51.411	Inflammatory polyps of colon with rectal bleeding	Diagnosis	ICD-10-CM
K51.412	Inflammatory polyps of colon with intestinal obstruction	Diagnosis	ICD-10-CM
K51.413	Inflammatory polyps of colon with fistula	Diagnosis	ICD-10-CM
K51.414	Inflammatory polyps of colon with abscess	Diagnosis	ICD-10-CM
K51.418	Inflammatory polyps of colon with other complication	Diagnosis	ICD-10-CM
K51.419	Inflammatory polyps of colon with unspecified complications	Diagnosis	ICD-10-CM
K51.50	Left sided colitis without complications	Diagnosis	ICD-10-CM
K51.511	Left sided colitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.512	Left sided colitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.513	Left sided colitis with fistula	Diagnosis	ICD-10-CM
K51.514	Left sided colitis with abscess	Diagnosis	ICD-10-CM
K51.518	Left sided colitis with other complication	Diagnosis	ICD-10-CM
K51.519	Left sided colitis with unspecified complications	Diagnosis	ICD-10-CM
K51.80	Other ulcerative colitis without complications	Diagnosis	ICD-10-CM
K51.811	Other ulcerative colitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.812	Other ulcerative colitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.813	Other ulcerative colitis with fistula	Diagnosis	ICD-10-CM
K51.814	Other ulcerative colitis with abscess	Diagnosis	ICD-10-CM
K51.818	Other ulcerative colitis with other complication	Diagnosis	ICD-10-CM
K51.819	Other ulcerative colitis with unspecified complications	Diagnosis	ICD-10-CM
K51.90	Ulcerative colitis, unspecified, without complications	Diagnosis	ICD-10-CM
K51.911	Ulcerative colitis, unspecified with rectal bleeding	Diagnosis	ICD-10-CM
K51.912	Ulcerative colitis, unspecified with intestinal obstruction	Diagnosis	ICD-10-CM
K51.913	Ulcerative colitis, unspecified with fistula	Diagnosis	ICD-10-CM
K51.914	Ulcerative colitis, unspecified with abscess	Diagnosis	ICD-10-CM
K51.918	Ulcerative colitis, unspecified with other complication	Diagnosis	ICD-10-CM
K51.919	Ulcerative colitis, unspecified with unspecified complications	Diagnosis	ICD-10-CM
K59.31	Toxic megacolon	Diagnosis	ICD-10-CM
E06.3	Autoimmune thyroiditis	Diagnosis	ICD-10-CM
E05.00	Thyrotoxicosis with diffuse goiter without thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E05.01	Thyrotoxicosis with diffuse goiter with thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
K90.0	Celiac disease	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E27.1	Primary adrenocortical insufficiency	Diagnosis	ICD-10-CM
E27.2	Addisonian crisis	Diagnosis	ICD-10-CM
E27.3	Drug-induced adrenocortical insufficiency	Diagnosis	ICD-10-CM
E27.40	Unspecified adrenocortical insufficiency	Diagnosis	ICD-10-CM
E27.49	Other adrenocortical insufficiency	Diagnosis	ICD-10-CM
E89.6	Postprocedural adrenocortical (-medullary) hypofunction	Diagnosis	ICD-10-CM
Bacterial Infection			
A02.21	Salmonella meningitis	Diagnosis	ICD-10-CM
A02.24	Salmonella osteomyelitis	Diagnosis	ICD-10-CM
A18.01	Tuberculosis of spine	Diagnosis	ICD-10-CM
A18.03	Tuberculosis of other bones	Diagnosis	ICD-10-CM
A39.0	Meningococcal meningitis	Diagnosis	ICD-10-CM
A39.2	Acute meningococemia	Diagnosis	ICD-10-CM
A39.3	Chronic meningococemia	Diagnosis	ICD-10-CM
A39.4	Meningococemia, unspecified	Diagnosis	ICD-10-CM
A39.51	Meningococcal endocarditis	Diagnosis	ICD-10-CM
A39.81	Meningococcal encephalitis	Diagnosis	ICD-10-CM
A40.0	Sepsis due to streptococcus, group A	Diagnosis	ICD-10-CM
A40.1	Sepsis due to streptococcus, group B	Diagnosis	ICD-10-CM
A40.3	Sepsis due to Streptococcus pneumoniae	Diagnosis	ICD-10-CM
A40.8	Other streptococcal sepsis	Diagnosis	ICD-10-CM
A40.9	Streptococcal sepsis, unspecified	Diagnosis	ICD-10-CM
A41.01	Sepsis due to Methicillin susceptible Staphylococcus aureus	Diagnosis	ICD-10-CM
A41.02	Sepsis due to Methicillin resistant Staphylococcus aureus	Diagnosis	ICD-10-CM
A41.1	Sepsis due to other specified staphylococcus	Diagnosis	ICD-10-CM
A41.2	Sepsis due to unspecified staphylococcus	Diagnosis	ICD-10-CM
A41.3	Sepsis due to Hemophilus influenzae	Diagnosis	ICD-10-CM
A41.4	Sepsis due to anaerobes	Diagnosis	ICD-10-CM
A41.50	Gram-negative sepsis, unspecified	Diagnosis	ICD-10-CM
A41.51	Sepsis due to Escherichia coli [E. coli]	Diagnosis	ICD-10-CM
A41.52	Sepsis due to Pseudomonas	Diagnosis	ICD-10-CM
A41.53	Sepsis due to Serratia	Diagnosis	ICD-10-CM
A41.59	Other Gram-negative sepsis	Diagnosis	ICD-10-CM
A41.81	Sepsis due to Enterococcus	Diagnosis	ICD-10-CM
A41.89	Other specified sepsis	Diagnosis	ICD-10-CM
A41.9	Sepsis, unspecified organism	Diagnosis	ICD-10-CM
A42.7	Actinomycotic sepsis	Diagnosis	ICD-10-CM
A48.1	Legionnaires' disease	Diagnosis	ICD-10-CM
A51.41	Secondary syphilitic meningitis	Diagnosis	ICD-10-CM
A52.03	Syphilitic endocarditis	Diagnosis	ICD-10-CM
A52.13	Late syphilitic meningitis	Diagnosis	ICD-10-CM
A52.14	Late syphilitic encephalitis	Diagnosis	ICD-10-CM
A54.40	Gonococcal infection of musculoskeletal system, unspecified	Diagnosis	ICD-10-CM
A54.41	Gonococcal spondylopathy	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
A54.42	Gonococcal arthritis	Diagnosis	ICD-10-CM
A54.43	Gonococcal osteomyelitis	Diagnosis	ICD-10-CM
A54.49	Gonococcal infection of other musculoskeletal tissue	Diagnosis	ICD-10-CM
A54.81	Gonococcal meningitis	Diagnosis	ICD-10-CM
A54.83	Gonococcal heart infection	Diagnosis	ICD-10-CM
G00.0	Hemophilus meningitis	Diagnosis	ICD-10-CM
G00.1	Pneumococcal meningitis	Diagnosis	ICD-10-CM
G00.2	Streptococcal meningitis	Diagnosis	ICD-10-CM
G00.3	Staphylococcal meningitis	Diagnosis	ICD-10-CM
G00.8	Other bacterial meningitis	Diagnosis	ICD-10-CM
G00.9	Bacterial meningitis, unspecified	Diagnosis	ICD-10-CM
G01	Meningitis in bacterial diseases classified elsewhere	Diagnosis	ICD-10-CM
G04.2	Bacterial meningoencephalitis and meningomyelitis, not elsewhere classified	Diagnosis	ICD-10-CM
G04.90	Encephalitis and encephalomyelitis, unspecified	Diagnosis	ICD-10-CM
G04.91	Myelitis, unspecified	Diagnosis	ICD-10-CM
G37.4	Subacute necrotizing myelitis of central nervous system	Diagnosis	ICD-10-CM
I33.0	Acute and subacute infective endocarditis	Diagnosis	ICD-10-CM
I33.9	Acute and subacute endocarditis, unspecified	Diagnosis	ICD-10-CM
J13	Pneumonia due to Streptococcus pneumoniae	Diagnosis	ICD-10-CM
J14	Pneumonia due to Hemophilus influenzae	Diagnosis	ICD-10-CM
J15.0	Pneumonia due to Klebsiella pneumoniae	Diagnosis	ICD-10-CM
J15.1	Pneumonia due to Pseudomonas	Diagnosis	ICD-10-CM
J15.20	Pneumonia due to staphylococcus, unspecified	Diagnosis	ICD-10-CM
J15.211	Pneumonia due to Methicillin susceptible Staphylococcus aureus	Diagnosis	ICD-10-CM
J15.212	Pneumonia due to Methicillin resistant Staphylococcus aureus	Diagnosis	ICD-10-CM
J15.29	Pneumonia due to other staphylococcus	Diagnosis	ICD-10-CM
J15.3	Pneumonia due to streptococcus, group B	Diagnosis	ICD-10-CM
J15.4	Pneumonia due to other streptococci	Diagnosis	ICD-10-CM
J15.5	Pneumonia due to Escherichia coli	Diagnosis	ICD-10-CM
J15.6	Pneumonia due to other Gram-negative bacteria	Diagnosis	ICD-10-CM
J15.7	Pneumonia due to Mycoplasma pneumoniae	Diagnosis	ICD-10-CM
J15.8	Pneumonia due to other specified bacteria	Diagnosis	ICD-10-CM
J15.9	Unspecified bacterial pneumonia	Diagnosis	ICD-10-CM
J16.0	Chlamydial pneumonia	Diagnosis	ICD-10-CM
J16.8	Pneumonia due to other specified infectious organisms	Diagnosis	ICD-10-CM
J18.1	Lobar pneumonia, unspecified organism	Diagnosis	ICD-10-CM
K12.2	Cellulitis and abscess of mouth	Diagnosis	ICD-10-CM
L02.01	Cutaneous abscess of face	Diagnosis	ICD-10-CM
L02.11	Cutaneous abscess of neck	Diagnosis	ICD-10-CM
L02.211	Cutaneous abscess of abdominal wall	Diagnosis	ICD-10-CM
L02.212	Cutaneous abscess of back [any part, except buttock]	Diagnosis	ICD-10-CM
L02.213	Cutaneous abscess of chest wall	Diagnosis	ICD-10-CM
L02.214	Cutaneous abscess of groin	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L02.215	Cutaneous abscess of perineum	Diagnosis	ICD-10-CM
L02.216	Cutaneous abscess of umbilicus	Diagnosis	ICD-10-CM
L02.219	Cutaneous abscess of trunk, unspecified	Diagnosis	ICD-10-CM
L02.31	Cutaneous abscess of buttock	Diagnosis	ICD-10-CM
L02.411	Cutaneous abscess of right axilla	Diagnosis	ICD-10-CM
L02.412	Cutaneous abscess of left axilla	Diagnosis	ICD-10-CM
L02.413	Cutaneous abscess of right upper limb	Diagnosis	ICD-10-CM
L02.414	Cutaneous abscess of left upper limb	Diagnosis	ICD-10-CM
L02.415	Cutaneous abscess of right lower limb	Diagnosis	ICD-10-CM
L02.416	Cutaneous abscess of left lower limb	Diagnosis	ICD-10-CM
L02.419	Cutaneous abscess of limb, unspecified	Diagnosis	ICD-10-CM
L02.511	Cutaneous abscess of right hand	Diagnosis	ICD-10-CM
L02.512	Cutaneous abscess of left hand	Diagnosis	ICD-10-CM
L02.519	Cutaneous abscess of unspecified hand	Diagnosis	ICD-10-CM
L02.611	Cutaneous abscess of right foot	Diagnosis	ICD-10-CM
L02.612	Cutaneous abscess of left foot	Diagnosis	ICD-10-CM
L02.619	Cutaneous abscess of unspecified foot	Diagnosis	ICD-10-CM
L02.811	Cutaneous abscess of head [any part, except face]	Diagnosis	ICD-10-CM
L02.818	Cutaneous abscess of other sites	Diagnosis	ICD-10-CM
L02.91	Cutaneous abscess, unspecified	Diagnosis	ICD-10-CM
L03.011	Cellulitis of right finger	Diagnosis	ICD-10-CM
L03.012	Cellulitis of left finger	Diagnosis	ICD-10-CM
L03.019	Cellulitis of unspecified finger	Diagnosis	ICD-10-CM
L03.021	Acute lymphangitis of right finger	Diagnosis	ICD-10-CM
L03.022	Acute lymphangitis of left finger	Diagnosis	ICD-10-CM
L03.029	Acute lymphangitis of unspecified finger	Diagnosis	ICD-10-CM
L03.031	Cellulitis of right toe	Diagnosis	ICD-10-CM
L03.032	Cellulitis of left toe	Diagnosis	ICD-10-CM
L03.039	Cellulitis of unspecified toe	Diagnosis	ICD-10-CM
L03.041	Acute lymphangitis of right toe	Diagnosis	ICD-10-CM
L03.042	Acute lymphangitis of left toe	Diagnosis	ICD-10-CM
L03.049	Acute lymphangitis of unspecified toe	Diagnosis	ICD-10-CM
L03.111	Cellulitis of right axilla	Diagnosis	ICD-10-CM
L03.112	Cellulitis of left axilla	Diagnosis	ICD-10-CM
L03.113	Cellulitis of right upper limb	Diagnosis	ICD-10-CM
L03.114	Cellulitis of left upper limb	Diagnosis	ICD-10-CM
L03.115	Cellulitis of right lower limb	Diagnosis	ICD-10-CM
L03.116	Cellulitis of left lower limb	Diagnosis	ICD-10-CM
L03.119	Cellulitis of unspecified part of limb	Diagnosis	ICD-10-CM
L03.121	Acute lymphangitis of right axilla	Diagnosis	ICD-10-CM
L03.122	Acute lymphangitis of left axilla	Diagnosis	ICD-10-CM
L03.123	Acute lymphangitis of right upper limb	Diagnosis	ICD-10-CM
L03.124	Acute lymphangitis of left upper limb	Diagnosis	ICD-10-CM
L03.125	Acute lymphangitis of right lower limb	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L03.126	Acute lymphangitis of left lower limb	Diagnosis	ICD-10-CM
L03.129	Acute lymphangitis of unspecified part of limb	Diagnosis	ICD-10-CM
L03.211	Cellulitis of face	Diagnosis	ICD-10-CM
L03.212	Acute lymphangitis of face	Diagnosis	ICD-10-CM
L03.213	Periorbital cellulitis	Diagnosis	ICD-10-CM
L03.221	Cellulitis of neck	Diagnosis	ICD-10-CM
L03.222	Acute lymphangitis of neck	Diagnosis	ICD-10-CM
L03.311	Cellulitis of abdominal wall	Diagnosis	ICD-10-CM
L03.312	Cellulitis of back [any part except buttock]	Diagnosis	ICD-10-CM
L03.313	Cellulitis of chest wall	Diagnosis	ICD-10-CM
L03.314	Cellulitis of groin	Diagnosis	ICD-10-CM
L03.315	Cellulitis of perineum	Diagnosis	ICD-10-CM
L03.316	Cellulitis of umbilicus	Diagnosis	ICD-10-CM
L03.317	Cellulitis of buttock	Diagnosis	ICD-10-CM
L03.319	Cellulitis of trunk, unspecified	Diagnosis	ICD-10-CM
L03.321	Acute lymphangitis of abdominal wall	Diagnosis	ICD-10-CM
L03.322	Acute lymphangitis of back [any part except buttock]	Diagnosis	ICD-10-CM
L03.323	Acute lymphangitis of chest wall	Diagnosis	ICD-10-CM
L03.324	Acute lymphangitis of groin	Diagnosis	ICD-10-CM
L03.325	Acute lymphangitis of perineum	Diagnosis	ICD-10-CM
L03.326	Acute lymphangitis of umbilicus	Diagnosis	ICD-10-CM
L03.327	Acute lymphangitis of buttock	Diagnosis	ICD-10-CM
L03.329	Acute lymphangitis of trunk, unspecified	Diagnosis	ICD-10-CM
L03.811	Cellulitis of head [any part, except face]	Diagnosis	ICD-10-CM
L03.818	Cellulitis of other sites	Diagnosis	ICD-10-CM
L03.891	Acute lymphangitis of head [any part, except face]	Diagnosis	ICD-10-CM
L03.898	Acute lymphangitis of other sites	Diagnosis	ICD-10-CM
L03.90	Cellulitis, unspecified	Diagnosis	ICD-10-CM
L03.91	Acute lymphangitis, unspecified	Diagnosis	ICD-10-CM
L98.3	Eosinophilic cellulitis [Wells]	Diagnosis	ICD-10-CM
M00.00	Staphylococcal arthritis, unspecified joint	Diagnosis	ICD-10-CM
M00.011	Staphylococcal arthritis, right shoulder	Diagnosis	ICD-10-CM
M00.012	Staphylococcal arthritis, left shoulder	Diagnosis	ICD-10-CM
M00.019	Staphylococcal arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M00.021	Staphylococcal arthritis, right elbow	Diagnosis	ICD-10-CM
M00.022	Staphylococcal arthritis, left elbow	Diagnosis	ICD-10-CM
M00.029	Staphylococcal arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M00.031	Staphylococcal arthritis, right wrist	Diagnosis	ICD-10-CM
M00.032	Staphylococcal arthritis, left wrist	Diagnosis	ICD-10-CM
M00.039	Staphylococcal arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M00.041	Staphylococcal arthritis, right hand	Diagnosis	ICD-10-CM
M00.042	Staphylococcal arthritis, left hand	Diagnosis	ICD-10-CM
M00.049	Staphylococcal arthritis, unspecified hand	Diagnosis	ICD-10-CM
M00.051	Staphylococcal arthritis, right hip	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M00.052	Staphylococcal arthritis, left hip	Diagnosis	ICD-10-CM
M00.059	Staphylococcal arthritis, unspecified hip	Diagnosis	ICD-10-CM
M00.061	Staphylococcal arthritis, right knee	Diagnosis	ICD-10-CM
M00.062	Staphylococcal arthritis, left knee	Diagnosis	ICD-10-CM
M00.069	Staphylococcal arthritis, unspecified knee	Diagnosis	ICD-10-CM
M00.071	Staphylococcal arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M00.072	Staphylococcal arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M00.079	Staphylococcal arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M00.08	Staphylococcal arthritis, vertebrae	Diagnosis	ICD-10-CM
M00.09	Staphylococcal polyarthritis	Diagnosis	ICD-10-CM
M00.10	Pneumococcal arthritis, unspecified joint	Diagnosis	ICD-10-CM
M00.111	Pneumococcal arthritis, right shoulder	Diagnosis	ICD-10-CM
M00.112	Pneumococcal arthritis, left shoulder	Diagnosis	ICD-10-CM
M00.119	Pneumococcal arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M00.121	Pneumococcal arthritis, right elbow	Diagnosis	ICD-10-CM
M00.122	Pneumococcal arthritis, left elbow	Diagnosis	ICD-10-CM
M00.129	Pneumococcal arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M00.131	Pneumococcal arthritis, right wrist	Diagnosis	ICD-10-CM
M00.132	Pneumococcal arthritis, left wrist	Diagnosis	ICD-10-CM
M00.139	Pneumococcal arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M00.141	Pneumococcal arthritis, right hand	Diagnosis	ICD-10-CM
M00.142	Pneumococcal arthritis, left hand	Diagnosis	ICD-10-CM
M00.149	Pneumococcal arthritis, unspecified hand	Diagnosis	ICD-10-CM
M00.151	Pneumococcal arthritis, right hip	Diagnosis	ICD-10-CM
M00.152	Pneumococcal arthritis, left hip	Diagnosis	ICD-10-CM
M00.159	Pneumococcal arthritis, unspecified hip	Diagnosis	ICD-10-CM
M00.161	Pneumococcal arthritis, right knee	Diagnosis	ICD-10-CM
M00.162	Pneumococcal arthritis, left knee	Diagnosis	ICD-10-CM
M00.169	Pneumococcal arthritis, unspecified knee	Diagnosis	ICD-10-CM
M00.171	Pneumococcal arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M00.172	Pneumococcal arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M00.179	Pneumococcal arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M00.18	Pneumococcal arthritis, vertebrae	Diagnosis	ICD-10-CM
M00.19	Pneumococcal polyarthritis	Diagnosis	ICD-10-CM
M00.20	Other streptococcal arthritis, unspecified joint	Diagnosis	ICD-10-CM
M00.211	Other streptococcal arthritis, right shoulder	Diagnosis	ICD-10-CM
M00.212	Other streptococcal arthritis, left shoulder	Diagnosis	ICD-10-CM
M00.219	Other streptococcal arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M00.221	Other streptococcal arthritis, right elbow	Diagnosis	ICD-10-CM
M00.222	Other streptococcal arthritis, left elbow	Diagnosis	ICD-10-CM
M00.229	Other streptococcal arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M00.231	Other streptococcal arthritis, right wrist	Diagnosis	ICD-10-CM
M00.232	Other streptococcal arthritis, left wrist	Diagnosis	ICD-10-CM
M00.239	Other streptococcal arthritis, unspecified wrist	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M00.241	Other streptococcal arthritis, right hand	Diagnosis	ICD-10-CM
M00.242	Other streptococcal arthritis, left hand	Diagnosis	ICD-10-CM
M00.249	Other streptococcal arthritis, unspecified hand	Diagnosis	ICD-10-CM
M00.251	Other streptococcal arthritis, right hip	Diagnosis	ICD-10-CM
M00.252	Other streptococcal arthritis, left hip	Diagnosis	ICD-10-CM
M00.259	Other streptococcal arthritis, unspecified hip	Diagnosis	ICD-10-CM
M00.261	Other streptococcal arthritis, right knee	Diagnosis	ICD-10-CM
M00.262	Other streptococcal arthritis, left knee	Diagnosis	ICD-10-CM
M00.269	Other streptococcal arthritis, unspecified knee	Diagnosis	ICD-10-CM
M00.271	Other streptococcal arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M00.272	Other streptococcal arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M00.279	Other streptococcal arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M00.28	Other streptococcal arthritis, vertebrae	Diagnosis	ICD-10-CM
M00.29	Other streptococcal polyarthritis	Diagnosis	ICD-10-CM
M00.80	Arthritis due to other bacteria, unspecified joint	Diagnosis	ICD-10-CM
M00.811	Arthritis due to other bacteria, right shoulder	Diagnosis	ICD-10-CM
M00.812	Arthritis due to other bacteria, left shoulder	Diagnosis	ICD-10-CM
M00.819	Arthritis due to other bacteria, unspecified shoulder	Diagnosis	ICD-10-CM
M00.821	Arthritis due to other bacteria, right elbow	Diagnosis	ICD-10-CM
M00.822	Arthritis due to other bacteria, left elbow	Diagnosis	ICD-10-CM
M00.829	Arthritis due to other bacteria, unspecified elbow	Diagnosis	ICD-10-CM
M00.831	Arthritis due to other bacteria, right wrist	Diagnosis	ICD-10-CM
M00.832	Arthritis due to other bacteria, left wrist	Diagnosis	ICD-10-CM
M00.839	Arthritis due to other bacteria, unspecified wrist	Diagnosis	ICD-10-CM
M00.841	Arthritis due to other bacteria, right hand	Diagnosis	ICD-10-CM
M00.842	Arthritis due to other bacteria, left hand	Diagnosis	ICD-10-CM
M00.849	Arthritis due to other bacteria, unspecified hand	Diagnosis	ICD-10-CM
M00.851	Arthritis due to other bacteria, right hip	Diagnosis	ICD-10-CM
M00.852	Arthritis due to other bacteria, left hip	Diagnosis	ICD-10-CM
M00.859	Arthritis due to other bacteria, unspecified hip	Diagnosis	ICD-10-CM
M00.861	Arthritis due to other bacteria, right knee	Diagnosis	ICD-10-CM
M00.862	Arthritis due to other bacteria, left knee	Diagnosis	ICD-10-CM
M00.869	Arthritis due to other bacteria, unspecified knee	Diagnosis	ICD-10-CM
M00.871	Arthritis due to other bacteria, right ankle and foot	Diagnosis	ICD-10-CM
M00.872	Arthritis due to other bacteria, left ankle and foot	Diagnosis	ICD-10-CM
M00.879	Arthritis due to other bacteria, unspecified ankle and foot	Diagnosis	ICD-10-CM
M00.88	Arthritis due to other bacteria, vertebrae	Diagnosis	ICD-10-CM
M00.89	Polyarthritis due to other bacteria	Diagnosis	ICD-10-CM
M00.9	Pyogenic arthritis, unspecified	Diagnosis	ICD-10-CM
M46.20	Osteomyelitis of vertebra, site unspecified	Diagnosis	ICD-10-CM
M46.21	Osteomyelitis of vertebra, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M46.22	Osteomyelitis of vertebra, cervical region	Diagnosis	ICD-10-CM
M46.23	Osteomyelitis of vertebra, cervicothoracic region	Diagnosis	ICD-10-CM
M46.24	Osteomyelitis of vertebra, thoracic region	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M46.25	Osteomyelitis of vertebra, thoracolumbar region	Diagnosis	ICD-10-CM
M46.26	Osteomyelitis of vertebra, lumbar region	Diagnosis	ICD-10-CM
M46.27	Osteomyelitis of vertebra, lumbosacral region	Diagnosis	ICD-10-CM
M46.28	Osteomyelitis of vertebra, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M86.00	Acute hematogenous osteomyelitis, unspecified site	Diagnosis	ICD-10-CM
M86.011	Acute hematogenous osteomyelitis, right shoulder	Diagnosis	ICD-10-CM
M86.012	Acute hematogenous osteomyelitis, left shoulder	Diagnosis	ICD-10-CM
M86.019	Acute hematogenous osteomyelitis, unspecified shoulder	Diagnosis	ICD-10-CM
M86.021	Acute hematogenous osteomyelitis, right humerus	Diagnosis	ICD-10-CM
M86.022	Acute hematogenous osteomyelitis, left humerus	Diagnosis	ICD-10-CM
M86.029	Acute hematogenous osteomyelitis, unspecified humerus	Diagnosis	ICD-10-CM
M86.031	Acute hematogenous osteomyelitis, right radius and ulna	Diagnosis	ICD-10-CM
M86.032	Acute hematogenous osteomyelitis, left radius and ulna	Diagnosis	ICD-10-CM
M86.039	Acute hematogenous osteomyelitis, unspecified radius and ulna	Diagnosis	ICD-10-CM
M86.041	Acute hematogenous osteomyelitis, right hand	Diagnosis	ICD-10-CM
M86.042	Acute hematogenous osteomyelitis, left hand	Diagnosis	ICD-10-CM
M86.049	Acute hematogenous osteomyelitis, unspecified hand	Diagnosis	ICD-10-CM
M86.051	Acute hematogenous osteomyelitis, right femur	Diagnosis	ICD-10-CM
M86.052	Acute hematogenous osteomyelitis, left femur	Diagnosis	ICD-10-CM
M86.059	Acute hematogenous osteomyelitis, unspecified femur	Diagnosis	ICD-10-CM
M86.061	Acute hematogenous osteomyelitis, right tibia and fibula	Diagnosis	ICD-10-CM
M86.062	Acute hematogenous osteomyelitis, left tibia and fibula	Diagnosis	ICD-10-CM
M86.069	Acute hematogenous osteomyelitis, unspecified tibia and fibula	Diagnosis	ICD-10-CM
M86.071	Acute hematogenous osteomyelitis, right ankle and foot	Diagnosis	ICD-10-CM
M86.072	Acute hematogenous osteomyelitis, left ankle and foot	Diagnosis	ICD-10-CM
M86.079	Acute hematogenous osteomyelitis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M86.08	Acute hematogenous osteomyelitis, other sites	Diagnosis	ICD-10-CM
M86.09	Acute hematogenous osteomyelitis, multiple sites	Diagnosis	ICD-10-CM
M86.10	Other acute osteomyelitis, unspecified site	Diagnosis	ICD-10-CM
M86.111	Other acute osteomyelitis, right shoulder	Diagnosis	ICD-10-CM
M86.112	Other acute osteomyelitis, left shoulder	Diagnosis	ICD-10-CM
M86.119	Other acute osteomyelitis, unspecified shoulder	Diagnosis	ICD-10-CM
M86.121	Other acute osteomyelitis, right humerus	Diagnosis	ICD-10-CM
M86.122	Other acute osteomyelitis, left humerus	Diagnosis	ICD-10-CM
M86.129	Other acute osteomyelitis, unspecified humerus	Diagnosis	ICD-10-CM
M86.131	Other acute osteomyelitis, right radius and ulna	Diagnosis	ICD-10-CM
M86.132	Other acute osteomyelitis, left radius and ulna	Diagnosis	ICD-10-CM
M86.139	Other acute osteomyelitis, unspecified radius and ulna	Diagnosis	ICD-10-CM
M86.141	Other acute osteomyelitis, right hand	Diagnosis	ICD-10-CM
M86.142	Other acute osteomyelitis, left hand	Diagnosis	ICD-10-CM
M86.149	Other acute osteomyelitis, unspecified hand	Diagnosis	ICD-10-CM
M86.151	Other acute osteomyelitis, right femur	Diagnosis	ICD-10-CM
M86.152	Other acute osteomyelitis, left femur	Diagnosis	ICD-10-CM
M86.159	Other acute osteomyelitis, unspecified femur	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M86.161	Other acute osteomyelitis, right tibia and fibula	Diagnosis	ICD-10-CM
M86.162	Other acute osteomyelitis, left tibia and fibula	Diagnosis	ICD-10-CM
M86.169	Other acute osteomyelitis, unspecified tibia and fibula	Diagnosis	ICD-10-CM
M86.171	Other acute osteomyelitis, right ankle and foot	Diagnosis	ICD-10-CM
M86.172	Other acute osteomyelitis, left ankle and foot	Diagnosis	ICD-10-CM
M86.179	Other acute osteomyelitis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M86.18	Other acute osteomyelitis, other site	Diagnosis	ICD-10-CM
M86.19	Other acute osteomyelitis, multiple sites	Diagnosis	ICD-10-CM
M86.20	Subacute osteomyelitis, unspecified site	Diagnosis	ICD-10-CM
M86.211	Subacute osteomyelitis, right shoulder	Diagnosis	ICD-10-CM
M86.212	Subacute osteomyelitis, left shoulder	Diagnosis	ICD-10-CM
M86.219	Subacute osteomyelitis, unspecified shoulder	Diagnosis	ICD-10-CM
M86.221	Subacute osteomyelitis, right humerus	Diagnosis	ICD-10-CM
M86.222	Subacute osteomyelitis, left humerus	Diagnosis	ICD-10-CM
M86.229	Subacute osteomyelitis, unspecified humerus	Diagnosis	ICD-10-CM
M86.231	Subacute osteomyelitis, right radius and ulna	Diagnosis	ICD-10-CM
M86.232	Subacute osteomyelitis, left radius and ulna	Diagnosis	ICD-10-CM
M86.239	Subacute osteomyelitis, unspecified radius and ulna	Diagnosis	ICD-10-CM
M86.241	Subacute osteomyelitis, right hand	Diagnosis	ICD-10-CM
M86.242	Subacute osteomyelitis, left hand	Diagnosis	ICD-10-CM
M86.249	Subacute osteomyelitis, unspecified hand	Diagnosis	ICD-10-CM
M86.251	Subacute osteomyelitis, right femur	Diagnosis	ICD-10-CM
M86.252	Subacute osteomyelitis, left femur	Diagnosis	ICD-10-CM
M86.259	Subacute osteomyelitis, unspecified femur	Diagnosis	ICD-10-CM
M86.261	Subacute osteomyelitis, right tibia and fibula	Diagnosis	ICD-10-CM
M86.262	Subacute osteomyelitis, left tibia and fibula	Diagnosis	ICD-10-CM
M86.269	Subacute osteomyelitis, unspecified tibia and fibula	Diagnosis	ICD-10-CM
M86.271	Subacute osteomyelitis, right ankle and foot	Diagnosis	ICD-10-CM
M86.272	Subacute osteomyelitis, left ankle and foot	Diagnosis	ICD-10-CM
M86.279	Subacute osteomyelitis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M86.28	Subacute osteomyelitis, other site	Diagnosis	ICD-10-CM
M86.29	Subacute osteomyelitis, multiple sites	Diagnosis	ICD-10-CM
M86.30	Chronic multifocal osteomyelitis, unspecified site	Diagnosis	ICD-10-CM
M86.311	Chronic multifocal osteomyelitis, right shoulder	Diagnosis	ICD-10-CM
M86.312	Chronic multifocal osteomyelitis, left shoulder	Diagnosis	ICD-10-CM
M86.319	Chronic multifocal osteomyelitis, unspecified shoulder	Diagnosis	ICD-10-CM
M86.321	Chronic multifocal osteomyelitis, right humerus	Diagnosis	ICD-10-CM
M86.322	Chronic multifocal osteomyelitis, left humerus	Diagnosis	ICD-10-CM
M86.329	Chronic multifocal osteomyelitis, unspecified humerus	Diagnosis	ICD-10-CM
M86.331	Chronic multifocal osteomyelitis, right radius and ulna	Diagnosis	ICD-10-CM
M86.332	Chronic multifocal osteomyelitis, left radius and ulna	Diagnosis	ICD-10-CM
M86.339	Chronic multifocal osteomyelitis, unspecified radius and ulna	Diagnosis	ICD-10-CM
M86.341	Chronic multifocal osteomyelitis, right hand	Diagnosis	ICD-10-CM
M86.342	Chronic multifocal osteomyelitis, left hand	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M86.349	Chronic multifocal osteomyelitis, unspecified hand	Diagnosis	ICD-10-CM
M86.351	Chronic multifocal osteomyelitis, right femur	Diagnosis	ICD-10-CM
M86.352	Chronic multifocal osteomyelitis, left femur	Diagnosis	ICD-10-CM
M86.359	Chronic multifocal osteomyelitis, unspecified femur	Diagnosis	ICD-10-CM
M86.361	Chronic multifocal osteomyelitis, right tibia and fibula	Diagnosis	ICD-10-CM
M86.362	Chronic multifocal osteomyelitis, left tibia and fibula	Diagnosis	ICD-10-CM
M86.369	Chronic multifocal osteomyelitis, unspecified tibia and fibula	Diagnosis	ICD-10-CM
M86.371	Chronic multifocal osteomyelitis, right ankle and foot	Diagnosis	ICD-10-CM
M86.372	Chronic multifocal osteomyelitis, left ankle and foot	Diagnosis	ICD-10-CM
M86.379	Chronic multifocal osteomyelitis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M86.38	Chronic multifocal osteomyelitis, other site	Diagnosis	ICD-10-CM
M86.39	Chronic multifocal osteomyelitis, multiple sites	Diagnosis	ICD-10-CM
M86.40	Chronic osteomyelitis with draining sinus, unspecified site	Diagnosis	ICD-10-CM
M86.411	Chronic osteomyelitis with draining sinus, right shoulder	Diagnosis	ICD-10-CM
M86.412	Chronic osteomyelitis with draining sinus, left shoulder	Diagnosis	ICD-10-CM
M86.419	Chronic osteomyelitis with draining sinus, unspecified shoulder	Diagnosis	ICD-10-CM
M86.421	Chronic osteomyelitis with draining sinus, right humerus	Diagnosis	ICD-10-CM
M86.422	Chronic osteomyelitis with draining sinus, left humerus	Diagnosis	ICD-10-CM
M86.429	Chronic osteomyelitis with draining sinus, unspecified humerus	Diagnosis	ICD-10-CM
M86.431	Chronic osteomyelitis with draining sinus, right radius and ulna	Diagnosis	ICD-10-CM
M86.432	Chronic osteomyelitis with draining sinus, left radius and ulna	Diagnosis	ICD-10-CM
M86.439	Chronic osteomyelitis with draining sinus, unspecified radius and ulna	Diagnosis	ICD-10-CM
M86.441	Chronic osteomyelitis with draining sinus, right hand	Diagnosis	ICD-10-CM
M86.442	Chronic osteomyelitis with draining sinus, left hand	Diagnosis	ICD-10-CM
M86.449	Chronic osteomyelitis with draining sinus, unspecified hand	Diagnosis	ICD-10-CM
M86.451	Chronic osteomyelitis with draining sinus, right femur	Diagnosis	ICD-10-CM
M86.452	Chronic osteomyelitis with draining sinus, left femur	Diagnosis	ICD-10-CM
M86.459	Chronic osteomyelitis with draining sinus, unspecified femur	Diagnosis	ICD-10-CM
M86.461	Chronic osteomyelitis with draining sinus, right tibia and fibula	Diagnosis	ICD-10-CM
M86.462	Chronic osteomyelitis with draining sinus, left tibia and fibula	Diagnosis	ICD-10-CM
M86.469	Chronic osteomyelitis with draining sinus, unspecified tibia and fibula	Diagnosis	ICD-10-CM
M86.471	Chronic osteomyelitis with draining sinus, right ankle and foot	Diagnosis	ICD-10-CM
M86.472	Chronic osteomyelitis with draining sinus, left ankle and foot	Diagnosis	ICD-10-CM
M86.479	Chronic osteomyelitis with draining sinus, unspecified ankle and foot	Diagnosis	ICD-10-CM
M86.48	Chronic osteomyelitis with draining sinus, other site	Diagnosis	ICD-10-CM
M86.49	Chronic osteomyelitis with draining sinus, multiple sites	Diagnosis	ICD-10-CM
M86.50	Other chronic hematogenous osteomyelitis, unspecified site	Diagnosis	ICD-10-CM
M86.511	Other chronic hematogenous osteomyelitis, right shoulder	Diagnosis	ICD-10-CM
M86.512	Other chronic hematogenous osteomyelitis, left shoulder	Diagnosis	ICD-10-CM
M86.519	Other chronic hematogenous osteomyelitis, unspecified shoulder	Diagnosis	ICD-10-CM
M86.521	Other chronic hematogenous osteomyelitis, right humerus	Diagnosis	ICD-10-CM
M86.522	Other chronic hematogenous osteomyelitis, left humerus	Diagnosis	ICD-10-CM
M86.529	Other chronic hematogenous osteomyelitis, unspecified humerus	Diagnosis	ICD-10-CM
M86.531	Other chronic hematogenous osteomyelitis, right radius and ulna	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M86.532	Other chronic hematogenous osteomyelitis, left radius and ulna	Diagnosis	ICD-10-CM
M86.539	Other chronic hematogenous osteomyelitis, unspecified radius and ulna	Diagnosis	ICD-10-CM
M86.541	Other chronic hematogenous osteomyelitis, right hand	Diagnosis	ICD-10-CM
M86.542	Other chronic hematogenous osteomyelitis, left hand	Diagnosis	ICD-10-CM
M86.549	Other chronic hematogenous osteomyelitis, unspecified hand	Diagnosis	ICD-10-CM
M86.551	Other chronic hematogenous osteomyelitis, right femur	Diagnosis	ICD-10-CM
M86.552	Other chronic hematogenous osteomyelitis, left femur	Diagnosis	ICD-10-CM
M86.559	Other chronic hematogenous osteomyelitis, unspecified femur	Diagnosis	ICD-10-CM
M86.561	Other chronic hematogenous osteomyelitis, right tibia and fibula	Diagnosis	ICD-10-CM
M86.562	Other chronic hematogenous osteomyelitis, left tibia and fibula	Diagnosis	ICD-10-CM
M86.569	Other chronic hematogenous osteomyelitis, unspecified tibia and fibula	Diagnosis	ICD-10-CM
M86.571	Other chronic hematogenous osteomyelitis, right ankle and foot	Diagnosis	ICD-10-CM
M86.572	Other chronic hematogenous osteomyelitis, left ankle and foot	Diagnosis	ICD-10-CM
M86.579	Other chronic hematogenous osteomyelitis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M86.58	Other chronic hematogenous osteomyelitis, other site	Diagnosis	ICD-10-CM
M86.59	Other chronic hematogenous osteomyelitis, multiple sites	Diagnosis	ICD-10-CM
M86.60	Other chronic osteomyelitis, unspecified site	Diagnosis	ICD-10-CM
M86.611	Other chronic osteomyelitis, right shoulder	Diagnosis	ICD-10-CM
M86.612	Other chronic osteomyelitis, left shoulder	Diagnosis	ICD-10-CM
M86.619	Other chronic osteomyelitis, unspecified shoulder	Diagnosis	ICD-10-CM
M86.621	Other chronic osteomyelitis, right humerus	Diagnosis	ICD-10-CM
M86.622	Other chronic osteomyelitis, left humerus	Diagnosis	ICD-10-CM
M86.629	Other chronic osteomyelitis, unspecified humerus	Diagnosis	ICD-10-CM
M86.631	Other chronic osteomyelitis, right radius and ulna	Diagnosis	ICD-10-CM
M86.632	Other chronic osteomyelitis, left radius and ulna	Diagnosis	ICD-10-CM
M86.639	Other chronic osteomyelitis, unspecified radius and ulna	Diagnosis	ICD-10-CM
M86.641	Other chronic osteomyelitis, right hand	Diagnosis	ICD-10-CM
M86.642	Other chronic osteomyelitis, left hand	Diagnosis	ICD-10-CM
M86.649	Other chronic osteomyelitis, unspecified hand	Diagnosis	ICD-10-CM
M86.651	Other chronic osteomyelitis, right thigh	Diagnosis	ICD-10-CM
M86.652	Other chronic osteomyelitis, left thigh	Diagnosis	ICD-10-CM
M86.659	Other chronic osteomyelitis, unspecified thigh	Diagnosis	ICD-10-CM
M86.661	Other chronic osteomyelitis, right tibia and fibula	Diagnosis	ICD-10-CM
M86.662	Other chronic osteomyelitis, left tibia and fibula	Diagnosis	ICD-10-CM
M86.669	Other chronic osteomyelitis, unspecified tibia and fibula	Diagnosis	ICD-10-CM
M86.671	Other chronic osteomyelitis, right ankle and foot	Diagnosis	ICD-10-CM
M86.672	Other chronic osteomyelitis, left ankle and foot	Diagnosis	ICD-10-CM
M86.679	Other chronic osteomyelitis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M86.68	Other chronic osteomyelitis, other site	Diagnosis	ICD-10-CM
M86.69	Other chronic osteomyelitis, multiple sites	Diagnosis	ICD-10-CM
M86.8X0	Other osteomyelitis, multiple sites	Diagnosis	ICD-10-CM
M86.8X1	Other osteomyelitis, shoulder	Diagnosis	ICD-10-CM
M86.8X2	Other osteomyelitis, upper arm	Diagnosis	ICD-10-CM
M86.8X3	Other osteomyelitis, forearm	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M86.8X4	Other osteomyelitis, hand	Diagnosis	ICD-10-CM
M86.8X5	Other osteomyelitis, thigh	Diagnosis	ICD-10-CM
M86.8X6	Other osteomyelitis, lower leg	Diagnosis	ICD-10-CM
M86.8X7	Other osteomyelitis, ankle and foot	Diagnosis	ICD-10-CM
M86.8X8	Other osteomyelitis, other site	Diagnosis	ICD-10-CM
M86.8X9	Other osteomyelitis, unspecified sites	Diagnosis	ICD-10-CM
M86.9	Osteomyelitis, unspecified	Diagnosis	ICD-10-CM
M90.80	Osteopathy in diseases classified elsewhere, unspecified site	Diagnosis	ICD-10-CM
M90.811	Osteopathy in diseases classified elsewhere, right shoulder	Diagnosis	ICD-10-CM
M90.812	Osteopathy in diseases classified elsewhere, left shoulder	Diagnosis	ICD-10-CM
M90.819	Osteopathy in diseases classified elsewhere, unspecified shoulder	Diagnosis	ICD-10-CM
M90.821	Osteopathy in diseases classified elsewhere, right upper arm	Diagnosis	ICD-10-CM
M90.822	Osteopathy in diseases classified elsewhere, left upper arm	Diagnosis	ICD-10-CM
M90.829	Osteopathy in diseases classified elsewhere, unspecified upper arm	Diagnosis	ICD-10-CM
M90.831	Osteopathy in diseases classified elsewhere, right forearm	Diagnosis	ICD-10-CM
M90.832	Osteopathy in diseases classified elsewhere, left forearm	Diagnosis	ICD-10-CM
M90.839	Osteopathy in diseases classified elsewhere, unspecified forearm	Diagnosis	ICD-10-CM
M90.841	Osteopathy in diseases classified elsewhere, right hand	Diagnosis	ICD-10-CM
M90.842	Osteopathy in diseases classified elsewhere, left hand	Diagnosis	ICD-10-CM
M90.849	Osteopathy in diseases classified elsewhere, unspecified hand	Diagnosis	ICD-10-CM
M90.851	Osteopathy in diseases classified elsewhere, right thigh	Diagnosis	ICD-10-CM
M90.852	Osteopathy in diseases classified elsewhere, left thigh	Diagnosis	ICD-10-CM
M90.859	Osteopathy in diseases classified elsewhere, unspecified thigh	Diagnosis	ICD-10-CM
M90.861	Osteopathy in diseases classified elsewhere, right lower leg	Diagnosis	ICD-10-CM
M90.862	Osteopathy in diseases classified elsewhere, left lower leg	Diagnosis	ICD-10-CM
M90.869	Osteopathy in diseases classified elsewhere, unspecified lower leg	Diagnosis	ICD-10-CM
M90.871	Osteopathy in diseases classified elsewhere, right ankle and foot	Diagnosis	ICD-10-CM
M90.872	Osteopathy in diseases classified elsewhere, left ankle and foot	Diagnosis	ICD-10-CM
M90.879	Osteopathy in diseases classified elsewhere, unspecified ankle and foot	Diagnosis	ICD-10-CM
M90.88	Osteopathy in diseases classified elsewhere, other site	Diagnosis	ICD-10-CM
M90.89	Osteopathy in diseases classified elsewhere, multiple sites	Diagnosis	ICD-10-CM
N10	Acute pyelonephritis	Diagnosis	ICD-10-CM
N11.0	Nonobstructive reflux-associated chronic pyelonephritis	Diagnosis	ICD-10-CM
N11.1	Chronic obstructive pyelonephritis	Diagnosis	ICD-10-CM
N11.8	Other chronic tubulo-interstitial nephritis	Diagnosis	ICD-10-CM
N11.9	Chronic tubulo-interstitial nephritis, unspecified	Diagnosis	ICD-10-CM
N12	Tubulo-interstitial nephritis, not specified as acute or chronic	Diagnosis	ICD-10-CM
N13.6	Pyonephrosis	Diagnosis	ICD-10-CM
N15.1	Renal and perinephric abscess	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
N28.84	Pyelitis cystica	Diagnosis	ICD-10-CM
N28.85	Pyeloureteritis cystica	Diagnosis	ICD-10-CM
N28.86	Ureteritis cystica	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
N39.0	Urinary tract infection, site not specified	Diagnosis	ICD-10-CM
R78.81	Bacteremia	Diagnosis	ICD-10-CM
Benign Prostatic Hyperplasia			
N40.2	Nodular prostate without lower urinary tract symptoms	Diagnosis	ICD-10-CM
N40.3	Nodular prostate with lower urinary tract symptoms	Diagnosis	ICD-10-CM
N40.0	Benign prostatic hyperplasia without lower urinary tract symptoms	Diagnosis	ICD-10-CM
N40.1	Benign prostatic hyperplasia with lower urinary tract symptoms	Diagnosis	ICD-10-CM
Bipolar Disorder			
F39	Unspecified mood [affective] disorder	Diagnosis	ICD-10-CM
F34.9	Persistent mood [affective] disorder, unspecified	Diagnosis	ICD-10-CM
F34.89	Other specified persistent mood disorders	Diagnosis	ICD-10-CM
F33.8	Other recurrent depressive disorders	Diagnosis	ICD-10-CM
F30.8	Other manic episodes	Diagnosis	ICD-10-CM
F31.89	Other bipolar disorder	Diagnosis	ICD-10-CM
F30.9	Manic episode, unspecified	Diagnosis	ICD-10-CM
F30.13	Manic episode, severe, without psychotic symptoms	Diagnosis	ICD-10-CM
F30.2	Manic episode, severe with psychotic symptoms	Diagnosis	ICD-10-CM
F30.10	Manic episode without psychotic symptoms, unspecified	Diagnosis	ICD-10-CM
F30.12	Manic episode without psychotic symptoms, moderate	Diagnosis	ICD-10-CM
F30.11	Manic episode without psychotic symptoms, mild	Diagnosis	ICD-10-CM
F30.3	Manic episode in partial remission	Diagnosis	ICD-10-CM
F30.4	Manic episode in full remission	Diagnosis	ICD-10-CM
F34.81	Disruptive mood dysregulation disorder	Diagnosis	ICD-10-CM
F31.81	Bipolar II disorder	Diagnosis	ICD-10-CM
F31.9	Bipolar disorder, unspecified	Diagnosis	ICD-10-CM
F31.77	Bipolar disorder, in partial remission, most recent episode mixed	Diagnosis	ICD-10-CM
F31.73	Bipolar disorder, in partial remission, most recent episode manic	Diagnosis	ICD-10-CM
F31.71	Bipolar disorder, in partial remission, most recent episode hypomanic	Diagnosis	ICD-10-CM
F31.75	Bipolar disorder, in partial remission, most recent episode depressed	Diagnosis	ICD-10-CM
F31.78	Bipolar disorder, in full remission, most recent episode mixed	Diagnosis	ICD-10-CM
F31.74	Bipolar disorder, in full remission, most recent episode manic	Diagnosis	ICD-10-CM
F31.72	Bipolar disorder, in full remission, most recent episode hypomanic	Diagnosis	ICD-10-CM
F31.76	Bipolar disorder, in full remission, most recent episode depressed	Diagnosis	ICD-10-CM
F31.70	Bipolar disorder, currently in remission, most recent episode unspecified	Diagnosis	ICD-10-CM
F31.60	Bipolar disorder, current episode mixed, unspecified	Diagnosis	ICD-10-CM
F31.63	Bipolar disorder, current episode mixed, severe, without psychotic	Diagnosis	ICD-10-CM
F31.64	Bipolar disorder, current episode mixed, severe, with psychotic features	Diagnosis	ICD-10-CM
F31.62	Bipolar disorder, current episode mixed, moderate	Diagnosis	ICD-10-CM
F31.61	Bipolar disorder, current episode mixed, mild	Diagnosis	ICD-10-CM
F31.10	Bipolar disorder, current episode manic without psychotic features, unspecified	Diagnosis	ICD-10-CM
F31.13	Bipolar disorder, current episode manic without psychotic features,	Diagnosis	ICD-10-CM
F31.12	Bipolar disorder, current episode manic without psychotic features, moderate	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F31.11	Bipolar disorder, current episode manic without psychotic features, mild	Diagnosis	ICD-10-CM
F31.2	Bipolar disorder, current episode manic severe with psychotic features	Diagnosis	ICD-10-CM
F31.0	Bipolar disorder, current episode hypomanic	Diagnosis	ICD-10-CM
F31.4	Bipolar disorder, current episode depressed, severe, without psychotic features	Diagnosis	ICD-10-CM
F31.5	Bipolar disorder, current episode depressed, severe, with psychotic features	Diagnosis	ICD-10-CM
F31.32	Bipolar disorder, current episode depressed, moderate	Diagnosis	ICD-10-CM
F31.30	Bipolar disorder, current episode depressed, mild or moderate severity, unspecified	Diagnosis	ICD-10-CM
F31.31	Bipolar disorder, current episode depressed, mild	Diagnosis	ICD-10-CM
Blind or Visually Impaired			
H54.3	Unqualified visual loss, both eyes	Diagnosis	ICD-10-CM
H54.2	Low vision, both eyes	Diagnosis	ICD-10-CM
H54.2X22	Low vision right eye category 2, 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
H54.1225	Low vision right eye category 2, blindness left eye category 5	Diagnosis	ICD-10-CM
H54.1224	Low vision right eye category 2, blindness left eye category 4	Diagnosis	ICD-10-CM
H54.1223	Low vision right eye category 2, blindness left eye category 3	Diagnosis	ICD-10-CM
H54.2X12	Low vision right eye category 1, low vision left eye category 2	Diagnosis	ICD-10-CM
H54.2X11	Low vision right eye category 1, low vision left eye category 1	Diagnosis	ICD-10-CM
H54.1215	Low vision right eye category 1, blindness left eye category 5	Diagnosis	ICD-10-CM
H54.1214	Low vision right eye category 1, blindness left eye category 4	Diagnosis	ICD-10-CM
H54.1213	Low vision right eye category 1, blindness left eye category 3	Diagnosis	ICD-10-CM
H54.8	Legal blindness, as defined in USA	Diagnosis	ICD-10-CM
H54.11	Blindness, right eye, low vision left eye	Diagnosis	ICD-10-CM
H54.10	Blindness, one eye, low vision other eye, unspecified eyes	Diagnosis	ICD-10-CM
H54.12	Blindness, left eye, low vision right eye	Diagnosis	ICD-10-CM
H54.0	Blindness, both eyes	Diagnosis	ICD-10-CM
H54.1152	Blindness right eye category 5, 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
H54.0X55	Blindness right eye category 5, blindness left eye category 5	Diagnosis	ICD-10-CM
H54.0X54	Blindness right eye category 5, blindness left eye category 4	Diagnosis	ICD-10-CM
H54.0X53	Blindness right eye category 5, blindness left eye category 3	Diagnosis	ICD-10-CM
H54.1142	Blindness right eye category 4, 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
H54.0X45	Blindness right eye category 4, blindness left eye category 5	Diagnosis	ICD-10-CM
H54.0X44	Blindness right eye category 4, blindness left eye category 4	Diagnosis	ICD-10-CM
H54.0X43	Blindness right eye category 4, blindness left eye category 3	Diagnosis	ICD-10-CM
H54.1132	Blindness right eye category 3, low vision left eye category 2	Diagnosis	ICD-10-CM
H54.1131	Blindness right eye category 3, low vision left eye category 1	Diagnosis	ICD-10-CM
H54.0X35	Blindness right eye category 3, blindness left eye category 5	Diagnosis	ICD-10-CM
H54.0X34	Blindness right eye category 3, blindness left eye category 4	Diagnosis	ICD-10-CM
H54.0X33	Blindness right eye category 3, blindness left eye category 3	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
Cataracts			
H26.109	Unspecified traumatic cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.101	Unspecified traumatic cataract, right eye	Diagnosis	ICD-10-CM
H26.102	Unspecified traumatic cataract, left eye	Diagnosis	ICD-10-CM
H26.103	Unspecified traumatic cataract, bilateral	Diagnosis	ICD-10-CM
H26.40	Unspecified secondary cataract	Diagnosis	ICD-10-CM
H26.009	Unspecified infantile and juvenile cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.001	Unspecified infantile and juvenile cataract, right eye	Diagnosis	ICD-10-CM
H26.002	Unspecified infantile and juvenile cataract, left eye	Diagnosis	ICD-10-CM
H26.003	Unspecified infantile and juvenile cataract, bilateral	Diagnosis	ICD-10-CM
H26.20	Unspecified complicated cataract	Diagnosis	ICD-10-CM
H26.9	Unspecified cataract	Diagnosis	ICD-10-CM
H25.9	Unspecified age-related cataract	Diagnosis	ICD-10-CM
E11.36	Type 2 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E10.36	Type 1 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
H26.139	Total traumatic cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.131	Total traumatic cataract, right eye	Diagnosis	ICD-10-CM
H26.132	Total traumatic cataract, left eye	Diagnosis	ICD-10-CM
H26.133	Total traumatic cataract, bilateral	Diagnosis	ICD-10-CM
H26.419	Soemmering's ring, unspecified eye	Diagnosis	ICD-10-CM
H26.411	Soemmering's ring, right eye	Diagnosis	ICD-10-CM
H26.412	Soemmering's ring, left eye	Diagnosis	ICD-10-CM
H26.413	Soemmering's ring, bilateral	Diagnosis	ICD-10-CM
H26.059	Posterior subcapsular polar infantile and juvenile cataract, unspecified	Diagnosis	ICD-10-CM
H26.051	Posterior subcapsular polar infantile and juvenile cataract, right eye	Diagnosis	ICD-10-CM
H26.052	Posterior subcapsular polar infantile and juvenile cataract, left eye	Diagnosis	ICD-10-CM
H26.053	Posterior subcapsular polar infantile and juvenile cataract, bilateral	Diagnosis	ICD-10-CM
H25.049	Posterior subcapsular polar age-related cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.041	Posterior subcapsular polar age-related cataract, right eye	Diagnosis	ICD-10-CM
H25.042	Posterior subcapsular polar age-related cataract, left eye	Diagnosis	ICD-10-CM
H25.043	Posterior subcapsular polar age-related cataract, bilateral	Diagnosis	ICD-10-CM
H26.129	Partially resolved traumatic cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.121	Partially resolved traumatic cataract, right eye	Diagnosis	ICD-10-CM
H26.122	Partially resolved traumatic cataract, left eye	Diagnosis	ICD-10-CM
H26.123	Partially resolved traumatic cataract, bilateral	Diagnosis	ICD-10-CM
E13.36	Other specified diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
H26.8	Other specified cataract	Diagnosis	ICD-10-CM
H26.499	Other secondary cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.491	Other secondary cataract, right eye	Diagnosis	ICD-10-CM
H26.492	Other secondary cataract, left eye	Diagnosis	ICD-10-CM
H26.493	Other secondary cataract, bilateral	Diagnosis	ICD-10-CM
H26.09	Other infantile and juvenile cataract	Diagnosis	ICD-10-CM
H25.099	Other age-related incipient cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.091	Other age-related incipient cataract, right eye	Diagnosis	ICD-10-CM

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

Code	Description	Code	
		Category	Code Type
H25.092	Other age-related incipient cataract, left eye	Diagnosis	ICD-10-CM
H25.093	Other age-related incipient cataract, bilateral	Diagnosis	ICD-10-CM
H25.89	Other age-related cataract	Diagnosis	ICD-10-CM
H26.119	Localized traumatic opacities, unspecified eye	Diagnosis	ICD-10-CM
H26.111	Localized traumatic opacities, right eye	Diagnosis	ICD-10-CM
H26.112	Localized traumatic opacities, left eye	Diagnosis	ICD-10-CM
H26.113	Localized traumatic opacities, bilateral	Diagnosis	ICD-10-CM
H26.039	Infantile and juvenile nuclear cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.031	Infantile and juvenile nuclear cataract, right eye	Diagnosis	ICD-10-CM
H26.032	Infantile and juvenile nuclear cataract, left eye	Diagnosis	ICD-10-CM
H26.033	Infantile and juvenile nuclear cataract, bilateral	Diagnosis	ICD-10-CM
H26.019	Infantile and juvenile cortical, lamellar, or zonular cataract, unspecified	Diagnosis	ICD-10-CM
H26.011	Infantile and juvenile cortical, lamellar, or zonular cataract, right eye	Diagnosis	ICD-10-CM
H26.012	Infantile and juvenile cortical, lamellar, or zonular cataract, left eye	Diagnosis	ICD-10-CM
H26.013	Infantile and juvenile cortical, lamellar, or zonular cataract, bilateral	Diagnosis	ICD-10-CM
E09.36	Drug or chemical induced diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
H26.30	Drug-induced cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.31	Drug-induced cataract, right eye	Diagnosis	ICD-10-CM
H26.32	Drug-induced cataract, left eye	Diagnosis	ICD-10-CM
H26.33	Drug-induced cataract, bilateral	Diagnosis	ICD-10-CM
E08.36	Diabetes mellitus due to underlying condition with diabetic cataract	Diagnosis	ICD-10-CM
H25.019	Cortical age-related cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.011	Cortical age-related cataract, right eye	Diagnosis	ICD-10-CM
H25.012	Cortical age-related cataract, left eye	Diagnosis	ICD-10-CM
H25.013	Cortical age-related cataract, bilateral	Diagnosis	ICD-10-CM
Q12.0	Congenital cataract	Diagnosis	ICD-10-CM
H26.069	Combined forms of infantile and juvenile cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.061	Combined forms of infantile and juvenile cataract, right eye	Diagnosis	ICD-10-CM
H26.062	Combined forms of infantile and juvenile cataract, left eye	Diagnosis	ICD-10-CM
H26.063	Combined forms of infantile and juvenile cataract, bilateral	Diagnosis	ICD-10-CM
H25.819	Combined forms of age-related cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.811	Combined forms of age-related cataract, right eye	Diagnosis	ICD-10-CM
H25.812	Combined forms of age-related cataract, left eye	Diagnosis	ICD-10-CM
H25.813	Combined forms of age-related cataract, bilateral	Diagnosis	ICD-10-CM
H26.219	Cataract with neovascularization, unspecified eye	Diagnosis	ICD-10-CM
H26.211	Cataract with neovascularization, right eye	Diagnosis	ICD-10-CM
H26.212	Cataract with neovascularization, left eye	Diagnosis	ICD-10-CM
H26.213	Cataract with neovascularization, bilateral	Diagnosis	ICD-10-CM
H26.229	Cataract secondary to ocular disorders (degenerative) (inflammatory), unspecified eye	Diagnosis	ICD-10-CM
H26.221	Cataract secondary to ocular disorders (degenerative) (inflammatory), right eye	Diagnosis	ICD-10-CM
H26.222	Cataract secondary to ocular disorders (degenerative) (inflammatory), left eye	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
H26.223	Cataract secondary to ocular disorders (degenerative) (inflammatory), bilateral	Diagnosis	ICD-10-CM
H26.049	Anterior subcapsular polar infantile and juvenile cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.041	Anterior subcapsular polar infantile and juvenile cataract, right eye	Diagnosis	ICD-10-CM
H26.042	Anterior subcapsular polar infantile and juvenile cataract, left eye	Diagnosis	ICD-10-CM
H26.043	Anterior subcapsular polar infantile and juvenile cataract, bilateral	Diagnosis	ICD-10-CM
H25.039	Anterior subcapsular polar age-related cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.031	Anterior subcapsular polar age-related cataract, right eye	Diagnosis	ICD-10-CM
H25.032	Anterior subcapsular polar age-related cataract, left eye	Diagnosis	ICD-10-CM
H25.033	Anterior subcapsular polar age-related cataract, bilateral	Diagnosis	ICD-10-CM
H25.10	Age-related nuclear cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.11	Age-related nuclear cataract, right eye	Diagnosis	ICD-10-CM
H25.12	Age-related nuclear cataract, left eye	Diagnosis	ICD-10-CM
H25.13	Age-related nuclear cataract, bilateral	Diagnosis	ICD-10-CM
H25.20	Age-related cataract, morgagnian type, unspecified eye	Diagnosis	ICD-10-CM
H25.21	Age-related cataract, morgagnian type, right eye	Diagnosis	ICD-10-CM
H25.22	Age-related cataract, morgagnian type, left eye	Diagnosis	ICD-10-CM
H25.23	Age-related cataract, morgagnian type, bilateral	Diagnosis	ICD-10-CM
Cerebral Palsy			
G80.0	Spastic quadriplegic cerebral palsy	Diagnosis	ICD-10-CM
G80.2	Spastic hemiplegic cerebral palsy	Diagnosis	ICD-10-CM
G80.1	Spastic diplegic cerebral palsy	Diagnosis	ICD-10-CM
G80.8	Other cerebral palsy	Diagnosis	ICD-10-CM
G80.9	Cerebral palsy, unspecified	Diagnosis	ICD-10-CM
G80.3	Athetoid cerebral palsy	Diagnosis	ICD-10-CM
G80.4	Ataxic cerebral palsy	Diagnosis	ICD-10-CM
Chronic Kidney Disease			
N05.9	Unspecified nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N05.8	Unspecified nephritic syndrome with other 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
N05.5	Unspecified nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N05.3	Unspecified nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N05.2	Unspecified nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N05.4	Unspecified nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N05.7	Unspecified nephritic syndrome with diffuse crescentic	Diagnosis	ICD-10-CM
N05.6	Unspecified nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N05.A	Unspecified nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
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
E10.29	Type 1 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
M32.15	Tubulo-interstitial nephropathy in systemic lupus erythematosus	Diagnosis	ICD-10-CM
A18.11	Tuberculosis of kidney and ureter	Diagnosis	ICD-10-CM
N14.4	Toxic nephropathy, not elsewhere classified	Diagnosis	ICD-10-CM
A52.75	Syphilis of kidney and ureter	Diagnosis	ICD-10-CM
M35.04	Sjogren syndrome with tubulo-interstitial nephropathy	Diagnosis	ICD-10-CM
M35.0A	Sjogren syndrome with glomerular disease	Diagnosis	ICD-10-CM
N16	Renal tubulo-interstitial disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N15.9	Renal tubulo-interstitial disease, unspecified	Diagnosis	ICD-10-CM
N26.9	Renal sclerosis, unspecified	Diagnosis	ICD-10-CM
Q61.4	Renal dysplasia	Diagnosis	ICD-10-CM
N02.9	Recurrent and persistent hematuria with unspecified morphologic	Diagnosis	ICD-10-CM
N02.8	Recurrent and persistent hematuria with other morphologic changes	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
N02.5	Recurrent and persistent hematuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N02.3	Recurrent and persistent hematuria with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.2	Recurrent and persistent hematuria with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N02.4	Recurrent and persistent hematuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.7	Recurrent and persistent hematuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N02.6	Recurrent and persistent hematuria with dense deposit disease	Diagnosis	ICD-10-CM
N02.A	Recurrent and persistent hematuria with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N01.9	Rapidly progressive nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N01.8	Rapidly progressive nephritic syndrome with other 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
N01.5	Rapidly progressive nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N01.3	Rapidly progressive nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
N01.2	Rapidly progressive nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N01.4	Rapidly progressive nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N01.7	Rapidly progressive nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N01.6	Rapidly progressive nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N01.A	Rapidly progressive nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N99.0	Postprocedural (acute) (chronic) kidney failure	Diagnosis	ICD-10-CM
Q61.3	Polycystic kidney, unspecified	Diagnosis	ICD-10-CM
Q61.2	Polycystic kidney, adult type	Diagnosis	ICD-10-CM
B52.0	Plasmodium malariae malaria with nephropathy	Diagnosis	ICD-10-CM
N15.8	Other specified renal tubulo-interstitial diseases	Diagnosis	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	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
Q61.19	Other polycystic kidney, infantile type	Diagnosis	ICD-10-CM
N25.89	Other disorders resulting from impaired renal tubular function	Diagnosis	ICD-10-CM
Q61.8	Other cystic kidney diseases	Diagnosis	ICD-10-CM
N04.9	Nephrotic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N04.8	Nephrotic syndrome with other 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
N04.5	Nephrotic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N04.3	Nephrotic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.2	Nephrotic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N04.4	Nephrotic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.7	Nephrotic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N04.6	Nephrotic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N04.A	Nephrotic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N14.2	Nephropathy induced by unspecified drug, medicament or biological substance	Diagnosis	ICD-10-CM
N14.1	Nephropathy induced by other drugs, medicaments and biological substances	Diagnosis	ICD-10-CM
N14.3	Nephropathy induced by heavy metals	Diagnosis	ICD-10-CM
N25.1	Nephrogenic diabetes insipidus	Diagnosis	ICD-10-CM
Q61.5	Medullary cystic kidney	Diagnosis	ICD-10-CM
N06.9	Isolated proteinuria with unspecified morphologic lesion	Diagnosis	ICD-10-CM
N06.8	Isolated proteinuria with other morphologic lesion	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
N06.5	Isolated proteinuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
N06.3	Isolated proteinuria with diffuse mesangial proliferative	Diagnosis	ICD-10-CM
N06.2	Isolated proteinuria with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N06.4	Isolated proteinuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N06.7	Isolated proteinuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N06.6	Isolated proteinuria with dense deposit disease	Diagnosis	ICD-10-CM
N06.A	Isolated proteinuria with C3 glomerulonephritis	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
I13.10	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
I13.2	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
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
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
N07.9	Hereditary nephropathy, not elsewhere classified with unspecified morphologic lesions	Diagnosis	ICD-10-CM
N07.8	Hereditary nephropathy, not elsewhere classified with other morphologic lesions	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
N07.5	Hereditary nephropathy, not elsewhere classified with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N07.3	Hereditary nephropathy, not elsewhere classified with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N07.2	Hereditary nephropathy, not elsewhere classified with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N07.4	Hereditary nephropathy, not elsewhere classified with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N07.7	Hereditary nephropathy, not elsewhere classified with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N07.6	Hereditary nephropathy, not elsewhere classified with dense deposit disease	Diagnosis	ICD-10-CM
N07.A	Hereditary nephropathy, not elsewhere classified with C3 glomerulonephritis	Diagnosis	ICD-10-CM
K76.7	Hepatorenal syndrome	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M10.38	Gout due to renal impairment, vertebrae	Diagnosis	ICD-10-CM
M10.339	Gout due to renal impairment, unspecified wrist	Diagnosis	ICD-10-CM
M10.30	Gout due to renal impairment, unspecified site	Diagnosis	ICD-10-CM
M10.319	Gout due to renal impairment, unspecified shoulder	Diagnosis	ICD-10-CM
M10.369	Gout due to renal impairment, unspecified knee	Diagnosis	ICD-10-CM
M10.359	Gout due to renal impairment, unspecified hip	Diagnosis	ICD-10-CM
M10.349	Gout due to renal impairment, unspecified hand	Diagnosis	ICD-10-CM
M10.329	Gout due to renal impairment, unspecified elbow	Diagnosis	ICD-10-CM
M10.379	Gout due to renal impairment, unspecified ankle and foot	Diagnosis	ICD-10-CM
M10.331	Gout due to renal impairment, right wrist	Diagnosis	ICD-10-CM
M10.311	Gout due to renal impairment, right shoulder	Diagnosis	ICD-10-CM
M10.361	Gout due to renal impairment, right knee	Diagnosis	ICD-10-CM
M10.351	Gout due to renal impairment, right hip	Diagnosis	ICD-10-CM
M10.341	Gout due to renal impairment, right hand	Diagnosis	ICD-10-CM
M10.321	Gout due to renal impairment, right elbow	Diagnosis	ICD-10-CM
M10.371	Gout due to renal impairment, right ankle and foot	Diagnosis	ICD-10-CM
M10.39	Gout due to renal impairment, multiple sites	Diagnosis	ICD-10-CM
M10.332	Gout due to renal impairment, left wrist	Diagnosis	ICD-10-CM
M10.312	Gout due to renal impairment, left shoulder	Diagnosis	ICD-10-CM
M10.362	Gout due to renal impairment, left knee	Diagnosis	ICD-10-CM
M10.352	Gout due to renal impairment, left hip	Diagnosis	ICD-10-CM
M10.342	Gout due to renal impairment, left hand	Diagnosis	ICD-10-CM
M10.322	Gout due to renal impairment, left elbow	Diagnosis	ICD-10-CM
M10.372	Gout due to renal impairment, left ankle and foot	Diagnosis	ICD-10-CM
N08	Glomerular disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
M32.14	Glomerular disease in systemic lupus erythematosus	Diagnosis	ICD-10-CM
N18.6	End stage renal disease	Diagnosis	ICD-10-CM
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
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
N25.9	Disorder resulting from impaired renal tubular function, unspecified	Diagnosis	ICD-10-CM
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication	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
Q61.11	Cystic dilatation of collecting ducts	Diagnosis	ICD-10-CM
Q61.02	Congenital multiple renal cysts	Diagnosis	ICD-10-CM
N03.9	Chronic nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N03.8	Chronic nephritic syndrome with other 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

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

Code	Description	Code Category	Code Type
N03.5	Chronic nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N03.3	Chronic nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.2	Chronic nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N03.4	Chronic nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.7	Chronic nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N03.6	Chronic nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N03.A	Chronic nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N18.9	Chronic kidney disease, unspecified	Diagnosis	ICD-10-CM
N18.5	Chronic kidney disease, stage 5	Diagnosis	ICD-10-CM
N18.4	Chronic kidney disease, stage 4 (severe)	Diagnosis	ICD-10-CM
N18.32	Chronic kidney disease, stage 3b	Diagnosis	ICD-10-CM
N18.31	Chronic kidney disease, stage 3a	Diagnosis	ICD-10-CM
N18.30	Chronic kidney disease, stage 3 unspecified	Diagnosis	ICD-10-CM
N18.3	Chronic kidney disease, stage 3 (moderate)	Diagnosis	ICD-10-CM
N18.2	Chronic kidney disease, stage 2 (mild)	Diagnosis	ICD-10-CM
N18.1	Chronic kidney disease, stage 1	Diagnosis	ICD-10-CM
N15.0	Balkan nephropathy	Diagnosis	ICD-10-CM
N26.1	Atrophy of kidney (terminal)	Diagnosis	ICD-10-CM
N14.0	Analgesic nephropathy	Diagnosis	ICD-10-CM
Coagulopathy			
D65	Disseminated intravascular coagulation [defibrination syndrome]	Diagnosis	ICD-10-CM
D66	Hereditary factor VIII deficiency	Diagnosis	ICD-10-CM
D67	Hereditary factor IX deficiency	Diagnosis	ICD-10-CM
D68.0	Von Willebrand's disease	Diagnosis	ICD-10-CM
D68.1	Hereditary factor XI deficiency	Diagnosis	ICD-10-CM
D68.2	Hereditary deficiency of other clotting factors	Diagnosis	ICD-10-CM
D68.311	Acquired hemophilia	Diagnosis	ICD-10-CM
D68.312	Antiphospholipid antibody with hemorrhagic disorder	Diagnosis	ICD-10-CM
D68.318	Other hemorrhagic disorder due to intrinsic circulating anticoagulants, antibodies, or inhibitors	Diagnosis	ICD-10-CM
D68.32	Hemorrhagic disorder due to extrinsic circulating anticoagulants	Diagnosis	ICD-10-CM
D68.4	Acquired coagulation factor deficiency	Diagnosis	ICD-10-CM
D68.8	Other specified coagulation defects	Diagnosis	ICD-10-CM
D68.9	Coagulation defect, unspecified	Diagnosis	ICD-10-CM
D69.1	Qualitative platelet defects	Diagnosis	ICD-10-CM
D69.6	Thrombocytopenia, unspecified	Diagnosis	ICD-10-CM
Colonoscopy			
0066T	Computed tomographic (CT) colonography (ie, virtual colonoscopy); screening	Procedure	CPT-3
0067T	Computed tomographic (CT) colonography (ie, virtual colonoscopy); diagnostic	Procedure	CPT-3

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

Code	Description	Code	
		Category	Code Type
45330	Sigmoidoscopy, flexible; diagnostic, with or without collection of specimen(s) by brushing or washing (separate procedure)	Procedure	CPT-4
45331	Sigmoidoscopy, flexible; with biopsy, single or multiple	Procedure	CPT-4
45332	Sigmoidoscopy, flexible; with removal of foreign body	Procedure	CPT-4
45333	Sigmoidoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps	Procedure	CPT-4
45334	Sigmoidoscopy, flexible; with control of bleeding (eg, injection, bipolar cautery, unipolar cautery, laser, heater probe, stapler, plasma coagulator)	Procedure	CPT-4
45335	Sigmoidoscopy, flexible; with directed submucosal injection(s), any substance	Procedure	CPT-4
45337	Sigmoidoscopy, flexible; with decompression (for pathologic distention) (eg, volvulus, megacolon), including placement of decompression tube, when performed	Procedure	CPT-4
45338	Sigmoidoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique	Procedure	CPT-4
45339	Sigmoidoscopy, flexible; with ablation of tumor(s), polyp(s), or other lesion(s) not amenable to removal by hot biopsy forceps, bipolar cautery or snare technique	Procedure	CPT-4
45340	Sigmoidoscopy, flexible; with transendoscopic balloon dilation	Procedure	CPT-4
45341	Sigmoidoscopy, flexible; with endoscopic ultrasound examination	Procedure	CPT-4
45342	Sigmoidoscopy, flexible; with transendoscopic ultrasound guided intramural or transmural fine needle aspiration/biopsy(s)	Procedure	CPT-4
45345	Sigmoidoscopy, flexible; with transendoscopic stent placement (includes predilation)	Procedure	CPT-4
45378	Colonoscopy, flexible; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)	Procedure	CPT-4
45379	Colonoscopy, flexible; with removal of foreign body(s)	Procedure	CPT-4
45380	Colonoscopy, flexible; with biopsy, single or multiple	Procedure	CPT-4
45381	Colonoscopy, flexible; with directed submucosal injection(s), any	Procedure	CPT-4
45382	Colonoscopy, flexible; with control of bleeding, any method	Procedure	CPT-4
45383	Colonoscopy, flexible, proximal to splenic flexure; with ablation of tumor(s), polyp(s), or other lesion(s) not amenable to removal by hot biopsy forceps, bipolar cautery or snare technique	Procedure	CPT-4
45384	Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps	Procedure	CPT-4
45385	Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique	Procedure	CPT-4
45386	Colonoscopy, flexible; with transendoscopic balloon dilation	Procedure	CPT-4
45387	Colonoscopy, flexible, proximal to splenic flexure; with transendoscopic stent placement (includes predilation)	Procedure	CPT-4
45388	Colonoscopy, flexible; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)	Procedure	CPT-4
45389	Colonoscopy, flexible; with endoscopic stent placement (includes pre- and post-dilation and guide wire passage, when performed)	Procedure	CPT-4

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

Code	Description	Code Category	Code Type
45390	Colonoscopy, flexible; with endoscopic mucosal resection	Procedure	CPT-4
45391	Colonoscopy, flexible; with endoscopic ultrasound examination limited to the rectum, sigmoid, descending, transverse, or ascending colon and cecum, and adjacent structures	Procedure	CPT-4
45392	Colonoscopy, flexible; with transendoscopic ultrasound guided intramural or transmural fine needle aspiration/biopsy(s), includes endoscopic ultrasound examination limited to the rectum, sigmoid, descending, transverse, or ascending colon and cecum, and adjacent structures	Procedure	CPT-4
G0104	Colorectal cancer screening; flexible sigmoidoscopy	Procedure	HCPCS
G0105	Colorectal cancer screening; colonoscopy on individual at high risk	Procedure	HCPCS
G0121	Colorectal cancer screening; colonoscopy on individual not meeting criteria for high risk	Procedure	HCPCS
Chronic Obstructive Pulmonary Disorder			
J42	Unspecified chronic bronchitis	Diagnosis	ICD-10-CM
J43.0	Unilateral pulmonary emphysema [MacLeod's syndrome]	Diagnosis	ICD-10-CM
J41.0	Simple chronic bronchitis	Diagnosis	ICD-10-CM
J43.1	Panlobular emphysema	Diagnosis	ICD-10-CM
J41.1	Mucopurulent chronic bronchitis	Diagnosis	ICD-10-CM
J41.8	Mixed simple and mucopurulent chronic bronchitis	Diagnosis	ICD-10-CM
J98.2	Interstitial emphysema	Diagnosis	ICD-10-CM
J43.9	Emphysema, unspecified	Diagnosis	ICD-10-CM
J98.3	Compensatory emphysema	Diagnosis	ICD-10-CM
J44.9	Chronic obstructive pulmonary disease, unspecified	Diagnosis	ICD-10-CM
J44.0	Chronic obstructive pulmonary disease with (acute) lower respiratory infection	Diagnosis	ICD-10-CM
J44.1	Chronic obstructive pulmonary disease with (acute) exacerbation	Diagnosis	ICD-10-CM
J43.2	Centrilobular emphysema	Diagnosis	ICD-10-CM
J40	Bronchitis, not specified as acute or chronic	Diagnosis	ICD-10-CM
J47.9	Bronchiectasis, uncomplicated	Diagnosis	ICD-10-CM
J47.0	Bronchiectasis with acute lower respiratory infection	Diagnosis	ICD-10-CM
J47.1	Bronchiectasis with (acute) exacerbation	Diagnosis	ICD-10-CM
Cystic Fibrosis			
E70.310	X-linked ocular albinism	Diagnosis	ICD-10-CM
E56.9	Vitamin deficiency, unspecified	Diagnosis	ICD-10-CM
E70.21	Tyrosinemia	Diagnosis	ICD-10-CM
E70.321	Tyrosinase positive oculocutaneous albinism	Diagnosis	ICD-10-CM
E70.320	Tyrosinase negative oculocutaneous albinism	Diagnosis	ICD-10-CM
E71.312	Short chain acyl CoA dehydrogenase deficiency	Diagnosis	ICD-10-CM
E71.41	Primary carnitine deficiency	Diagnosis	ICD-10-CM
E74.89	Other specified disorders of carbohydrate metabolism	Diagnosis	ICD-10-CM
E72.8	Other specified disorders of amino-acid metabolism	Diagnosis	ICD-10-CM
E70.39	Other specified albinism	Diagnosis	ICD-10-CM
E70.328	Other oculocutaneous albinism	Diagnosis	ICD-10-CM
E70.318	Other ocular albinism	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E70.1	Other hyperphenylalaninemias	Diagnosis	ICD-10-CM
E72.29	Other disorders of urea cycle metabolism	Diagnosis	ICD-10-CM
E70.29	Other disorders of tyrosine metabolism	Diagnosis	ICD-10-CM
E72.19	Other disorders of sulfur-bearing amino-acid metabolism	Diagnosis	ICD-10-CM
E72.59	Other disorders of glycine metabolism	Diagnosis	ICD-10-CM
E74.818	Other disorders of glucose transport	Diagnosis	ICD-10-CM
E74.29	Other disorders of galactose metabolism	Diagnosis	ICD-10-CM
E71.318	Other disorders of fatty-acid oxidation	Diagnosis	ICD-10-CM
E71.19	Other disorders of branched-chain amino-acid metabolism	Diagnosis	ICD-10-CM
E70.8	Other disorders of aromatic amino-acid metabolism	Diagnosis	ICD-10-CM
E70.89	Other disorders of aromatic amino-acid metabolism	Diagnosis	ICD-10-CM
E71.118	Other branched-chain organic acidurias	Diagnosis	ICD-10-CM
E70.338	Other albinism with hematologic abnormality	Diagnosis	ICD-10-CM
E25.8	Other adrenogenital disorders	Diagnosis	ICD-10-CM
E70.329	Oculocutaneous albinism, unspecified	Diagnosis	ICD-10-CM
E70.319	Ocular albinism, unspecified	Diagnosis	ICD-10-CM
E72.51	Non-ketotic hyperglycinemia	Diagnosis	ICD-10-CM
E71.314	Muscle carnitine palmitoyltransferase deficiency	Diagnosis	ICD-10-CM
E72.12	Methylenetetrahydrofolate reductase deficiency	Diagnosis	ICD-10-CM
E71.311	Medium chain acyl CoA dehydrogenase deficiency	Diagnosis	ICD-10-CM
E84.11	Meconium ileus in cystic fibrosis	Diagnosis	ICD-10-CM
E71.0	Maple-syrup-urine disease	Diagnosis	ICD-10-CM
E71.310	Long chain/very long chain acyl CoA dehydrogenase deficiency	Diagnosis	ICD-10-CM
E71.110	Isovaleric acidemia	Diagnosis	ICD-10-CM
E72.11	Homocystinuria	Diagnosis	ICD-10-CM
E70.331	Hermansky-Pudlak syndrome	Diagnosis	ICD-10-CM
E71.313	Glutaric aciduria type II	Diagnosis	ICD-10-CM
E74.810	Glucose transporter protein type 1 deficiency	Diagnosis	ICD-10-CM
E74.21	Galactosemia	Diagnosis	ICD-10-CM
E70.5	Disorders of tryptophan metabolism	Diagnosis	ICD-10-CM
E72.10	Disorders of sulfur-bearing amino-acid metabolism, unspecified	Diagnosis	ICD-10-CM
E72.4	Disorders of ornithine metabolism	Diagnosis	ICD-10-CM
E72.3	Disorders of lysine and hydroxylysine metabolism	Diagnosis	ICD-10-CM
E71.32	Disorders of ketone metabolism	Diagnosis	ICD-10-CM
E74.819	Disorders of glucose transport, unspecified	Diagnosis	ICD-10-CM
E74.20	Disorders of galactose metabolism, unspecified	Diagnosis	ICD-10-CM
E72.20	Disorder of urea cycle metabolism, unspecified	Diagnosis	ICD-10-CM
E70.20	Disorder of tyrosine metabolism, unspecified	Diagnosis	ICD-10-CM
E72.50	Disorder of glycine metabolism, unspecified	Diagnosis	ICD-10-CM
E71.2	Disorder of branched-chain amino-acid metabolism, unspecified	Diagnosis	ICD-10-CM
E70.9	Disorder of aromatic amino-acid metabolism, unspecified	Diagnosis	ICD-10-CM
D84.1	Defects in the complement system	Diagnosis	ICD-10-CM
E84.9	Cystic fibrosis, unspecified	Diagnosis	ICD-10-CM
E84.0	Cystic fibrosis with pulmonary manifestations	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E84.8	Cystic fibrosis with other manifestations	Diagnosis	ICD-10-CM
E84.19	Cystic fibrosis with other intestinal manifestations	Diagnosis	ICD-10-CM
E00.9	Congenital iodine-deficiency syndrome, unspecified	Diagnosis	ICD-10-CM
E00.0	Congenital iodine-deficiency syndrome, neurological type	Diagnosis	ICD-10-CM
E00.1	Congenital iodine-deficiency syndrome, myxedematous type	Diagnosis	ICD-10-CM
E00.2	Congenital iodine-deficiency syndrome, mixed type	Diagnosis	ICD-10-CM
E03.1	Congenital hypothyroidism without goiter	Diagnosis	ICD-10-CM
E03.0	Congenital hypothyroidism with diffuse goiter	Diagnosis	ICD-10-CM
E25.0	Congenital adrenogenital disorders associated with enzyme deficiency	Diagnosis	ICD-10-CM
E70.0	Classical phenylketonuria	Diagnosis	ICD-10-CM
E72.23	Citrullinemia	Diagnosis	ICD-10-CM
E70.330	Chediak-Higashi syndrome	Diagnosis	ICD-10-CM
D81.810	Biotinidase deficiency	Diagnosis	ICD-10-CM
E70.311	Autosomal recessive ocular albinism	Diagnosis	ICD-10-CM
E70.81	Aromatic L-amino acid decarboxylase deficiency	Diagnosis	ICD-10-CM
E72.22	Arginosuccinic aciduria	Diagnosis	ICD-10-CM
E72.21	Argininemia	Diagnosis	ICD-10-CM
E70.30	Albinism, unspecified	Diagnosis	ICD-10-CM
E70.339	Albinism with hematologic abnormality, unspecified	Diagnosis	ICD-10-CM
E25.9	Adrenogenital disorder, unspecified	Diagnosis	ICD-10-CM
E71.111	3-methylglutaconic aciduria	Diagnosis	ICD-10-CM
Deaf or Hearing Impairment			
H90.5	Unspecified sensorineural hearing loss	Diagnosis	ICD-10-CM
H91.90	Unspecified hearing loss, unspecified ear	Diagnosis	ICD-10-CM
H91.91	Unspecified hearing loss, right ear	Diagnosis	ICD-10-CM
H91.92	Unspecified hearing loss, left ear	Diagnosis	ICD-10-CM
H91.93	Unspecified hearing loss, bilateral	Diagnosis	ICD-10-CM
H90.41	Sensorineural hearing loss, unilateral, right ear, with unrestricted hearing on the contralateral side	Diagnosis	ICD-10-CM
H90.A21	Sensorineural hearing loss, unilateral, right ear, with restricted hearing on the contralateral side	Diagnosis	ICD-10-CM
H90.42	Sensorineural hearing loss, unilateral, left ear, with unrestricted hearing on the contralateral side	Diagnosis	ICD-10-CM
H90.A22	Sensorineural hearing loss, unilateral, left ear, with restricted hearing on the contralateral side	Diagnosis	ICD-10-CM
H90.3	Sensorineural hearing loss, bilateral	Diagnosis	ICD-10-CM
H91.09	Ototoxic hearing loss, unspecified ear	Diagnosis	ICD-10-CM
H91.01	Ototoxic hearing loss, right ear	Diagnosis	ICD-10-CM
H91.02	Ototoxic hearing loss, left ear	Diagnosis	ICD-10-CM
H91.03	Ototoxic hearing loss, bilateral	Diagnosis	ICD-10-CM
H91.8X9	Other specified hearing loss, unspecified ear	Diagnosis	ICD-10-CM
H91.8X1	Other specified hearing loss, right ear	Diagnosis	ICD-10-CM
H91.8X2	Other specified hearing loss, left ear	Diagnosis	ICD-10-CM
H91.8X3	Other specified hearing loss, bilateral	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
H90.8	Mixed conductive and sensorineural hearing loss, unspecified	Diagnosis	ICD-10-CM
H90.71	Mixed conductive and sensorineural hearing loss, unilateral, right ear, with unrestricted hearing on the contralateral side	Diagnosis	ICD-10-CM
H90.A31	Mixed conductive and sensorineural hearing loss, unilateral, right ear with restricted hearing on the contralateral side	Diagnosis	ICD-10-CM
H90.72	Mixed conductive and sensorineural hearing loss, unilateral, left ear, with unrestricted hearing on the contralateral side	Diagnosis	ICD-10-CM
H90.A32	Mixed conductive and sensorineural hearing loss, unilateral, left ear with restricted hearing on the contralateral side	Diagnosis	ICD-10-CM
H90.6	Mixed conductive and sensorineural hearing loss, bilateral	Diagnosis	ICD-10-CM
H91.3	Deaf nonspeaking, not elsewhere classified	Diagnosis	ICD-10-CM
Degenerative Disease of Central Nervous System			
E75.00	GM2 gangliosidosis, unspecified	Diagnosis	ICD-10-CM
E75.01	Sandhoff disease	Diagnosis	ICD-10-CM
E75.02	Tay-Sachs disease	Diagnosis	ICD-10-CM
E75.09	Other GM2 gangliosidosis	Diagnosis	ICD-10-CM
E75.10	Unspecified gangliosidosis	Diagnosis	ICD-10-CM
E75.11	Mucopolipidosis IV	Diagnosis	ICD-10-CM
E75.19	Other gangliosidosis	Diagnosis	ICD-10-CM
E75.23	Krabbe disease	Diagnosis	ICD-10-CM
E75.25	Metachromatic leukodystrophy	Diagnosis	ICD-10-CM
E75.29	Other sphingolipidosis	Diagnosis	ICD-10-CM
E75.4	Neuronal ceroid lipofuscinosis	Diagnosis	ICD-10-CM
F84.2	Rett's syndrome	Diagnosis	ICD-10-CM
G10	Huntington's disease	Diagnosis	ICD-10-CM
G11.0	Congenital nonprogressive ataxia	Diagnosis	ICD-10-CM
G11.1	Early-onset cerebellar ataxia	Diagnosis	ICD-10-CM
G11.2	Late-onset cerebellar ataxia	Diagnosis	ICD-10-CM
G11.3	Cerebellar ataxia with defective DNA repair	Diagnosis	ICD-10-CM
G11.4	Hereditary spastic paraplegia	Diagnosis	ICD-10-CM
G11.8	Other hereditary ataxias	Diagnosis	ICD-10-CM
G11.9	Hereditary ataxia, unspecified	Diagnosis	ICD-10-CM
G12.0	Infantile spinal muscular atrophy, type I [Werdnig-Hoffman]	Diagnosis	ICD-10-CM
G12.1	Other inherited spinal muscular atrophy	Diagnosis	ICD-10-CM
G12.20	Motor neuron disease, unspecified	Diagnosis	ICD-10-CM
G12.21	Amyotrophic lateral sclerosis	Diagnosis	ICD-10-CM
G12.22	Progressive bulbar palsy	Diagnosis	ICD-10-CM
G12.23	Primary lateral sclerosis	Diagnosis	ICD-10-CM
G12.24	Familial motor neuron disease	Diagnosis	ICD-10-CM
G12.25	Progressive spinal muscle atrophy	Diagnosis	ICD-10-CM
G12.29	Other motor neuron disease	Diagnosis	ICD-10-CM
G12.8	Other spinal muscular atrophies and related syndromes	Diagnosis	ICD-10-CM
G12.9	Spinal muscular atrophy, unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
G13.2	Systemic atrophy primarily affecting the central nervous system in myxedema	Diagnosis	ICD-10-CM
G13.8	Systemic atrophy primarily affecting central nervous system in other diseases classified elsewhere	Diagnosis	ICD-10-CM
G20	Parkinson's disease	Diagnosis	ICD-10-CM
G21.0	Malignant neuroleptic syndrome	Diagnosis	ICD-10-CM
G21.11	Neuroleptic induced parkinsonism	Diagnosis	ICD-10-CM
G21.19	Other drug induced secondary parkinsonism	Diagnosis	ICD-10-CM
G21.2	Secondary parkinsonism due to other external agents	Diagnosis	ICD-10-CM
G21.3	Postencephalitic parkinsonism	Diagnosis	ICD-10-CM
G21.4	Vascular parkinsonism	Diagnosis	ICD-10-CM
G21.8	Other secondary parkinsonism	Diagnosis	ICD-10-CM
G21.9	Secondary parkinsonism, unspecified	Diagnosis	ICD-10-CM
G23.0	Hallervorden-Spatz disease	Diagnosis	ICD-10-CM
G23.1	Progressive supranuclear ophthalmoplegia [Steele-Richardson-Olszewski]	Diagnosis	ICD-10-CM
G23.2	Striatonigral degeneration	Diagnosis	ICD-10-CM
G23.8	Other specified degenerative diseases of basal ganglia	Diagnosis	ICD-10-CM
G23.9	Degenerative disease of basal ganglia, unspecified	Diagnosis	ICD-10-CM
G24.01	Drug induced subacute dyskinesia	Diagnosis	ICD-10-CM
G24.02	Drug induced acute dystonia	Diagnosis	ICD-10-CM
G24.09	Other drug induced dystonia	Diagnosis	ICD-10-CM
G24.1	Genetic torsion dystonia	Diagnosis	ICD-10-CM
G24.2	Idiopathic nonfamilial dystonia	Diagnosis	ICD-10-CM
G24.3	Spasmodic torticollis	Diagnosis	ICD-10-CM
G24.4	Idiopathic orofacial dystonia	Diagnosis	ICD-10-CM
G24.5	Blepharospasm	Diagnosis	ICD-10-CM
G24.8	Other dystonia	Diagnosis	ICD-10-CM
G24.9	Dystonia, unspecified	Diagnosis	ICD-10-CM
G25.0	Essential tremor	Diagnosis	ICD-10-CM
G25.1	Drug-induced tremor	Diagnosis	ICD-10-CM
G25.2	Other specified forms of tremor	Diagnosis	ICD-10-CM
G25.3	Myoclonus	Diagnosis	ICD-10-CM
G25.4	Drug-induced chorea	Diagnosis	ICD-10-CM
G25.5	Other chorea	Diagnosis	ICD-10-CM
G25.61	Drug induced tics	Diagnosis	ICD-10-CM
G25.69	Other tics of organic origin	Diagnosis	ICD-10-CM
G25.70	Drug induced movement disorder, unspecified	Diagnosis	ICD-10-CM
G25.71	Drug induced akathisia	Diagnosis	ICD-10-CM
G25.79	Other drug induced movement disorders	Diagnosis	ICD-10-CM
G25.81	Restless legs syndrome	Diagnosis	ICD-10-CM
G25.82	Stiff-man syndrome	Diagnosis	ICD-10-CM
G25.83	Benign shuddering attacks	Diagnosis	ICD-10-CM
G25.89	Other specified extrapyramidal and movement disorders	Diagnosis	ICD-10-CM
G25.9	Extrapyramidal and movement disorder, unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
G26	Extrapyramidal and movement disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
G30.0	Alzheimer's disease with early onset	Diagnosis	ICD-10-CM
G30.1	Alzheimer's disease with late onset	Diagnosis	ICD-10-CM
G30.8	Other Alzheimer's disease	Diagnosis	ICD-10-CM
G30.9	Alzheimer's disease, unspecified	Diagnosis	ICD-10-CM
G31.01	Pick's disease	Diagnosis	ICD-10-CM
G31.09	Other frontotemporal dementia	Diagnosis	ICD-10-CM
G31.1	Senile degeneration of brain, not elsewhere classified	Diagnosis	ICD-10-CM
G31.2	Degeneration of nervous system due to alcohol	Diagnosis	ICD-10-CM
G31.81	Alpers disease	Diagnosis	ICD-10-CM
G31.82	Leigh's disease	Diagnosis	ICD-10-CM
G31.83	Dementia with Lewy bodies	Diagnosis	ICD-10-CM
G31.84	Mild cognitive impairment, so stated	Diagnosis	ICD-10-CM
G31.85	Corticobasal degeneration	Diagnosis	ICD-10-CM
G31.89	Other specified degenerative diseases of nervous system	Diagnosis	ICD-10-CM
G31.9	Degenerative disease of nervous system, unspecified	Diagnosis	ICD-10-CM
G32.0	Subacute combined degeneration of spinal cord in diseases classified elsewhere	Diagnosis	ICD-10-CM
G32.81	Cerebellar ataxia in diseases classified elsewhere	Diagnosis	ICD-10-CM
G80.3	Athetoid cerebral palsy	Diagnosis	ICD-10-CM
G89.0	Central pain syndrome	Diagnosis	ICD-10-CM
G89.11	Acute pain due to trauma	Diagnosis	ICD-10-CM
G89.12	Acute post-thoracotomy pain	Diagnosis	ICD-10-CM
G89.18	Other acute postprocedural pain	Diagnosis	ICD-10-CM
G89.21	Chronic pain due to trauma	Diagnosis	ICD-10-CM
G89.22	Chronic post-thoracotomy pain	Diagnosis	ICD-10-CM
G89.28	Other chronic postprocedural pain	Diagnosis	ICD-10-CM
G89.29	Other chronic pain	Diagnosis	ICD-10-CM
G89.3	Neoplasm related pain (acute) (chronic)	Diagnosis	ICD-10-CM
G89.4	Chronic pain syndrome	Diagnosis	ICD-10-CM
G90.01	Carotid sinus syncope	Diagnosis	ICD-10-CM
G90.09	Other idiopathic peripheral autonomic neuropathy	Diagnosis	ICD-10-CM
G90.2	Horner's syndrome	Diagnosis	ICD-10-CM
G90.3	Multi-system degeneration of the autonomic nervous system	Diagnosis	ICD-10-CM
G90.4	Autonomic dysreflexia	Diagnosis	ICD-10-CM
G90.50	Complex regional pain syndrome I, unspecified	Diagnosis	ICD-10-CM
G90.511	Complex regional pain syndrome I of right upper limb	Diagnosis	ICD-10-CM
G90.512	Complex regional pain syndrome I of left upper limb	Diagnosis	ICD-10-CM
G90.513	Complex regional pain syndrome I of upper limb, bilateral	Diagnosis	ICD-10-CM
G90.519	Complex regional pain syndrome I of unspecified upper limb	Diagnosis	ICD-10-CM
G90.521	Complex regional pain syndrome I of right lower limb	Diagnosis	ICD-10-CM
G90.522	Complex regional pain syndrome I of left lower limb	Diagnosis	ICD-10-CM
G90.523	Complex regional pain syndrome I of lower limb, bilateral	Diagnosis	ICD-10-CM
G90.529	Complex regional pain syndrome I of unspecified lower limb	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
G90.59	Complex regional pain syndrome I of other specified site	Diagnosis	ICD-10-CM
G90.8	Other disorders of autonomic nervous system	Diagnosis	ICD-10-CM
G90.9	Disorder of the autonomic nervous system, unspecified	Diagnosis	ICD-10-CM
G91.0	Communicating hydrocephalus	Diagnosis	ICD-10-CM
G91.1	Obstructive hydrocephalus	Diagnosis	ICD-10-CM
G91.2	(Idiopathic) normal pressure hydrocephalus	Diagnosis	ICD-10-CM
G91.3	Post-traumatic hydrocephalus, unspecified	Diagnosis	ICD-10-CM
G91.4	Hydrocephalus in diseases classified elsewhere	Diagnosis	ICD-10-CM
G91.8	Other hydrocephalus	Diagnosis	ICD-10-CM
G91.9	Hydrocephalus, unspecified	Diagnosis	ICD-10-CM
G93.7	Reye's syndrome	Diagnosis	ICD-10-CM
G93.89	Other specified disorders of brain	Diagnosis	ICD-10-CM
G93.9	Disorder of brain, unspecified	Diagnosis	ICD-10-CM
G94	Other disorders of brain in diseases classified elsewhere	Diagnosis	ICD-10-CM
G95.0	Syringomyelia and syringobulbia	Diagnosis	ICD-10-CM
G95.11	Acute infarction of spinal cord (embolic) (nonembolic)	Diagnosis	ICD-10-CM
G95.19	Other vascular myelopathies	Diagnosis	ICD-10-CM
G95.20	Unspecified cord compression	Diagnosis	ICD-10-CM
G95.29	Other cord compression	Diagnosis	ICD-10-CM
G95.81	Conus medullaris syndrome	Diagnosis	ICD-10-CM
G95.89	Other specified diseases of spinal cord	Diagnosis	ICD-10-CM
G95.9	Disease of spinal cord, unspecified	Diagnosis	ICD-10-CM
G99.0	Autonomic neuropathy in diseases classified elsewhere	Diagnosis	ICD-10-CM
G99.2	Myelopathy in diseases classified elsewhere	Diagnosis	ICD-10-CM
R52	Pain, unspecified	Diagnosis	ICD-10-CM
Depressive and Bipolar Disorders			
F32.89	Other specified depressive episodes	Diagnosis	ICD-10-CM
F33.8	Other recurrent depressive disorders	Diagnosis	ICD-10-CM
F32.8	Other depressive episodes	Diagnosis	ICD-10-CM
F31.89	Other bipolar disorder	Diagnosis	ICD-10-CM
F06.32	Mood disorder due to known physiological condition with major depressive-like episode	Diagnosis	ICD-10-CM
F06.31	Mood disorder due to known physiological condition with depressive features	Diagnosis	ICD-10-CM
F32.9	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-10-CM
F32.2	Major depressive disorder, single episode, severe without psychotic features	Diagnosis	ICD-10-CM
F32.3	Major depressive disorder, single episode, severe with psychotic features	Diagnosis	ICD-10-CM
F32.1	Major depressive disorder, single episode, moderate	Diagnosis	ICD-10-CM
F32.0	Major depressive disorder, single episode, mild	Diagnosis	ICD-10-CM
F32.4	Major depressive disorder, single episode, in partial remission	Diagnosis	ICD-10-CM
F32.5	Major depressive disorder, single episode, in full remission	Diagnosis	ICD-10-CM
F33.9	Major depressive disorder, recurrent, unspecified	Diagnosis	ICD-10-CM
F33.3	Major depressive disorder, recurrent, severe with psychotic symptoms	Diagnosis	ICD-10-CM

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

Code	Description	Code	
		Category	Code Type
F33.1	Major depressive disorder, recurrent, moderate	Diagnosis	ICD-10-CM
F33.0	Major depressive disorder, recurrent, mild	Diagnosis	ICD-10-CM
F33.40	Major depressive disorder, recurrent, in remission, unspecified	Diagnosis	ICD-10-CM
F33.41	Major depressive disorder, recurrent, in partial remission	Diagnosis	ICD-10-CM
F33.42	Major depressive disorder, recurrent, in full remission	Diagnosis	ICD-10-CM
F33.2	Major depressive disorder, recurrent severe without psychotic features	Diagnosis	ICD-10-CM
F34.1	Dysthymic disorder	Diagnosis	ICD-10-CM
F32.A	Depression, unspecified	Diagnosis	ICD-10-CM
F34.0	Cyclothymic disorder	Diagnosis	ICD-10-CM
F31.81	Bipolar II disorder	Diagnosis	ICD-10-CM
F31.9	Bipolar disorder, unspecified	Diagnosis	ICD-10-CM
F31.77	Bipolar disorder, in partial remission, most recent episode mixed	Diagnosis	ICD-10-CM
F31.73	Bipolar disorder, in partial remission, most recent episode manic	Diagnosis	ICD-10-CM
F31.71	Bipolar disorder, in partial remission, most recent episode hypomanic	Diagnosis	ICD-10-CM
F31.75	Bipolar disorder, in partial remission, most recent episode depressed	Diagnosis	ICD-10-CM
F31.78	Bipolar disorder, in full remission, most recent episode mixed	Diagnosis	ICD-10-CM
F31.76	Bipolar disorder, in full remission, most recent episode depressed	Diagnosis	ICD-10-CM
F31.60	Bipolar disorder, current episode mixed, unspecified	Diagnosis	ICD-10-CM
F31.63	Bipolar disorder, current episode mixed, severe, without psychotic	Diagnosis	ICD-10-CM
F31.64	Bipolar disorder, current episode mixed, severe, with psychotic features	Diagnosis	ICD-10-CM
F31.62	Bipolar disorder, current episode mixed, moderate	Diagnosis	ICD-10-CM
F31.61	Bipolar disorder, current episode mixed, mild	Diagnosis	ICD-10-CM
F31.10	Bipolar disorder, current episode manic without psychotic features, unspecified	Diagnosis	ICD-10-CM
F31.13	Bipolar disorder, current episode manic without psychotic features,	Diagnosis	ICD-10-CM
F31.12	Bipolar disorder, current episode manic without psychotic features, moderate	Diagnosis	ICD-10-CM
F31.11	Bipolar disorder, current episode manic without psychotic features, mild	Diagnosis	ICD-10-CM
F31.2	Bipolar disorder, current episode manic severe with psychotic features	Diagnosis	ICD-10-CM
F31.0	Bipolar disorder, current episode hypomanic	Diagnosis	ICD-10-CM
F31.4	Bipolar disorder, current episode depressed, severe, without psychotic features	Diagnosis	ICD-10-CM
F31.5	Bipolar disorder, current episode depressed, severe, with psychotic features	Diagnosis	ICD-10-CM
F31.32	Bipolar disorder, current episode depressed, moderate	Diagnosis	ICD-10-CM
F31.30	Bipolar disorder, current episode depressed, mild or moderate severity, unspecified	Diagnosis	ICD-10-CM
F31.31	Bipolar disorder, current episode depressed, mild	Diagnosis	ICD-10-CM
F43.23	Adjustment disorder with mixed anxiety and depressed mood	Diagnosis	ICD-10-CM
F43.21	Adjustment disorder with depressed mood	Diagnosis	ICD-10-CM
Depressive Disorders			
F32.89	Other specified depressive episodes	Diagnosis	ICD-10-CM
F33.8	Other recurrent depressive disorders	Diagnosis	ICD-10-CM
F32.9	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F32.2	Major depressive disorder, single episode, severe without psychotic features	Diagnosis	ICD-10-CM
F32.3	Major depressive disorder, single episode, severe with psychotic features	Diagnosis	ICD-10-CM
F32.1	Major depressive disorder, single episode, moderate	Diagnosis	ICD-10-CM
F32.0	Major depressive disorder, single episode, mild	Diagnosis	ICD-10-CM
F32.4	Major depressive disorder, single episode, in partial remission	Diagnosis	ICD-10-CM
F32.5	Major depressive disorder, single episode, in full remission	Diagnosis	ICD-10-CM
F33.9	Major depressive disorder, recurrent, unspecified	Diagnosis	ICD-10-CM
F33.3	Major depressive disorder, recurrent, severe with psychotic symptoms	Diagnosis	ICD-10-CM
F33.1	Major depressive disorder, recurrent, moderate	Diagnosis	ICD-10-CM
F33.0	Major depressive disorder, recurrent, mild	Diagnosis	ICD-10-CM
F33.40	Major depressive disorder, recurrent, in remission, unspecified	Diagnosis	ICD-10-CM
F33.41	Major depressive disorder, recurrent, in partial remission	Diagnosis	ICD-10-CM
F33.42	Major depressive disorder, recurrent, in full remission	Diagnosis	ICD-10-CM
F33.2	Major depressive disorder, recurrent severe without psychotic features	Diagnosis	ICD-10-CM
F34.1	Dysthymic disorder	Diagnosis	ICD-10-CM
F32.A	Depression, unspecified	Diagnosis	ICD-10-CM
Developmental Delay			
F89	Unspecified disorder of psychological development	Diagnosis	ICD-10-CM
F82	Specific developmental disorder of motor function	Diagnosis	ICD-10-CM
F88	Other disorders of psychological development	Diagnosis	ICD-10-CM
F81.9	Developmental disorder of scholastic skills, unspecified	Diagnosis	ICD-10-CM
Diabetes			
E11.9	Type 2 diabetes mellitus without complications	Diagnosis	ICD-10-CM
E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.8	Type 2 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E11.3559	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	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
E11.3499	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3491	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

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

Code	Description	Code Category	Code Type
E11.349	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3419	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3411	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
E11.341	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3599	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	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
E11.359	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema	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
E11.3531	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
E11.3529	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	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
E11.3519	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
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

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

Code	Description	Code Category	Code Type
E11.3513	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.351	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema	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
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
E11.630	Type 2 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E11.69	Type 2 diabetes mellitus with other specified complication	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
E11.638	Type 2 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E11.39	Type 2 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.618	Type 2 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E11.59	Type 2 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E11.3399	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3391	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
E11.339	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3319	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3311	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

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

Code	Description	Code Category	Code Type
E11.331	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3299	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3291	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
E11.329	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3219	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3211	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
E11.321	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	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
E11.649	Type 2 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E11.641	Type 2 diabetes mellitus with hypoglycemia with coma	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
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E11.621	Type 2 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E11.51	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E11.52	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E11.40	Type 2 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E11.610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E11.37X9	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E11.37X1	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
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
E11.620	Type 2 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.36	Type 2 diabetes mellitus with diabetic cataract	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
E10.9	Type 1 diabetes mellitus without complications	Diagnosis	ICD-10-CM
E10.319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.8	Type 1 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E10.3499	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3491	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
E10.349	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3419	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3411	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
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
E10.341	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.359	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3519	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	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

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

Code	Description	Code Category	Code Type
E10.3513	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.351	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.630	Type 1 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E10.69	Type 1 diabetes mellitus with other specified complication	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
E10.638	Type 1 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E10.39	Type 1 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E10.49	Type 1 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E10.618	Type 1 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E10.59	Type 1 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E10.3399	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3391	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
E10.339	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3319	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3311	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
E10.331	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3299	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3291	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
E10.329	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E10.3219	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3211	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
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
E10.321	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	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
E10.649	Type 1 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E10.641	Type 1 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E10.65	Type 1 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E10.621	Type 1 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E10.42	Type 1 diabetes mellitus with diabetic polyneuropathy	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	Diagnosis	ICD-10-CM
E10.40	Type 1 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E10.610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E10.41	Type 1 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E10.37X9	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	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
E10.620	Type 1 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E10.36	Type 1 diabetes mellitus with diabetic cataract	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
E13.311	Other specified diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	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
E13.00	Other specified diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E13.01	Other specified diabetes mellitus with hyperosmolarity with coma	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
E09.9	Drug or chemical induced diabetes mellitus without complications	Diagnosis	ICD-10-CM
E09.319	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.311	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.8	Drug or chemical induced diabetes mellitus with unspecified	Diagnosis	ICD-10-CM
E09.3559	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E09.3551	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E09.3552	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E09.3553	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E09.3499	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.3491	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E09.3492	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E09.3493	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E09.349	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3419	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.3411	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E09.3412	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E09.3413	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E09.341	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3599	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.3591	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E09.3592	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E09.3593	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E09.359	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3539	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E09.3531	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E09.3532	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E09.3533	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E09.3529	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E09.3521	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E09.3522	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left	Diagnosis	ICD-10-CM
E09.3523	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E09.3519	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.3511	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E09.3512	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E09.3513	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E09.351	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3549	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E09.3541	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E09.3542	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E09.3543	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E09.630	Drug or chemical induced diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E09.69	Drug or chemical induced diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E09.622	Drug or chemical induced diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E09.628	Drug or chemical induced diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E09.638	Drug or chemical induced diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E09.39	Drug or chemical induced diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E09.618	Drug or chemical induced diabetes mellitus with other diabetic	Diagnosis	ICD-10-CM
E09.59	Drug or chemical induced diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E09.49	Drug or chemical induced diabetes mellitus with neurological complications with other diabetic neurological complication	Diagnosis	ICD-10-CM
E09.42	Drug or chemical induced diabetes mellitus with neurological complications with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E09.40	Drug or chemical induced diabetes mellitus with neurological complications with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E09.41	Drug or chemical induced diabetes mellitus with neurological complications with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E09.43	Drug or chemical induced diabetes mellitus with neurological complications with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E09.44	Drug or chemical induced diabetes mellitus with neurological complications with diabetic amyotrophy	Diagnosis	ICD-10-CM
E09.3399	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified	Diagnosis	ICD-10-CM
E09.3391	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E09.3392	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E09.3393	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E09.339	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3319	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E09.3311	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E09.3312	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E09.3313	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E09.331	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3299	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.3291	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E09.3292	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E09.3293	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E09.329	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3219	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.3211	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E09.3212	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E09.3213	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E09.321	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	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
E09.649	Drug or chemical induced diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E09.641	Drug or chemical induced diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E09.00	Drug or chemical induced diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E09.01	Drug or chemical induced diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E09.65	Drug or chemical induced diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E09.621	Drug or chemical induced diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E09.51	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E09.52	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E09.610	Drug or chemical induced diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E09.21	Drug or chemical induced diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E09.37X9	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E09.37X1	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E09.37X2	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E09.37X3	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E09.620	Drug or chemical induced diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E09.22	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E09.36	Drug or chemical induced diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E08.9	Diabetes mellitus due to underlying condition without complications	Diagnosis	ICD-10-CM
E08.319	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.311	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.8	Diabetes mellitus due to underlying condition with unspecified complications	Diagnosis	ICD-10-CM
E08.3559	Diabetes mellitus due to underlying condition with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E08.3551	Diabetes mellitus due to underlying condition with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E08.3552	Diabetes mellitus due to underlying condition with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E08.3553	Diabetes mellitus due to underlying condition with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E08.3499	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, unspecified	Diagnosis	ICD-10-CM
E08.3491	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E08.3492	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E08.3493	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E08.349	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.3419	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, unspecified	Diagnosis	ICD-10-CM
E08.3411	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E08.3412	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E08.3413	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E08.341	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.3599	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.3591	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E08.3592	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E08.3593	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E08.359	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.3539	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E08.3531	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E08.3532	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E08.3533	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E08.3529	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E08.3521	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E08.3522	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left	Diagnosis	ICD-10-CM
E08.3523	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E08.3519	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.3511	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E08.3512	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E08.3513	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E08.351	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.3549	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E08.3541	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E08.3542	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E08.3543	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E08.630	Diabetes mellitus due to underlying condition with periodontal disease	Diagnosis	ICD-10-CM
E08.69	Diabetes mellitus due to underlying condition with other specified complication	Diagnosis	ICD-10-CM
E08.622	Diabetes mellitus due to underlying condition with other skin ulcer	Diagnosis	ICD-10-CM
E08.628	Diabetes mellitus due to underlying condition with other skin complications	Diagnosis	ICD-10-CM
E08.638	Diabetes mellitus due to underlying condition with other oral complications	Diagnosis	ICD-10-CM
E08.39	Diabetes mellitus due to underlying condition with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E08.49	Diabetes mellitus due to underlying condition with other diabetic neurological complication	Diagnosis	ICD-10-CM
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication	Diagnosis	ICD-10-CM
E08.618	Diabetes mellitus due to underlying condition with other diabetic arthropathy	Diagnosis	ICD-10-CM
E08.59	Diabetes mellitus due to underlying condition with other circulatory complications	Diagnosis	ICD-10-CM
E08.3399	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.3391	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E08.3392	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E08.3393	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E08.339	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.3319	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, unspecified	Diagnosis	ICD-10-CM
E08.3311	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E08.3312	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E08.3313	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E08.331	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.3299	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.3291	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E08.3292	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E08.3293	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E08.329	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.3219	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.3211	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E08.3212	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E08.3213	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E08.321	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema	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
E08.649	Diabetes mellitus due to underlying condition with hypoglycemia without coma	Diagnosis	ICD-10-CM
E08.641	Diabetes mellitus due to underlying condition with hypoglycemia with coma	Diagnosis	ICD-10-CM
E08.00	Diabetes mellitus due to underlying condition with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E08.01	Diabetes mellitus due to underlying condition with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E08.65	Diabetes mellitus due to underlying condition with hyperglycemia	Diagnosis	ICD-10-CM
E08.621	Diabetes mellitus due to underlying condition with foot ulcer	Diagnosis	ICD-10-CM
E08.42	Diabetes mellitus due to underlying condition with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E08.51	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E08.52	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E08.40	Diabetes mellitus due to underlying condition with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E08.610	Diabetes mellitus due to underlying condition with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E08.21	Diabetes mellitus due to underlying condition with diabetic nephropathy	Diagnosis	ICD-10-CM
E08.41	Diabetes mellitus due to underlying condition with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E08.37X9	Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E08.37X1	Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E08.37X2	Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E08.37X3	Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E08.620	Diabetes mellitus due to underlying condition with diabetic dermatitis	Diagnosis	ICD-10-CM
E08.22	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E08.36	Diabetes mellitus due to underlying condition with diabetic cataract	Diagnosis	ICD-10-CM
E08.43	Diabetes mellitus due to underlying condition with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E08.44	Diabetes mellitus due to underlying condition with diabetic amyotrophy	Diagnosis	ICD-10-CM
Drug Disorders			
F13.90	Sedative, hypnotic, or anxiolytic use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F13.939	Sedative, hypnotic or anxiolytic use, unspecified with withdrawal, unspecified	Diagnosis	ICD-10-CM
F13.930	Sedative, hypnotic or anxiolytic use, unspecified with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F13.932	Sedative, hypnotic or anxiolytic use, unspecified with withdrawal with perceptual disturbances	Diagnosis	ICD-10-CM
F13.931	Sedative, hypnotic or anxiolytic use, unspecified with withdrawal delirium	Diagnosis	ICD-10-CM
F13.99	Sedative, hypnotic or anxiolytic use, unspecified with unspecified sedative, hypnotic or anxiolytic-induced disorder	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F13.982	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced sleep disorder	Diagnosis	ICD-10-CM
F13.981	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced sexual dysfunction	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
F13.951	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations	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
F13.97	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced persisting dementia	Diagnosis	ICD-10-CM
F13.96	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced persisting amnesic disorder	Diagnosis	ICD-10-CM
F13.94	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced mood disorder	Diagnosis	ICD-10-CM
F13.980	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced anxiety disorder	Diagnosis	ICD-10-CM
F13.988	Sedative, hypnotic or anxiolytic use, unspecified with other sedative, hypnotic or anxiolytic-induced disorder	Diagnosis	ICD-10-CM
F13.929	Sedative, hypnotic or anxiolytic use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F13.920	Sedative, hypnotic or anxiolytic use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F13.921	Sedative, hypnotic or anxiolytic use, unspecified with intoxication delirium	Diagnosis	ICD-10-CM
F13.20	Sedative, hypnotic or anxiolytic dependence, uncomplicated	Diagnosis	ICD-10-CM
F13.239	Sedative, hypnotic or anxiolytic dependence with withdrawal, unspecified	Diagnosis	ICD-10-CM
F13.230	Sedative, hypnotic or anxiolytic dependence with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F13.232	Sedative, hypnotic or anxiolytic dependence with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F13.231	Sedative, hypnotic or anxiolytic dependence with withdrawal delirium	Diagnosis	ICD-10-CM
F13.29	Sedative, hypnotic or anxiolytic dependence with unspecified sedative, hypnotic or anxiolytic-induced disorder	Diagnosis	ICD-10-CM
F13.282	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced sleep disorder	Diagnosis	ICD-10-CM
F13.281	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced sexual dysfunction	Diagnosis	ICD-10-CM
F13.259	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F13.251	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations	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

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

Code	Description	Code Category	Code Type
F13.27	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced persisting dementia	Diagnosis	ICD-10-CM
F13.26	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced persisting amnestic disorder	Diagnosis	ICD-10-CM
F13.24	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced mood disorder	Diagnosis	ICD-10-CM
F13.280	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced anxiety disorder	Diagnosis	ICD-10-CM
F13.288	Sedative, hypnotic or anxiolytic dependence with other sedative, hypnotic or anxiolytic-induced disorder	Diagnosis	ICD-10-CM
F13.229	Sedative, hypnotic or anxiolytic dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F13.220	Sedative, hypnotic or anxiolytic dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F13.221	Sedative, hypnotic or anxiolytic dependence with intoxication delirium	Diagnosis	ICD-10-CM
F13.10	Sedative, hypnotic or anxiolytic abuse, uncomplicated	Diagnosis	ICD-10-CM
F13.139	Sedative, hypnotic or anxiolytic abuse with withdrawal, unspecified	Diagnosis	ICD-10-CM
F13.130	Sedative, hypnotic or anxiolytic abuse with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F13.132	Sedative, hypnotic or anxiolytic abuse with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F13.131	Sedative, hypnotic or anxiolytic abuse with withdrawal delirium	Diagnosis	ICD-10-CM
F13.19	Sedative, hypnotic or anxiolytic abuse with unspecified sedative, hypnotic or anxiolytic-induced disorder	Diagnosis	ICD-10-CM
F13.182	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced sleep disorder	Diagnosis	ICD-10-CM
F13.181	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced sexual dysfunction	Diagnosis	ICD-10-CM
F13.159	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F13.151	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations	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
F13.14	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced mood disorder	Diagnosis	ICD-10-CM
F13.180	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced anxiety disorder	Diagnosis	ICD-10-CM
F13.188	Sedative, hypnotic or anxiolytic abuse with other sedative, hypnotic or anxiolytic-induced disorder	Diagnosis	ICD-10-CM
F13.129	Sedative, hypnotic or anxiolytic abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F13.120	Sedative, hypnotic or anxiolytic abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F13.121	Sedative, hypnotic or anxiolytic abuse with intoxication delirium	Diagnosis	ICD-10-CM
F15.90	Other stimulant use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F15.93	Other stimulant use, unspecified with withdrawal	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F15.99	Other stimulant use, unspecified with unspecified stimulant-induced disorder	Diagnosis	ICD-10-CM
F15.982	Other stimulant use, unspecified with stimulant-induced sleep disorder	Diagnosis	ICD-10-CM
F15.981	Other stimulant use, unspecified with stimulant-induced sexual dysfunction	Diagnosis	ICD-10-CM
F15.959	Other stimulant use, unspecified with stimulant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F15.951	Other stimulant use, unspecified with stimulant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F15.950	Other stimulant use, unspecified with stimulant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F15.94	Other stimulant use, unspecified with stimulant-induced mood disorder	Diagnosis	ICD-10-CM
F15.980	Other stimulant use, unspecified with stimulant-induced anxiety disorder	Diagnosis	ICD-10-CM
F15.988	Other stimulant use, unspecified with other stimulant-induced disorder	Diagnosis	ICD-10-CM
F15.929	Other stimulant use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F15.920	Other stimulant use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F15.922	Other stimulant use, unspecified with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F15.921	Other stimulant use, unspecified with intoxication delirium	Diagnosis	ICD-10-CM
F15.20	Other stimulant dependence, uncomplicated	Diagnosis	ICD-10-CM
F15.23	Other stimulant dependence with withdrawal	Diagnosis	ICD-10-CM
F15.29	Other stimulant dependence with unspecified stimulant-induced disorder	Diagnosis	ICD-10-CM
F15.282	Other stimulant dependence with stimulant-induced sleep disorder	Diagnosis	ICD-10-CM
F15.281	Other stimulant dependence with stimulant-induced sexual dysfunction	Diagnosis	ICD-10-CM
F15.259	Other stimulant dependence with stimulant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F15.251	Other stimulant dependence with stimulant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F15.250	Other stimulant dependence with stimulant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F15.24	Other stimulant dependence with stimulant-induced mood disorder	Diagnosis	ICD-10-CM
F15.280	Other stimulant dependence with stimulant-induced anxiety disorder	Diagnosis	ICD-10-CM
F15.288	Other stimulant dependence with other stimulant-induced disorder	Diagnosis	ICD-10-CM
F15.229	Other stimulant dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F15.220	Other stimulant dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F15.222	Other stimulant dependence with intoxication with perceptual	Diagnosis	ICD-10-CM
F15.221	Other stimulant dependence with intoxication delirium	Diagnosis	ICD-10-CM
F15.10	Other stimulant abuse, uncomplicated	Diagnosis	ICD-10-CM
F15.13	Other stimulant abuse with withdrawal	Diagnosis	ICD-10-CM
F15.19	Other stimulant abuse with unspecified stimulant-induced disorder	Diagnosis	ICD-10-CM
F15.182	Other stimulant abuse with stimulant-induced sleep disorder	Diagnosis	ICD-10-CM
F15.181	Other stimulant abuse with stimulant-induced sexual dysfunction	Diagnosis	ICD-10-CM
F15.159	Other stimulant abuse with stimulant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F15.151	Other stimulant abuse with stimulant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F15.150	Other stimulant abuse with stimulant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F15.14	Other stimulant abuse with stimulant-induced mood disorder	Diagnosis	ICD-10-CM
F15.180	Other stimulant abuse with stimulant-induced anxiety disorder	Diagnosis	ICD-10-CM
F15.188	Other stimulant abuse with other stimulant-induced disorder	Diagnosis	ICD-10-CM
F15.129	Other stimulant abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F15.120	Other stimulant abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F15.122	Other stimulant abuse with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F15.121	Other stimulant abuse with intoxication delirium	Diagnosis	ICD-10-CM
F19.90	Other psychoactive substance use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F19.920	Other psychoactive substance use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F19.20	Other psychoactive substance dependence, uncomplicated	Diagnosis	ICD-10-CM
F19.239	Other psychoactive substance dependence with withdrawal, unspecified	Diagnosis	ICD-10-CM
F19.230	Other psychoactive substance dependence with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F19.232	Other psychoactive substance dependence with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F19.231	Other psychoactive substance dependence with withdrawal delirium	Diagnosis	ICD-10-CM
F19.29	Other psychoactive substance dependence with unspecified psychoactive substance-induced disorder	Diagnosis	ICD-10-CM
F19.282	Other psychoactive substance dependence with psychoactive substance-induced sleep disorder	Diagnosis	ICD-10-CM
F19.281	Other psychoactive substance dependence with psychoactive substance-induced sexual dysfunction	Diagnosis	ICD-10-CM
F19.259	Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F19.251	Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F19.250	Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F19.27	Other psychoactive substance dependence with psychoactive substance-induced persisting dementia	Diagnosis	ICD-10-CM
F19.26	Other psychoactive substance dependence with psychoactive substance-induced persisting amnesic disorder	Diagnosis	ICD-10-CM
F19.24	Other psychoactive substance dependence with psychoactive substance-induced mood disorder	Diagnosis	ICD-10-CM
F19.280	Other psychoactive substance dependence with psychoactive substance-induced anxiety disorder	Diagnosis	ICD-10-CM
F19.288	Other psychoactive substance dependence with other psychoactive substance-induced disorder	Diagnosis	ICD-10-CM
F19.229	Other psychoactive substance dependence with intoxication, unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F19.220	Other psychoactive substance dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F19.222	Other psychoactive substance dependence with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F19.221	Other psychoactive substance dependence with intoxication delirium	Diagnosis	ICD-10-CM
F19.10	Other psychoactive substance abuse, uncomplicated	Diagnosis	ICD-10-CM
F19.139	Other psychoactive substance abuse with withdrawal, unspecified	Diagnosis	ICD-10-CM
F19.130	Other psychoactive substance abuse with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F19.132	Other psychoactive substance abuse with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F19.131	Other psychoactive substance abuse with withdrawal delirium	Diagnosis	ICD-10-CM
F19.19	Other psychoactive substance abuse with unspecified psychoactive substance-induced disorder	Diagnosis	ICD-10-CM
F19.182	Other psychoactive substance abuse with psychoactive substance-induced sleep disorder	Diagnosis	ICD-10-CM
F19.181	Other psychoactive substance abuse with psychoactive substance-induced sexual dysfunction	Diagnosis	ICD-10-CM
F19.159	Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F19.151	Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F19.150	Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F19.17	Other psychoactive substance abuse with psychoactive substance-induced persisting dementia	Diagnosis	ICD-10-CM
F19.16	Other psychoactive substance abuse with psychoactive substance-induced persisting amnesic disorder	Diagnosis	ICD-10-CM
F19.14	Other psychoactive substance abuse with psychoactive substance-induced mood disorder	Diagnosis	ICD-10-CM
F19.180	Other psychoactive substance abuse with psychoactive substance-induced anxiety disorder	Diagnosis	ICD-10-CM
F19.188	Other psychoactive substance abuse with other psychoactive substance-induced disorder	Diagnosis	ICD-10-CM
F19.129	Other psychoactive substance abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F19.120	Other psychoactive substance abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F19.122	Other psychoactive substance abuse with intoxication with perceptual disturbances	Diagnosis	ICD-10-CM
F19.121	Other psychoactive substance abuse with intoxication delirium	Diagnosis	ICD-10-CM
F11.90	Opioid use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F11.93	Opioid use, unspecified with withdrawal	Diagnosis	ICD-10-CM
F11.99	Opioid use, unspecified with unspecified opioid-induced disorder	Diagnosis	ICD-10-CM
F11.988	Opioid use, unspecified with other opioid-induced disorder	Diagnosis	ICD-10-CM
F11.982	Opioid use, unspecified with opioid-induced sleep disorder	Diagnosis	ICD-10-CM
F11.981	Opioid use, unspecified with opioid-induced sexual dysfunction	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F11.959	Opioid use, unspecified with opioid-induced psychotic disorder,	Diagnosis	ICD-10-CM
F11.951	Opioid use, unspecified with opioid-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F11.950	Opioid use, unspecified with opioid-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F11.94	Opioid use, unspecified with opioid-induced mood disorder	Diagnosis	ICD-10-CM
F11.929	Opioid use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F11.920	Opioid use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F11.922	Opioid use, unspecified with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F11.921	Opioid use, unspecified with intoxication delirium	Diagnosis	ICD-10-CM
F11.20	Opioid dependence, uncomplicated	Diagnosis	ICD-10-CM
F11.23	Opioid dependence with withdrawal	Diagnosis	ICD-10-CM
F11.29	Opioid dependence with unspecified opioid-induced disorder	Diagnosis	ICD-10-CM
F11.288	Opioid dependence with other opioid-induced disorder	Diagnosis	ICD-10-CM
F11.282	Opioid dependence with opioid-induced sleep disorder	Diagnosis	ICD-10-CM
F11.281	Opioid dependence with opioid-induced sexual dysfunction	Diagnosis	ICD-10-CM
F11.259	Opioid dependence with opioid-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F11.251	Opioid dependence with opioid-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F11.250	Opioid dependence with opioid-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F11.24	Opioid dependence with opioid-induced mood disorder	Diagnosis	ICD-10-CM
F11.229	Opioid dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F11.220	Opioid dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F11.222	Opioid dependence with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F11.221	Opioid dependence with intoxication delirium	Diagnosis	ICD-10-CM
F11.10	Opioid abuse, uncomplicated	Diagnosis	ICD-10-CM
F11.13	Opioid abuse with withdrawal	Diagnosis	ICD-10-CM
F11.19	Opioid abuse with unspecified opioid-induced disorder	Diagnosis	ICD-10-CM
F11.188	Opioid abuse with other opioid-induced disorder	Diagnosis	ICD-10-CM
F11.182	Opioid abuse with opioid-induced sleep disorder	Diagnosis	ICD-10-CM
F11.181	Opioid abuse with opioid-induced sexual dysfunction	Diagnosis	ICD-10-CM
F11.159	Opioid abuse with opioid-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F11.151	Opioid abuse with opioid-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F11.150	Opioid abuse with opioid-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F11.14	Opioid abuse with opioid-induced mood disorder	Diagnosis	ICD-10-CM
F11.129	Opioid abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F11.120	Opioid abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F11.122	Opioid abuse with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F11.121	Opioid abuse with intoxication delirium	Diagnosis	ICD-10-CM
F17.209	Nicotine dependence, unspecified, with unspecified nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.208	Nicotine dependence, unspecified, with other nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.293	Nicotine dependence, other tobacco product, with withdrawal	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F17.299	Nicotine dependence, other tobacco product, with unspecified nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.298	Nicotine dependence, other tobacco product, with other nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.213	Nicotine dependence, cigarettes, with withdrawal	Diagnosis	ICD-10-CM
F17.219	Nicotine dependence, cigarettes, with unspecified nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.218	Nicotine dependence, cigarettes, with other nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.223	Nicotine dependence, chewing tobacco, with withdrawal	Diagnosis	ICD-10-CM
F17.229	Nicotine dependence, chewing tobacco, with unspecified nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.228	Nicotine dependence, chewing tobacco, with other nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.203	Nicotine dependence unspecified, with withdrawal	Diagnosis	ICD-10-CM
F18.90	Inhalant use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F18.99	Inhalant use, unspecified with unspecified inhalant-induced disorder	Diagnosis	ICD-10-CM
F18.988	Inhalant use, unspecified with other inhalant-induced disorder	Diagnosis	ICD-10-CM
F18.929	Inhalant use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F18.920	Inhalant use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F18.921	Inhalant use, unspecified with intoxication with delirium	Diagnosis	ICD-10-CM
F18.959	Inhalant use, unspecified with inhalant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F18.951	Inhalant use, unspecified with inhalant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F18.950	Inhalant use, unspecified with inhalant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F18.97	Inhalant use, unspecified with inhalant-induced persisting dementia	Diagnosis	ICD-10-CM
F18.94	Inhalant use, unspecified with inhalant-induced mood disorder	Diagnosis	ICD-10-CM
F18.980	Inhalant use, unspecified with inhalant-induced anxiety disorder	Diagnosis	ICD-10-CM
F18.20	Inhalant dependence, uncomplicated	Diagnosis	ICD-10-CM
F18.29	Inhalant dependence with unspecified inhalant-induced disorder	Diagnosis	ICD-10-CM
F18.288	Inhalant dependence with other inhalant-induced disorder	Diagnosis	ICD-10-CM
F18.229	Inhalant dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F18.220	Inhalant dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F18.221	Inhalant dependence with intoxication delirium	Diagnosis	ICD-10-CM
F18.259	Inhalant dependence with inhalant-induced psychotic disorder,	Diagnosis	ICD-10-CM
F18.251	Inhalant dependence with inhalant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F18.250	Inhalant dependence with inhalant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F18.24	Inhalant dependence with inhalant-induced mood disorder	Diagnosis	ICD-10-CM
F18.27	Inhalant dependence with inhalant-induced dementia	Diagnosis	ICD-10-CM
F18.280	Inhalant dependence with inhalant-induced anxiety disorder	Diagnosis	ICD-10-CM
F18.10	Inhalant abuse, uncomplicated	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F18.19	Inhalant abuse with unspecified inhalant-induced disorder	Diagnosis	ICD-10-CM
F18.188	Inhalant abuse with other inhalant-induced disorder	Diagnosis	ICD-10-CM
F18.129	Inhalant abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F18.120	Inhalant abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F18.121	Inhalant abuse with intoxication delirium	Diagnosis	ICD-10-CM
F18.159	Inhalant abuse with inhalant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F18.151	Inhalant abuse with inhalant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F18.150	Inhalant abuse with inhalant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F18.14	Inhalant abuse with inhalant-induced mood disorder	Diagnosis	ICD-10-CM
F18.17	Inhalant abuse with inhalant-induced dementia	Diagnosis	ICD-10-CM
F18.180	Inhalant abuse with inhalant-induced anxiety disorder	Diagnosis	ICD-10-CM
F16.90	Hallucinogen use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F16.99	Hallucinogen use, unspecified with unspecified hallucinogen-induced disorder	Diagnosis	ICD-10-CM
F16.988	Hallucinogen use, unspecified with other hallucinogen-induced disorder	Diagnosis	ICD-10-CM
F16.929	Hallucinogen use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F16.920	Hallucinogen use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F16.921	Hallucinogen use, unspecified with intoxication with delirium	Diagnosis	ICD-10-CM
F16.983	Hallucinogen use, unspecified with hallucinogen persisting perception disorder (flashbacks)	Diagnosis	ICD-10-CM
F16.959	Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F16.951	Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F16.950	Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F16.94	Hallucinogen use, unspecified with hallucinogen-induced mood disorder	Diagnosis	ICD-10-CM
F16.980	Hallucinogen use, unspecified with hallucinogen-induced anxiety disorder	Diagnosis	ICD-10-CM
F16.20	Hallucinogen dependence, uncomplicated	Diagnosis	ICD-10-CM
F16.29	Hallucinogen dependence with unspecified hallucinogen-induced disorder	Diagnosis	ICD-10-CM
F16.288	Hallucinogen dependence with other hallucinogen-induced disorder	Diagnosis	ICD-10-CM
F16.229	Hallucinogen dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F16.220	Hallucinogen dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F16.221	Hallucinogen dependence with intoxication with delirium	Diagnosis	ICD-10-CM
F16.283	Hallucinogen dependence with hallucinogen persisting perception disorder (flashbacks)	Diagnosis	ICD-10-CM
F16.259	Hallucinogen dependence with hallucinogen-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F16.251	Hallucinogen dependence with hallucinogen-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F16.250	Hallucinogen dependence with hallucinogen-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F16.24	Hallucinogen dependence with hallucinogen-induced mood disorder	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F16.280	Hallucinogen dependence with hallucinogen-induced anxiety disorder	Diagnosis	ICD-10-CM
F16.10	Hallucinogen abuse, uncomplicated	Diagnosis	ICD-10-CM
F16.19	Hallucinogen abuse with unspecified hallucinogen-induced disorder	Diagnosis	ICD-10-CM
F16.188	Hallucinogen abuse with other hallucinogen-induced disorder	Diagnosis	ICD-10-CM
F16.129	Hallucinogen abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F16.120	Hallucinogen abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F16.122	Hallucinogen abuse with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F16.121	Hallucinogen abuse with intoxication with delirium	Diagnosis	ICD-10-CM
F16.183	Hallucinogen abuse with hallucinogen persisting perception disorder (flashbacks)	Diagnosis	ICD-10-CM
F16.159	Hallucinogen abuse with hallucinogen-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F16.151	Hallucinogen abuse with hallucinogen-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F16.150	Hallucinogen abuse with hallucinogen-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F16.14	Hallucinogen abuse with hallucinogen-induced mood disorder	Diagnosis	ICD-10-CM
F16.180	Hallucinogen abuse with hallucinogen-induced anxiety disorder	Diagnosis	ICD-10-CM
F14.90	Cocaine use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F14.93	Cocaine use, unspecified with withdrawal	Diagnosis	ICD-10-CM
F14.99	Cocaine use, unspecified with unspecified cocaine-induced disorder	Diagnosis	ICD-10-CM
F14.988	Cocaine use, unspecified with other cocaine-induced disorder	Diagnosis	ICD-10-CM
F14.929	Cocaine use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F14.920	Cocaine use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F14.922	Cocaine use, unspecified with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F14.921	Cocaine use, unspecified with intoxication delirium	Diagnosis	ICD-10-CM
F14.982	Cocaine use, unspecified with cocaine-induced sleep disorder	Diagnosis	ICD-10-CM
F14.981	Cocaine use, unspecified with cocaine-induced sexual dysfunction	Diagnosis	ICD-10-CM
F14.959	Cocaine use, unspecified with cocaine-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F14.951	Cocaine use, unspecified with cocaine-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F14.950	Cocaine use, unspecified with cocaine-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F14.94	Cocaine use, unspecified with cocaine-induced mood disorder	Diagnosis	ICD-10-CM
F14.980	Cocaine use, unspecified with cocaine-induced anxiety disorder	Diagnosis	ICD-10-CM
F14.20	Cocaine dependence, uncomplicated	Diagnosis	ICD-10-CM
F14.23	Cocaine dependence with withdrawal	Diagnosis	ICD-10-CM
F14.29	Cocaine dependence with unspecified cocaine-induced disorder	Diagnosis	ICD-10-CM
F14.288	Cocaine dependence with other cocaine-induced disorder	Diagnosis	ICD-10-CM
F14.229	Cocaine dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F14.220	Cocaine dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F14.222	Cocaine dependence with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F14.221	Cocaine dependence with intoxication delirium	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F14.282	Cocaine dependence with cocaine-induced sleep disorder	Diagnosis	ICD-10-CM
F14.281	Cocaine dependence with cocaine-induced sexual dysfunction	Diagnosis	ICD-10-CM
F14.259	Cocaine dependence with cocaine-induced psychotic disorder,	Diagnosis	ICD-10-CM
F14.251	Cocaine dependence with cocaine-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F14.250	Cocaine dependence with cocaine-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F14.24	Cocaine dependence with cocaine-induced mood disorder	Diagnosis	ICD-10-CM
F14.280	Cocaine dependence with cocaine-induced anxiety disorder	Diagnosis	ICD-10-CM
F14.13	Cocaine abuse, unspecified with withdrawal	Diagnosis	ICD-10-CM
F14.10	Cocaine abuse, uncomplicated	Diagnosis	ICD-10-CM
F14.19	Cocaine abuse with unspecified cocaine-induced disorder	Diagnosis	ICD-10-CM
F14.188	Cocaine abuse with other cocaine-induced disorder	Diagnosis	ICD-10-CM
F14.129	Cocaine abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F14.120	Cocaine abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F14.122	Cocaine abuse with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F14.121	Cocaine abuse with intoxication with delirium	Diagnosis	ICD-10-CM
F14.182	Cocaine abuse with cocaine-induced sleep disorder	Diagnosis	ICD-10-CM
F14.181	Cocaine abuse with cocaine-induced sexual dysfunction	Diagnosis	ICD-10-CM
F14.159	Cocaine abuse with cocaine-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F14.151	Cocaine abuse with cocaine-induced psychotic disorder with	Diagnosis	ICD-10-CM
F14.150	Cocaine abuse with cocaine-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F14.14	Cocaine abuse with cocaine-induced mood disorder	Diagnosis	ICD-10-CM
F14.180	Cocaine abuse with cocaine-induced anxiety disorder	Diagnosis	ICD-10-CM
F12.90	Cannabis use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F12.99	Cannabis use, unspecified with unspecified cannabis-induced disorder	Diagnosis	ICD-10-CM
F12.959	Cannabis use, unspecified with psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F12.951	Cannabis use, unspecified with psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F12.950	Cannabis use, unspecified with psychotic disorder with delusions	Diagnosis	ICD-10-CM
F12.988	Cannabis use, unspecified with other cannabis-induced disorder	Diagnosis	ICD-10-CM
F12.929	Cannabis use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F12.920	Cannabis use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F12.922	Cannabis use, unspecified with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F12.921	Cannabis use, unspecified with intoxication delirium	Diagnosis	ICD-10-CM
F12.980	Cannabis use, unspecified with anxiety disorder	Diagnosis	ICD-10-CM
F12.20	Cannabis dependence, uncomplicated	Diagnosis	ICD-10-CM
F12.29	Cannabis dependence with unspecified cannabis-induced disorder	Diagnosis	ICD-10-CM
F12.259	Cannabis dependence with psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F12.251	Cannabis dependence with psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F12.250	Cannabis dependence with psychotic disorder with delusions	Diagnosis	ICD-10-CM
F12.288	Cannabis dependence with other cannabis-induced disorder	Diagnosis	ICD-10-CM
F12.229	Cannabis dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F12.220	Cannabis dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F12.222	Cannabis dependence with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM

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

Code	Description	Code	
		Category	Code Type
F12.221	Cannabis dependence with intoxication delirium	Diagnosis	ICD-10-CM
F12.280	Cannabis dependence with cannabis-induced anxiety disorder	Diagnosis	ICD-10-CM
F12.10	Cannabis abuse, uncomplicated	Diagnosis	ICD-10-CM
F12.13	Cannabis abuse with withdrawal	Diagnosis	ICD-10-CM
F12.19	Cannabis abuse with unspecified cannabis-induced disorder	Diagnosis	ICD-10-CM
F12.159	Cannabis abuse with psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F12.151	Cannabis abuse with psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F12.150	Cannabis abuse with psychotic disorder with delusions	Diagnosis	ICD-10-CM
F12.188	Cannabis abuse with other cannabis-induced disorder	Diagnosis	ICD-10-CM
F12.129	Cannabis abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F12.120	Cannabis abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F12.122	Cannabis abuse with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F12.121	Cannabis abuse with intoxication delirium	Diagnosis	ICD-10-CM
F12.180	Cannabis abuse with cannabis-induced anxiety disorder	Diagnosis	ICD-10-CM
HZ2ZZZZ	Detoxification Services for Substance Abuse Treatment	Procedure	ICD-10-PCS
HZ40ZZZ	Group Counseling for Substance Abuse Treatment, Cognitive	Procedure	ICD-10-PCS
HZ37ZZZ	Individual Counseling for Substance Abuse Treatment, Motivational Enhancement	Procedure	ICD-10-PCS
HZ30ZZZ	Individual Counseling for Substance Abuse Treatment, Cognitive	Procedure	ICD-10-PCS
HZ31ZZZ	Individual Counseling for Substance Abuse Treatment, Behavioral	Procedure	ICD-10-PCS
HZ3BZZZ	Individual Counseling for Substance Abuse Treatment, Spiritual	Procedure	ICD-10-PCS
HZ35ZZZ	Individual Counseling for Substance Abuse Treatment, Vocational	Procedure	ICD-10-PCS
HZ33ZZZ	Individual Counseling for Substance Abuse Treatment, 12-Step	Procedure	ICD-10-PCS
HZ39ZZZ	Individual Counseling for Substance Abuse Treatment, Continuing Care	Procedure	ICD-10-PCS
HZ32ZZZ	Individual Counseling for Substance Abuse Treatment, Cognitive-	Procedure	ICD-10-PCS
HZ38ZZZ	Individual Counseling for Substance Abuse Treatment, Confrontational	Procedure	ICD-10-PCS
HZ36ZZZ	Individual Counseling for Substance Abuse Treatment, Psychoeducation	Procedure	ICD-10-PCS
HZ34ZZZ	Individual Counseling for Substance Abuse Treatment, Interpersonal	Procedure	ICD-10-PCS
HZ93ZZZ	Pharmacotherapy for Substance Abuse Treatment, Antabuse	Procedure	ICD-10-PCS
HZ96ZZZ	Pharmacotherapy for Substance Abuse Treatment, Clonidine	Procedure	ICD-10-PCS
Durable Medical Equipment			
E0100	Cane, includes canes of all materials, adjustable or fixed, with tip	Procedure	HCPCS
E0105	Cane, quad or three-prong, includes canes of all materials, adjustable or fixed, with tips	Procedure	HCPCS
E0110	Crutches, forearm, includes crutches of various materials, adjustable or fixed, pair, complete with tips and handgrips	Procedure	HCPCS
E0111	Crutch, forearm, includes crutches of various materials, adjustable or fixed, each, with tip and handgrips	Procedure	HCPCS
E0112	Crutches, underarm, wood, adjustable or fixed, pair, with pads, tips, and handgrips	Procedure	HCPCS
E0113	Crutch, underarm, wood, adjustable or fixed, each, with pad, tip, and handgrip	Procedure	HCPCS
E0114	Crutches, underarm, other than wood, adjustable or fixed, pair, with pads, tips, and handgrips	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
E0116	Crutch, underarm, other than wood, adjustable or fixed, with pad, tip, handgrip, with or without shock absorber, each	Procedure	HCPCS
E0117	Crutch, underarm, articulating, spring assisted, each	Procedure	HCPCS
E0118	Crutch substitute, lower leg platform, with or without wheels, each	Procedure	HCPCS
E0130	Walker, rigid (pickup), adjustable or fixed height	Procedure	HCPCS
E0135	Walker, folding (pickup), adjustable or fixed height	Procedure	HCPCS
E0140	Walker, with trunk support, adjustable or fixed height, any type	Procedure	HCPCS
E0141	Walker, rigid, wheeled, adjustable or fixed height	Procedure	HCPCS
E0142	Rigid walker, wheeled, with seat	Procedure	HCPCS
E0143	Walker, folding, wheeled, adjustable or fixed height	Procedure	HCPCS
E0144	Walker, enclosed, four-sided framed, rigid or folding, wheeled with posterior seat	Procedure	HCPCS
E0145	Walker, wheeled, with seat and crutch attachments	Procedure	HCPCS
E0146	Folding walker, wheeled, with seat	Procedure	HCPCS
E0147	Walker, heavy-duty, multiple braking system, variable wheel resistance	Procedure	HCPCS
E0148	Walker, heavy-duty, without wheels, rigid or folding, any type, each	Procedure	HCPCS
E0149	Walker, heavy-duty, wheeled, rigid or folding, any type	Procedure	HCPCS
E0153	Platform attachment, forearm crutch, each	Procedure	HCPCS
E0154	Platform attachment, walker, each	Procedure	HCPCS
E0155	Wheel attachment, rigid pick-up walker, per pair	Procedure	HCPCS
E0156	Seat attachment, walker	Procedure	HCPCS
E0157	Crutch attachment, walker, each	Procedure	HCPCS
E0158	Leg extensions for walker, per set of four	Procedure	HCPCS
E0159	Brake attachment for wheeled walker, replacement, each	Procedure	HCPCS
E0250	Hospital bed, fixed height, with any type side rails, with mattress	Procedure	HCPCS
E0251	Hospital bed, fixed height, with any type side rails, without mattress	Procedure	HCPCS
E0255	Hospital bed, variable height, hi-lo, with any type side rails, with mattress	Procedure	HCPCS
E0256	Hospital bed, variable height, hi-lo, with any type side rails, without mattress	Procedure	HCPCS
E0260	Hospital bed, semi-electric (head and foot adjustment), with any type side rails, with mattress	Procedure	HCPCS
E0261	Hospital bed, semi-electric (head and foot adjustment), with any type side rails, without mattress	Procedure	HCPCS
E0265	Hospital bed, total electric (head, foot, and height adjustments), with any type side rails, with mattress	Procedure	HCPCS
E0266	Hospital bed, total electric (head, foot, and height adjustments), with any type side rails, without mattress	Procedure	HCPCS
E0270	Hospital bed, institutional type includes: oscillating, circulating and Stryker frame, with mattress	Procedure	HCPCS
E0271	Mattress, innerspring	Procedure	HCPCS
E0272	Mattress, foam rubber	Procedure	HCPCS
E0273	Bed board	Procedure	HCPCS
E0274	Over-bed table	Procedure	HCPCS
E0275	Bed pan, standard, metal or plastic	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
E0276	Bed pan, fracture, metal or plastic	Procedure	HCPCS
E0277	Powered pressure-reducing air mattress	Procedure	HCPCS
E0280	Bed cradle, any type	Procedure	HCPCS
E0290	Hospital bed, fixed height, without side rails, with mattress	Procedure	HCPCS
E0291	Hospital bed, fixed height, without side rails, without mattress	Procedure	HCPCS
E0292	Hospital bed, variable height, hi-lo, without side rails, with mattress	Procedure	HCPCS
E0293	Hospital bed, variable height, hi-lo, without side rails, without mattress	Procedure	HCPCS
E0294	Hospital bed, semi-electric (head and foot adjustment), without side rails, with mattress	Procedure	HCPCS
E0295	Hospital bed, semi-electric (head and foot adjustment), without side rails, without mattress	Procedure	HCPCS
E0296	Hospital bed, total electric (head, foot, and height adjustments), without side rails, with mattress	Procedure	HCPCS
E0297	Hospital bed, total electric (head, foot, and height adjustments), without side rails, without mattress	Procedure	HCPCS
E0298	Hospital bed, heavy duty, extra wide, with any type side rails, with mattress	Procedure	HCPCS
E0300	Pediatric crib, hospital grade, fully enclosed, with or without top	Procedure	HCPCS
E0301	Hospital bed, heavy-duty, extra wide, with weight capacity greater than 350 pounds, but less than or equal to 600 pounds, with any type side rails, without mattress	Procedure	HCPCS
E0302	Hospital bed, extra heavy-duty, extra wide, with weight capacity greater than 600 pounds, with any type side rails, without mattress	Procedure	HCPCS
E0303	Hospital bed, heavy-duty, extra wide, with weight capacity greater than 350 pounds, but less than or equal to 600 pounds, with any type side rails, with mattress	Procedure	HCPCS
E0304	Hospital bed, extra heavy-duty, extra wide, with weight capacity greater than 600 pounds, with any type side rails, with mattress	Procedure	HCPCS
E0305	Bedside rails, half-length	Procedure	HCPCS
E0310	Bedside rails, full-length	Procedure	HCPCS
E0315	Bed accessory: board, table, or support device, any type	Procedure	HCPCS
E0316	Safety enclosure frame/canopy for use with hospital bed, any type	Procedure	HCPCS
E0325	Urinal; male, jug-type, any material	Procedure	HCPCS
E0326	Urinal; female, jug-type, any material	Procedure	HCPCS
E0328	Hospital bed, pediatric, manual, 360 degree side enclosures, top of headboard, footboard and side rails up to 24 in above the spring, includes mattress	Procedure	HCPCS
E0329	Hospital bed, pediatric, electric or semi-electric, 360 degree side enclosures, top of headboard, footboard and side rails up to 24 in above the spring, includes mattress	Procedure	HCPCS
E0350	Control unit for electronic bowel irrigation/evacuation system	Procedure	HCPCS
E0352	Disposable pack (water reservoir bag, speculum, valving mechanism, and collection bag/box) for use with the electronic bowel irrigation/evacuation system	Procedure	HCPCS

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

Code	Description	Code	
		Category	Code Type
E0370	Air pressure elevator for heel	Procedure	HCPCS
E0371	Nonpowered advanced pressure reducing overlay for mattress, standard mattress length and width	Procedure	HCPCS
E0372	Powered air overlay for mattress, standard mattress length and width	Procedure	HCPCS
E0373	Nonpowered advanced pressure reducing mattress	Procedure	HCPCS
E1353	Regulator	Procedure	HCPCS
E1354	Oxygen accessory, wheeled cart for portable cylinder or portable concentrator, any type, replacement only, each	Procedure	HCPCS
E1355	Stand/rack	Procedure	HCPCS
E1356	Oxygen accessory, battery pack/cartridge for portable concentrator, any type, replacement only, each	Procedure	HCPCS
E1357	Oxygen accessory, battery charger for portable concentrator, any type, replacement only, each	Procedure	HCPCS
E1358	Oxygen accessory, DC power adapter for portable concentrator, any type, replacement only, each	Procedure	HCPCS
E1372	Immersion external heater for nebulizer	Procedure	HCPCS
E1375	Nebulizer portable with small compressor, with limited flow	Procedure	HCPCS
E1377	Oxygen concentrator, high humidity system equiv. to 244 cu. ft.	Procedure	HCPCS
E1378	Oxygen concentrator, high humidity system equiv. to 488 cu. ft.	Procedure	HCPCS
E1379	Oxygen concentrator, high humidity system equiv. to 732 cu. ft.	Procedure	HCPCS
E1380	Oxygen concentrator, high humidity system equiv. to 976 cu. ft.	Procedure	HCPCS
E1381	Oxygen concentrator, high humidity system equiv. to 1220 cu. ft.	Procedure	HCPCS
E1382	Oxygen concentrator, high humidity system equiv. to 1464 cu. ft.	Procedure	HCPCS
E1383	Oxygen concentrator, high humidity system equiv. to 1708 cu. ft.	Procedure	HCPCS
E1384	Oxygen concentrator, high humidity system equiv. to 1952 cu. ft.	Procedure	HCPCS
E1385	Oxygen concentrator, high humidity system equiv. to over 1952 cu. ft.	Procedure	HCPCS
E1390	Oxygen concentrator, single delivery port, capable of delivering 85 percent or greater oxygen concentration at the prescribed flow rate	Procedure	HCPCS
E1391	Oxygen concentrator, dual delivery port, capable of delivering 85 percent or greater oxygen concentration at the prescribed flow rate, each	Procedure	HCPCS
E1392	Portable oxygen concentrator, rental	Procedure	HCPCS
E1399	Durable medical equipment, miscellaneous	Procedure	HCPCS
E1400	Oxygen concentrator, manufacturer specified maximum flow rate does not exceed two liters per minute, at 85 percent or greater concentration	Procedure	HCPCS
E1401	Oxygen concentrator, manufacturer specified maximum flow rate greater than two liters per minute, does not exceed three liters per minute, at 85 percent or greater concentration	Procedure	HCPCS
E1402	Oxygen concentrator, manufacturer specified maximum flow rate greater than three liters per minute, does not exceed four liters per minute, at 85 percent or greater concentration	Procedure	HCPCS
E1403	Oxygen concentrator, manufacturer specified maximum flow rate greater than four liters per minute, does not exceed five liters per minute, at 85 percent or greater concentration	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
E1404	Oxygen concentrator, manufacturer specified maximum flow rate greater than five liters per minute, at 85 percent or greater concentration	Procedure	HCPCS
E1405	Oxygen and water vapor enriching system with heated delivery	Procedure	HCPCS
E1406	Oxygen and water vapor enriching system without heated delivery	Procedure	HCPCS
K0001	Standard wheelchair	Procedure	HCPCS
K0002	Standard hemi (low seat) wheelchair	Procedure	HCPCS
K0003	Lightweight wheelchair	Procedure	HCPCS
K0004	High strength, lightweight wheelchair	Procedure	HCPCS
K0005	Ultralightweight wheelchair	Procedure	HCPCS
K0006	Heavy-duty wheelchair	Procedure	HCPCS
K0007	Extra heavy-duty wheelchair	Procedure	HCPCS
K0008	Custom manual wheelchair/base	Procedure	HCPCS
K0009	Other manual wheelchair/base	Procedure	HCPCS
K0010	Standard-weight frame motorized/power wheelchair	Procedure	HCPCS
K0011	Standard-weight frame motorized/power wheelchair with programmable control parameters for speed adjustment, tremor dampening, acceleration control and braking	Procedure	HCPCS
K0012	Lightweight portable motorized/power wheelchair	Procedure	HCPCS
K0013	Custom motorized/power wheelchair base	Procedure	HCPCS
K0014	Other motorized/power wheelchair base	Procedure	HCPCS
K0015	Detachable, nonadjustable height armrest, each	Procedure	HCPCS
K0016	Detachable, adjustable height armrest, complete assembly, each	Procedure	HCPCS
K0017	Detachable, adjustable height armrest, base, each	Procedure	HCPCS
K0018	Detachable, adjustable height armrest, upper portion, replacement only, each	Procedure	HCPCS
K0019	Arm pad, each	Procedure	HCPCS
K0020	Fixed, adjustable height armrest, pair	Procedure	HCPCS
K0021	Anti-tipping device, each	Procedure	HCPCS
K0022	Reinforced back upholstery	Procedure	HCPCS
K0023	Solid back insert, planar back, single density foam, attached with straps	Procedure	HCPCS
K0024	Solid back insert, planar back, single density foam, with adjustable hook-on hardware	Procedure	HCPCS
K0025	Hook-on headrest extension	Procedure	HCPCS
K0026	Back upholstery for ultralightweight or high-strength lightweight wheelchair	Procedure	HCPCS
K0027	Back upholstery for wheelchair type other than ultralightweight or high-strength lightweight wheelchair	Procedure	HCPCS
K0028	Manual, fully reclining back	Procedure	HCPCS
K0029	Reinforced seat upholstery	Procedure	HCPCS
K0030	Solid seat insert, planar seat, single density foam	Procedure	HCPCS
K0031	Safety belt/pelvic strap, each	Procedure	HCPCS
K0032	Seat upholstery for ultralightweight or high-strength lightweight wheelchair	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
K0033	Seat upholstery for wheelchair type other than ultralightweight or high-strength lightweight wheelchair	Procedure	HCPCS
K0034	Heel loop,each	Procedure	HCPCS
K0035	Heel loop with ankle strap, each	Procedure	HCPCS
K0036	Toe loop, each	Procedure	HCPCS
K0037	High mount flip-up footrest, each	Procedure	HCPCS
K0038	Leg strap, each	Procedure	HCPCS
K0039	Leg strap, H style, each	Procedure	HCPCS
K0040	Adjustable angle footplate, each	Procedure	HCPCS
K0041	Large size footplate, each	Procedure	HCPCS
K0042	Standard size footplate, each	Procedure	HCPCS
K0043	Footrest, lower extension tube, replacement only, each	Procedure	HCPCS
K0044	Footrest, upper hanger bracket, each	Procedure	HCPCS
K0045	Footrest, complete assembly, replacement only, each	Procedure	HCPCS
K0046	Elevating legrest, lower extension tube, replacement only, each	Procedure	HCPCS
K0047	Elevating legrest, upper hanger bracket, replacement only, each	Procedure	HCPCS
K0048	Elevating legrest, complete assembly	Procedure	HCPCS
K0049	Calf pad, each	Procedure	HCPCS
K0050	Ratchet assembly, replacement only	Procedure	HCPCS
K0051	Cam release assembly, footrest or legrest, replacement only, each	Procedure	HCPCS
K0052	Swingaway, detachable footrests, replacement only, each	Procedure	HCPCS
K0053	Elevating footrests, articulating (telescoping), each	Procedure	HCPCS
K0054	Seat width of 10, 11, 12, 15, 17, or 20 inches for a high-strength, lightweight or ultralightweight wheelchair	Procedure	HCPCS
K0055	Seat depth of 15, 17, or 18 inches for a high strength, lightweight or ultralightweight wheelchair	Procedure	HCPCS
K0056	Seat height less than 17 in or equal to or greater than 21 in for a high-strength, lightweight, or ultralightweight wheelchair	Procedure	HCPCS
K0057	Seat width 19 or 20 inches for heavy duty or extra heavy-duty chair	Procedure	HCPCS
K0058	Seat depth 17 or 18 inches for a motorized/power wheelchair	Procedure	HCPCS
K0059	Plastic coated handrim, each	Procedure	HCPCS
K0060	Steel handrim, each	Procedure	HCPCS
K0061	Aluminum handrim, each	Procedure	HCPCS
K0062	Handrim with 8 to 10 vertical or oblique projections, each	Procedure	HCPCS
K0063	Handrim with 12 to 16 vertical or oblique projections, each	Procedure	HCPCS
K0064	Zero pressure tube (flat free insert), any size, each	Procedure	HCPCS
K0065	Spoke protectors, each	Procedure	HCPCS
K0066	Solid tire, any size, each	Procedure	HCPCS
K0067	Pneumatic tire, any size, each	Procedure	HCPCS
K0068	Pneumatic tire tube, each	Procedure	HCPCS
K0069	Rear wheel assembly, complete, with solid tire, spokes or molded, replacement only, each	Procedure	HCPCS
K0070	Rear wheel assembly, complete, with pneumatic tire, spokes or molded, replacement only, each	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
K0071	Front caster assembly, complete, with pneumatic tire, replacement only, each	Procedure	HCPCS
K0072	Front caster assembly, complete, with semipneumatic tire, each	Procedure	HCPCS
K0073	Caster pin lock, each	Procedure	HCPCS
K0074	Pneumatic caster tire, any size, each	Procedure	HCPCS
K0075	Semipneumatic caster tire, any size, each	Procedure	HCPCS
K0076	Solid caster tire, any size, each	Procedure	HCPCS
K0077	Front caster assembly, complete, with solid tire, each	Procedure	HCPCS
K0078	Pneumatic caster tire tube, each	Procedure	HCPCS
K0079	Wheel lock extension, pair	Procedure	HCPCS
K0080	Antirollback device, pair	Procedure	HCPCS
K0081	Wheel lock assembly, complete, each	Procedure	HCPCS
K0082	22 NF non-sealed lead acid battery, each	Procedure	HCPCS
K0083	22 NF sealed lead acid battery, each (e.g., gel cell, absorbed glass mat)	Procedure	HCPCS
K0084	Group 24 non-sealed lead acid battery, each	Procedure	HCPCS
K0085	Group 24 sealed lead acid battery, each (e.g., gel cell, absorbed glass mat)	Procedure	HCPCS
K0086	U-1 non-sealed lead acid battery, each	Procedure	HCPCS
K0087	U-1 sealed lead acid battery, each (e.g., gel cell, absorbed glass mat)	Procedure	HCPCS
K0088	Battery charger, single mode, for use with only one battery type, sealed or non-sealed	Procedure	HCPCS
K0089	Battery charger, dual mode, for use with either battery type, sealed or non-sealed	Procedure	HCPCS
K0090	Rear wheel tire for power wheelchair, any size, each	Procedure	HCPCS
K0091	Rear wheel tire tube other than zero pressure for power wheelchair, any size, each	Procedure	HCPCS
K0092	Rear wheel assembly for power wheelchair, complete, each	Procedure	HCPCS
K0093	Rear wheel zero pressure tire tube (flat free insert) for power wheelchair, any size, each	Procedure	HCPCS
K0094	Wheel tire for power base, any size, each	Procedure	HCPCS
K0095	Wheel tire tube other than zero pressure for each base, any size, each	Procedure	HCPCS
K0096	Wheel assembly for power base, complete, each	Procedure	HCPCS
K0097	Wheel zero-pressure tire tube (flat free insert) for power base, any size, each	Procedure	HCPCS
K0098	Drive belt for power wheelchair, replacement only	Procedure	HCPCS
K0099	Front caster for power wheelchair, each	Procedure	HCPCS
K0100	Wheelchair adapter for amputee, pair	Procedure	HCPCS
K0101	One-arm drive attachment, each	Procedure	HCPCS
K0102	Crutch and cane holder, each	Procedure	HCPCS
K0103	Transfer board, less than 25 inches	Procedure	HCPCS
K0104	Cylinder tank carrier, each	Procedure	HCPCS
K0105	IV hanger, each	Procedure	HCPCS
K0106	Arm trough, each	Procedure	HCPCS
K0107	Wheelchair tray	Procedure	HCPCS
K0108	Wheelchair component or accessory, not otherwise specified	Procedure	HCPCS

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

Code	Description	Code	
		Category	Code Type
K0109	Customization of wheelchair base frame (option or accessory)	Procedure	HCPCS
K0112	Trunk support device, vest type, with inner frame, prefabricated	Procedure	HCPCS
K0113	Trunk support device, vest type, without inner frame, prefabricated	Procedure	HCPCS
K0114	Back support system for use with a wheelchair, with inner frame, prefabricated	Procedure	HCPCS
K0115	Seating system, back module, posterior-lateral control, with or without lateral supports, custom fabricated for attachment to wheelchair base	Procedure	HCPCS
K0116	Seating system, combined back and seat module, custom fabricated for attachment to wheelchair base	Procedure	HCPCS
K0119	Azathioprine, oral, tab, 50 mg	Procedure	HCPCS
K0120	Azathioprine, parenteral, 100 mg	Procedure	HCPCS
K0122	Cyclosporine, parenteral, 250 mg	Procedure	HCPCS
K0123	Lymphocyte immune globulin, antithymocyte globulin, parenteral, 250 mg	Procedure	HCPCS
K0137	Skin barrier; liquid (spray, brush, etc.), per oz.	Procedure	HCPCS
K0138	Skin barrier; paste, per oz.	Procedure	HCPCS
K0139	Skin barrier; powder, per oz.	Procedure	HCPCS
K0168	Administration set, small volume nonfiltered pneumatic nebulizer, disposable	Procedure	HCPCS
K0169	Small volume nonfiltered pneumatic nebulizer, disposable	Procedure	HCPCS
K0170	Administration set, small volume nonfiltered pneumatic nebulizer, non-disposable	Procedure	HCPCS
K0171	Administration set, small volume filtered pneumatic nebulizer	Procedure	HCPCS
K0172	Large volume nebulizer, disposable, unfilled, used with aerosol	Procedure	HCPCS
K0173	Large volume nebulizer, disposable, prefilled, used with aerosol compressor	Procedure	HCPCS
K0174	Reservoir bottle, non-disposable, used with large volume ultrasonic nebulizer	Procedure	HCPCS
K0175	Corrugated tubing, disposable, used with large volume nebulizer, 100 feet	Procedure	HCPCS
K0176	Corrugated tubing, non-disposable, used with large volume nebulizer, 100 feet	Procedure	HCPCS
K0177	Water collection device, used with large volume nebulizer	Procedure	HCPCS
K0178	Filter, disposable, used with aerosol compressor	Procedure	HCPCS
K0179	Filter, non-disposable, used with aerosol compressor or ultrasonic generator	Procedure	HCPCS
K0180	Aerosol mask, used with DME nebulizer	Procedure	HCPCS
K0181	Dome and mouthpiece, used with small volume ultrasonic nebulizer	Procedure	HCPCS
K0182	Water, distilled, used with large volume nebulizer, 1000 ml	Procedure	HCPCS
K0183	Nasal application device used with positive airway pressure device	Procedure	HCPCS
K0184	Nasal single piece interface, replacement for nasal application device, pair or single piece interface	Procedure	HCPCS
K0185	Headgear used with positive airway pressure device	Procedure	HCPCS
K0186	Chin strap used with positive airway pressure device	Procedure	HCPCS
K0187	Tubing used with positive airway pressure device	Procedure	HCPCS
K0188	Filter, disposable, used with positive airway pressure device	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
K0189	Filter, non disposable, used with positive airway pressure device	Procedure	HCPCS
K0190	Canister, disposable, used with suction pump	Procedure	HCPCS
K0191	Canister, non-disposable, used with suction pump	Procedure	HCPCS
K0192	Tubing, used with suction pump	Procedure	HCPCS
K0193	Continuous positive airway pressure (CPAP) device, with humidifier	Procedure	HCPCS
K0194	Intermittent assist device with continuous positive airway pressure (CPAP), with humidifier	Procedure	HCPCS
K0195	Elevating legrests, pair (for use with capped rental wheelchair base)	Procedure	HCPCS
K0268	Humidifier, nonheated, used with positive airway pressure device	Procedure	HCPCS
K0269	Aerosol compressor, adjustable pressure, light duty for intermittent use	Procedure	HCPCS
K0270	Ultrasonic generator with small volume ultrasonic nebulizer	Procedure	HCPCS
K0277	Skin barrier; solid 4 x 4 or equivalent, with built-in convexity, each	Procedure	HCPCS
K0278	Skin barrier; with flange (solid, flexible or accordion) with built-in convexity, any size, each	Procedure	HCPCS
K0279	Skin barrier; with flange (solid, flexible or accordion) extended wear, with built-in convexity, any size, each	Procedure	HCPCS
K0280	Extension drainage tubing, any type, any length, with connector/adaptor, for use with urinary leg bag or urostomy pouch, each	Procedure	HCPCS
K0281	Lubricant, individual sterile packet, for insertion of urinary catheter, each	Procedure	HCPCS
K0283	Saline solution, per 10 ml, metered dose dispenser, for use with inhalation drugs	Procedure	HCPCS
K0284	External infusion pump, mechanical, reusable, for extended drug infusion	Procedure	HCPCS
K0400	Adhesive skin support attachment for use with external breast prosthesis, each	Procedure	HCPCS
K0401	For diabetics only, deluxe feature of off-the-shelf depth inlay shoe or custom molded shoe, per shoe	Procedure	HCPCS
K0407	Urinary catheter anchoring device, adhesive skin attachment	Procedure	HCPCS
K0408	Urinary catheter anchoring device, leg strap	Procedure	HCPCS
K0409	Sterile water irrigation solution, 1000 ml	Procedure	HCPCS
K0410	Male external catheter, with adhesive coating, each	Procedure	HCPCS
K0411	Male external catheter, with adhesive strip, each	Procedure	HCPCS
K0412	Mycophenolate mofetil, oral, 250 mg (CellCept)	Procedure	HCPCS
K0415	Prescription antiemetic drug, oral, per 1 mg, for use in conjunction with oral anticancer drug, NOS	Procedure	HCPCS
K0416	Prescription antiemetic drug, rectal, per 1 mg, for use in conjunction with oral anticancer drug, NOS	Procedure	HCPCS
K0417	External infusion pump, mechanical, reusable, for short term drug	Procedure	HCPCS
K0418	Cyclosporin, oral, per 100 mg (Sandimmune)	Procedure	HCPCS
K0419	Pouch, drainable, with faceplate attached, plastic, each	Procedure	HCPCS
K0420	Pouch, drainable, with faceplate attached, rubber, each	Procedure	HCPCS
K0421	Pouch, drainable, for use on faceplate, plastic, each	Procedure	HCPCS
K0422	Pouch, drainable, for use on faceplate, rubber, each	Procedure	HCPCS
K0423	Pouch, urinary, with faceplate attached, plastic, each	Procedure	HCPCS
K0424	Pouch, urinary, with faceplate attached, rubber, each	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
K0425	Pouch, urinary, for use on faceplate, plastic, each	Procedure	HCPCS
K0426	Pouch, urinary, for use on faceplate, heavy plastic, each	Procedure	HCPCS
K0427	Pouch, urinary, for use on faceplate, rubber, each	Procedure	HCPCS
K0428	Ostomy faceplate equivalent, silicone ring, each	Procedure	HCPCS
K0429	Skin barrier, solid 4x4 or equivalent, extended wear, without built-in convexity, each	Procedure	HCPCS
K0430	Skin barrier, with flange (solid, flexible or accordion), extended wear, without built-in convexity, any size, each	Procedure	HCPCS
K0431	Pouch, closed, with standard wear barrier attached, with built-in convexity (1 piece), each	Procedure	HCPCS
K0432	Pouch, drainable, with extended wear barrier attached, without built-in convexity (1 piece), each	Procedure	HCPCS
K0433	Pouch, drainable, with standard wear barrier attached, with built-in convexity (1 piece), each	Procedure	HCPCS
K0434	Pouch, drainable, with extended wear barrier attached, with built-in convexity (1 piece), each	Procedure	HCPCS
K0435	Pouch, urinary, with extended wear barrier attached, without built-in convexity (1 piece), each	Procedure	HCPCS
K0436	Pouch, urinary, with standard wear barrier attached, with built-in convexity (1 piece), each	Procedure	HCPCS
K0437	Pouch, urinary, with extended wear barrier attached, with built-in convexity (1 piece), each	Procedure	HCPCS
K0438	Ostomy deodorant for use in ostomy pouch, liquid, per fluid ounce	Procedure	HCPCS
K0439	Ostomy deodorant for use in ostomy pouch, solid, per tablet	Procedure	HCPCS
K0440	Nasal prosthesis, provided by a non-physician	Procedure	HCPCS
K0441	Midfacial prosthesis, provided by a non-physician	Procedure	HCPCS
K0442	Orbital prosthesis, provided by a non-physician	Procedure	HCPCS
K0443	Upper facial prosthesis, provided by a non-physician	Procedure	HCPCS
K0444	Hemi-facial prosthesis, provided by a non-physician	Procedure	HCPCS
K0445	Auricular prosthesis, provided by a non-physician	Procedure	HCPCS
K0446	Partial facial prosthesis, provided by a non-physician	Procedure	HCPCS
K0447	Nasal septal prosthesis, provided by a non-physician	Procedure	HCPCS
K0448	Unspecified maxillofacial prosthesis, by report, provided by a non-physician	Procedure	HCPCS
K0449	Repair or modification of maxillofacial prosthesis, labor component, 15 minute increments, provided by a non-physician	Procedure	HCPCS
K0450	Adhesive liquid, for use with facial prosthesis only, per ounce	Procedure	HCPCS
K0451	Adhesive remover, wipes, for use with facial prosthesis, per box of 50	Procedure	HCPCS
K0452	Wheelchair bearings, any type	Procedure	HCPCS
K0453	INJ AMPHOTERICIN B 50 MG	Procedure	HCPCS
K0455	Infusion pump used for uninterrupted parenteral administration of medication, (e.g., epoprostenol or treprostinol)	Procedure	HCPCS
K0456	Hospital bed, heavy duty, extra wide, with any type side rails, with mattress	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
K0457	Extra wide/heavy duty commode chair, each	Procedure	HCPCS
K0458	Heavy duty walker, without wheels, each	Procedure	HCPCS
K0459	Heavy duty wheeled walker, each	Procedure	HCPCS
K0460	Power add-on, to convert manual wheelchair to motorized wheelchair, joystick control	Procedure	HCPCS
K0461	Power add-on, to convert manual wheelchair to power operated vehicle, tiller control	Procedure	HCPCS
K0462	Temporary replacement for patient-owned equipment being repaired, any type	Procedure	HCPCS
K0669	Wheelchair accessory, wheelchair seat or back cushion, does not meet specific code criteria or no written coding verification from DME PDAC	Procedure	HCPCS
Epilepsy			
G40.89	Other seizures	Diagnosis	ICD-10-CM
G40.409	Other generalized epilepsy and epileptic syndromes, not intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.401	Other generalized epilepsy and epileptic syndromes, not intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.419	Other generalized epilepsy and epileptic syndromes, intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.411	Other generalized epilepsy and epileptic syndromes, intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.802	Other epilepsy, not intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.801	Other epilepsy, not intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.804	Other epilepsy, intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.803	Other epilepsy, intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.109	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, not intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.101	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, not intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.119	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.111	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.209	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, not intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.201	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, not intractable, with status epilepticus	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
G40.219	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.211	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.009	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, not intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.001	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, not intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.019	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.011	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.812	Lennox-Gastaut syndrome, not intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.811	Lennox-Gastaut syndrome, not intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.814	Lennox-Gastaut syndrome, intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.813	Lennox-Gastaut syndrome, intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.B09	Juvenile myoclonic epilepsy, not intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.B01	Juvenile myoclonic epilepsy, not intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.B19	Juvenile myoclonic epilepsy, intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.B11	Juvenile myoclonic epilepsy, intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.309	Generalized idiopathic epilepsy and epileptic syndromes, not intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.301	Generalized idiopathic epilepsy and epileptic syndromes, not intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.319	Generalized idiopathic epilepsy and epileptic syndromes, intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.311	Generalized idiopathic epilepsy and epileptic syndromes, intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.822	Epileptic spasms, not intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.821	Epileptic spasms, not intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.824	Epileptic spasms, intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.823	Epileptic spasms, intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.509	Epileptic seizures related to external causes, not intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.501	Epileptic seizures related to external causes, not intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.909	Epilepsy, unspecified, not intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.901	Epilepsy, unspecified, not intractable, with status epilepticus	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
G40.919	Epilepsy, unspecified, intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.911	Epilepsy, unspecified, intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.834	Dravet syndrome, intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.833	Dravet syndrome, intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.42	Cyclin-Dependent Kinase-Like 5 Deficiency Disorder	Diagnosis	ICD-10-CM
G40.A09	Absence epileptic syndrome, not intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.A01	Absence epileptic syndrome, not intractable, with status epilepticus	Diagnosis	ICD-10-CM
G40.A19	Absence epileptic syndrome, intractable, without status epilepticus	Diagnosis	ICD-10-CM
G40.A11	Absence epileptic syndrome, intractable, with status epilepticus	Diagnosis	ICD-10-CM
Fecal Occult Blood Test			
82270	BLD OCCULT; FECES 1-3 SIMULTANEOUS DETERM	Procedure	CPT-4
82272	Blood, occult, by peroxidase activity (eg, guaiac), qualitative, feces, 1-3 simultaneous determinations, performed for other than colorectal neoplasm screening	Procedure	CPT-4
82273	Blood, occult; other sources, qualitative	Procedure	CPT-4
82274	Blood, occult, by fecal hemoglobin determination by immunoassay, qualitative, feces, 1-3 simultaneous determinations	Procedure	CPT-4
Fibromyalgia and Chronic Pain			
M54.15	Radiculopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M54.14	Radiculopathy, thoracic region	Diagnosis	ICD-10-CM
M54.10	Radiculopathy, site unspecified	Diagnosis	ICD-10-CM
M54.18	Radiculopathy, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M54.11	Radiculopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M54.17	Radiculopathy, lumbosacral region	Diagnosis	ICD-10-CM
M54.16	Radiculopathy, lumbar region	Diagnosis	ICD-10-CM
M54.13	Radiculopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M54.12	Radiculopathy, cervical region	Diagnosis	ICD-10-CM
M60.829	Other myositis, unspecified upper arm	Diagnosis	ICD-10-CM
M60.859	Other myositis, unspecified thigh	Diagnosis	ICD-10-CM
M60.80	Other myositis, unspecified site	Diagnosis	ICD-10-CM
M60.819	Other myositis, unspecified shoulder	Diagnosis	ICD-10-CM
M60.869	Other myositis, unspecified lower leg	Diagnosis	ICD-10-CM
M60.849	Other myositis, unspecified hand	Diagnosis	ICD-10-CM
M60.839	Other myositis, unspecified forearm	Diagnosis	ICD-10-CM
M60.879	Other myositis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M60.821	Other myositis, right upper arm	Diagnosis	ICD-10-CM
M60.851	Other myositis, right thigh	Diagnosis	ICD-10-CM
M60.811	Other myositis, right shoulder	Diagnosis	ICD-10-CM
M60.861	Other myositis, right lower leg	Diagnosis	ICD-10-CM
M60.841	Other myositis, right hand	Diagnosis	ICD-10-CM
M60.831	Other myositis, right forearm	Diagnosis	ICD-10-CM
M60.871	Other myositis, right ankle and foot	Diagnosis	ICD-10-CM
M60.88	Other myositis, other site	Diagnosis	ICD-10-CM
M60.89	Other myositis, multiple sites	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M60.822	Other myositis, left upper arm	Diagnosis	ICD-10-CM
M60.852	Other myositis, left thigh	Diagnosis	ICD-10-CM
M60.812	Other myositis, left shoulder	Diagnosis	ICD-10-CM
M60.862	Other myositis, left lower leg	Diagnosis	ICD-10-CM
M60.842	Other myositis, left hand	Diagnosis	ICD-10-CM
M60.832	Other myositis, left forearm	Diagnosis	ICD-10-CM
M60.872	Other myositis, left ankle and foot	Diagnosis	ICD-10-CM
G89.28	Other chronic postprocedural pain	Diagnosis	ICD-10-CM
G89.29	Other chronic pain	Diagnosis	ICD-10-CM
M79.2	Neuralgia and neuritis, unspecified	Diagnosis	ICD-10-CM
G89.3	Neoplasm related pain (acute) (chronic)	Diagnosis	ICD-10-CM
M60.9	Myositis, unspecified	Diagnosis	ICD-10-CM
M79.10	Myalgia, unspecified site	Diagnosis	ICD-10-CM
M79.18	Myalgia, other site	Diagnosis	ICD-10-CM
M79.11	Myalgia of mastication muscle	Diagnosis	ICD-10-CM
M79.12	Myalgia of auxiliary muscles, head and neck	Diagnosis	ICD-10-CM
M79.1	Myalgia	Diagnosis	ICD-10-CM
M79.7	Fibromyalgia	Diagnosis	ICD-10-CM
G89.22	Chronic post-thoracotomy pain	Diagnosis	ICD-10-CM
G89.4	Chronic pain syndrome	Diagnosis	ICD-10-CM
G89.21	Chronic pain due to trauma	Diagnosis	ICD-10-CM
R53.82	Chronic fatigue, unspecified	Diagnosis	ICD-10-CM
Fluid and Electrolyte Disorder			
E86.0	Dehydration	Diagnosis	ICD-10-CM
E86.1	Hypovolemia	Diagnosis	ICD-10-CM
E86.9	Volume depletion, unspecified	Diagnosis	ICD-10-CM
E87.0	Hyperosmolality and hypernatremia	Diagnosis	ICD-10-CM
E87.1	Hypo-osmolality and hyponatremia	Diagnosis	ICD-10-CM
E87.2	Acidosis	Diagnosis	ICD-10-CM
E87.3	Alkalosis	Diagnosis	ICD-10-CM
E87.4	Mixed disorder of acid-base balance	Diagnosis	ICD-10-CM
E87.5	Hyperkalemia	Diagnosis	ICD-10-CM
E87.6	Hypokalemia	Diagnosis	ICD-10-CM
E87.70	Fluid overload, unspecified	Diagnosis	ICD-10-CM
E87.71	Transfusion associated circulatory overload	Diagnosis	ICD-10-CM
E87.79	Other fluid overload	Diagnosis	ICD-10-CM
E87.8	Other disorders of electrolyte and fluid balance, not elsewhere classified	Diagnosis	ICD-10-CM
Gallstones			
K80.00	Calculus of gallbladder with acute cholecystitis without obstruction	Diagnosis	ICD-10-CM
K80.01	Calculus of gallbladder with acute cholecystitis with obstruction	Diagnosis	ICD-10-CM
K80.10	Calculus of gallbladder with chronic cholecystitis without obstruction	Diagnosis	ICD-10-CM
K80.11	Calculus of gallbladder with chronic cholecystitis with obstruction	Diagnosis	ICD-10-CM
K80.12	Calculus of gallbladder with acute and chronic cholecystitis without obstruction	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
K80.13	Calculus of gallbladder with acute and chronic cholecystitis with obstruction	Diagnosis	ICD-10-CM
K80.18	Calculus of gallbladder with other cholecystitis without obstruction	Diagnosis	ICD-10-CM
K80.19	Calculus of gallbladder with other cholecystitis with obstruction	Diagnosis	ICD-10-CM
K80.20	Calculus of gallbladder without cholecystitis without obstruction	Diagnosis	ICD-10-CM
K80.21	Calculus of gallbladder without cholecystitis with obstruction	Diagnosis	ICD-10-CM
K80.30	Calculus of bile duct with cholangitis, unspecified, without obstruction	Diagnosis	ICD-10-CM
K80.31	Calculus of bile duct with cholangitis, unspecified, with obstruction	Diagnosis	ICD-10-CM
K80.32	Calculus of bile duct with acute cholangitis without obstruction	Diagnosis	ICD-10-CM
K80.33	Calculus of bile duct with acute cholangitis with obstruction	Diagnosis	ICD-10-CM
K80.34	Calculus of bile duct with chronic cholangitis without obstruction	Diagnosis	ICD-10-CM
K80.35	Calculus of bile duct with chronic cholangitis with obstruction	Diagnosis	ICD-10-CM
K80.36	Calculus of bile duct with acute and chronic cholangitis without obstruction	Diagnosis	ICD-10-CM
K80.37	Calculus of bile duct with acute and chronic cholangitis with obstruction	Diagnosis	ICD-10-CM
K80.40	Calculus of bile duct with cholecystitis, unspecified, without obstruction	Diagnosis	ICD-10-CM
K80.41	Calculus of bile duct with cholecystitis, unspecified, with obstruction	Diagnosis	ICD-10-CM
K80.42	Calculus of bile duct with acute cholecystitis without obstruction	Diagnosis	ICD-10-CM
K80.43	Calculus of bile duct with acute cholecystitis with obstruction	Diagnosis	ICD-10-CM
K80.44	Calculus of bile duct with chronic cholecystitis without obstruction	Diagnosis	ICD-10-CM
K80.45	Calculus of bile duct with chronic cholecystitis with obstruction	Diagnosis	ICD-10-CM
K80.46	Calculus of bile duct with acute and chronic cholecystitis without obstruction	Diagnosis	ICD-10-CM
K80.47	Calculus of bile duct with acute and chronic cholecystitis with obstruction	Diagnosis	ICD-10-CM
K80.50	Calculus of bile duct without cholangitis or cholecystitis without obstruction	Diagnosis	ICD-10-CM
K80.51	Calculus of bile duct without cholangitis or cholecystitis with obstruction	Diagnosis	ICD-10-CM
K80.60	Calculus of gallbladder and bile duct with cholecystitis, unspecified, without obstruction	Diagnosis	ICD-10-CM
K80.61	Calculus of gallbladder and bile duct with cholecystitis, unspecified, with obstruction	Diagnosis	ICD-10-CM
K80.62	Calculus of gallbladder and bile duct with acute cholecystitis without obstruction	Diagnosis	ICD-10-CM
K80.63	Calculus of gallbladder and bile duct with acute cholecystitis with obstruction	Diagnosis	ICD-10-CM
K80.64	Calculus of gallbladder and bile duct with chronic cholecystitis without obstruction	Diagnosis	ICD-10-CM
K80.65	Calculus of gallbladder and bile duct with chronic cholecystitis with obstruction	Diagnosis	ICD-10-CM
K80.66	Calculus of gallbladder and bile duct with acute and chronic cholecystitis without obstruction	Diagnosis	ICD-10-CM
K80.67	Calculus of gallbladder and bile duct with acute and chronic cholecystitis with obstruction	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
K80.70	Calculus of gallbladder and bile duct without cholecystitis without obstruction	Diagnosis	ICD-10-CM
K80.71	Calculus of gallbladder and bile duct without cholecystitis with	Diagnosis	ICD-10-CM
K80.80	Other cholelithiasis without obstruction	Diagnosis	ICD-10-CM
K80.81	Other cholelithiasis with obstruction	Diagnosis	ICD-10-CM
Glaucoma			
H40.20X0	Unspecified primary angle-closure glaucoma, stage unspecified	Diagnosis	ICD-10-CM
H40.20X3	Unspecified primary angle-closure glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.20X2	Unspecified primary angle-closure glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.20X1	Unspecified primary angle-closure glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.20X4	Unspecified primary angle-closure glaucoma, indeterminate stage	Diagnosis	ICD-10-CM
H40.10X0	Unspecified open-angle glaucoma, stage unspecified	Diagnosis	ICD-10-CM
H40.10X3	Unspecified open-angle glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.10X2	Unspecified open-angle glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.10X1	Unspecified open-angle glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.10X4	Unspecified open-angle glaucoma, indeterminate stage	Diagnosis	ICD-10-CM
H40.9	Unspecified glaucoma	Diagnosis	ICD-10-CM
H40.049	Steroid responder, unspecified eye	Diagnosis	ICD-10-CM
H40.041	Steroid responder, right eye	Diagnosis	ICD-10-CM
H40.042	Steroid responder, left eye	Diagnosis	ICD-10-CM
H40.043	Steroid responder, bilateral	Diagnosis	ICD-10-CM
H40.159	Residual stage of open-angle glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.151	Residual stage of open-angle glaucoma, right eye	Diagnosis	ICD-10-CM
H40.152	Residual stage of open-angle glaucoma, left eye	Diagnosis	ICD-10-CM
H40.153	Residual stage of open-angle glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.249	Residual stage of angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.241	Residual stage of angle-closure glaucoma, right eye	Diagnosis	ICD-10-CM
H40.242	Residual stage of angle-closure glaucoma, left eye	Diagnosis	ICD-10-CM
H40.243	Residual stage of angle-closure glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.1190	Primary open-angle glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1193	Primary open-angle glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1192	Primary open-angle glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1191	Primary open-angle glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1194	Primary open-angle glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.11X0	Primary open-angle glaucoma, stage unspecified	Diagnosis	ICD-10-CM
H40.11X3	Primary open-angle glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.1110	Primary open-angle glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1113	Primary open-angle glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1112	Primary open-angle glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1111	Primary open-angle glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1114	Primary open-angle glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.11X2	Primary open-angle glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.11X1	Primary open-angle glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.1120	Primary open-angle glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
H40.1123	Primary open-angle glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1122	Primary open-angle glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1121	Primary open-angle glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1124	Primary open-angle glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.11X4	Primary open-angle glaucoma, indeterminate stage	Diagnosis	ICD-10-CM
H40.1130	Primary open-angle glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1133	Primary open-angle glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1132	Primary open-angle glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1131	Primary open-angle glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1134	Primary open-angle glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1390	Pigmentary glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1393	Pigmentary glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1392	Pigmentary glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1391	Pigmentary glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1394	Pigmentary glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1310	Pigmentary glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1313	Pigmentary glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1312	Pigmentary glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1311	Pigmentary glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1314	Pigmentary glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1320	Pigmentary glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1323	Pigmentary glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1322	Pigmentary glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1321	Pigmentary glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1324	Pigmentary glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1330	Pigmentary glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1333	Pigmentary glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1332	Pigmentary glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1331	Pigmentary glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1334	Pigmentary glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.89	Other specified glaucoma	Diagnosis	ICD-10-CM
H40.019	Open angle with borderline findings, low risk, unspecified eye	Diagnosis	ICD-10-CM
H40.011	Open angle with borderline findings, low risk, right eye	Diagnosis	ICD-10-CM
H40.012	Open angle with borderline findings, low risk, left eye	Diagnosis	ICD-10-CM
H40.013	Open angle with borderline findings, low risk, bilateral	Diagnosis	ICD-10-CM
H40.029	Open angle with borderline findings, high risk, unspecified eye	Diagnosis	ICD-10-CM
H40.021	Open angle with borderline findings, high risk, right eye	Diagnosis	ICD-10-CM
H40.022	Open angle with borderline findings, high risk, left eye	Diagnosis	ICD-10-CM
H40.023	Open angle with borderline findings, high risk, bilateral	Diagnosis	ICD-10-CM
H40.059	Ocular hypertension, unspecified eye	Diagnosis	ICD-10-CM
H40.051	Ocular hypertension, right eye	Diagnosis	ICD-10-CM
H40.052	Ocular hypertension, left eye	Diagnosis	ICD-10-CM
H40.053	Ocular hypertension, bilateral	Diagnosis	ICD-10-CM
H40.1290	Low-tension glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
H40.1293	Low-tension glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1292	Low-tension glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1291	Low-tension glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1294	Low-tension glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1210	Low-tension glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1213	Low-tension glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1212	Low-tension glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1211	Low-tension glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1214	Low-tension glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1220	Low-tension glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1223	Low-tension glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1222	Low-tension glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1221	Low-tension glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1224	Low-tension glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1230	Low-tension glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1233	Low-tension glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1232	Low-tension glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1231	Low-tension glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1234	Low-tension glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.239	Intermittent angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.231	Intermittent angle-closure glaucoma, right eye	Diagnosis	ICD-10-CM
H40.232	Intermittent angle-closure glaucoma, left eye	Diagnosis	ICD-10-CM
H40.233	Intermittent angle-closure glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.829	Hypersecretion glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.821	Hypersecretion glaucoma, right eye	Diagnosis	ICD-10-CM
H40.822	Hypersecretion glaucoma, left eye	Diagnosis	ICD-10-CM
H40.823	Hypersecretion glaucoma, bilateral	Diagnosis	ICD-10-CM
H47.239	Glaucomatous optic atrophy, unspecified eye	Diagnosis	ICD-10-CM
H47.231	Glaucomatous optic atrophy, right eye	Diagnosis	ICD-10-CM
H47.232	Glaucomatous optic atrophy, left eye	Diagnosis	ICD-10-CM
H47.233	Glaucomatous optic atrophy, bilateral	Diagnosis	ICD-10-CM
H40.819	Glaucoma with increased episcleral venous pressure, unspecified eye	Diagnosis	ICD-10-CM
H40.811	Glaucoma with increased episcleral venous pressure, right eye	Diagnosis	ICD-10-CM
H40.812	Glaucoma with increased episcleral venous pressure, left eye	Diagnosis	ICD-10-CM
H40.813	Glaucoma with increased episcleral venous pressure, bilateral	Diagnosis	ICD-10-CM
H40.50X0	Glaucoma secondary to other eye disorders, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.50X3	Glaucoma secondary to other eye disorders, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.50X2	Glaucoma secondary to other eye disorders, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.50X1	Glaucoma secondary to other eye disorders, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.50X4	Glaucoma secondary to other eye disorders, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.51X0	Glaucoma secondary to other eye disorders, right eye, stage unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
H40.51X3	Glaucoma secondary to other eye disorders, right eye, severe stage	Diagnosis	ICD-10-CM
H40.51X2	Glaucoma secondary to other eye disorders, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.51X1	Glaucoma secondary to other eye disorders, right eye, mild stage	Diagnosis	ICD-10-CM
H40.51X4	Glaucoma secondary to other eye disorders, right eye, indeterminate	Diagnosis	ICD-10-CM
H40.52X0	Glaucoma secondary to other eye disorders, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.52X3	Glaucoma secondary to other eye disorders, left eye, severe stage	Diagnosis	ICD-10-CM
H40.52X2	Glaucoma secondary to other eye disorders, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.52X1	Glaucoma secondary to other eye disorders, left eye, mild stage	Diagnosis	ICD-10-CM
H40.52X4	Glaucoma secondary to other eye disorders, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.53X0	Glaucoma secondary to other eye disorders, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.53X3	Glaucoma secondary to other eye disorders, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.53X2	Glaucoma secondary to other eye disorders, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.53X1	Glaucoma secondary to other eye disorders, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.53X4	Glaucoma secondary to other eye disorders, bilateral, indeterminate	Diagnosis	ICD-10-CM
H40.30X0	Glaucoma secondary to eye trauma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.30X3	Glaucoma secondary to eye trauma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.30X2	Glaucoma secondary to eye trauma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.30X1	Glaucoma secondary to eye trauma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.30X4	Glaucoma secondary to eye trauma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.31X0	Glaucoma secondary to eye trauma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.31X3	Glaucoma secondary to eye trauma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.31X2	Glaucoma secondary to eye trauma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.31X1	Glaucoma secondary to eye trauma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.31X4	Glaucoma secondary to eye trauma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.32X0	Glaucoma secondary to eye trauma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.32X3	Glaucoma secondary to eye trauma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.32X2	Glaucoma secondary to eye trauma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.32X1	Glaucoma secondary to eye trauma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.32X4	Glaucoma secondary to eye trauma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.33X0	Glaucoma secondary to eye trauma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.33X3	Glaucoma secondary to eye trauma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.33X2	Glaucoma secondary to eye trauma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.33X1	Glaucoma secondary to eye trauma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.33X4	Glaucoma secondary to eye trauma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.40X0	Glaucoma secondary to eye inflammation, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.40X3	Glaucoma secondary to eye inflammation, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.40X2	Glaucoma secondary to eye inflammation, unspecified eye, moderate	Diagnosis	ICD-10-CM
H40.40X1	Glaucoma secondary to eye inflammation, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.40X4	Glaucoma secondary to eye inflammation, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.41X0	Glaucoma secondary to eye inflammation, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.41X3	Glaucoma secondary to eye inflammation, right eye, severe stage	Diagnosis	ICD-10-CM
H40.41X2	Glaucoma secondary to eye inflammation, right eye, moderate stage	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
H40.41X1	Glaucoma secondary to eye inflammation, right eye, mild stage	Diagnosis	ICD-10-CM
H40.41X4	Glaucoma secondary to eye inflammation, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.42X0	Glaucoma secondary to eye inflammation, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.42X3	Glaucoma secondary to eye inflammation, left eye, severe stage	Diagnosis	ICD-10-CM
H40.42X2	Glaucoma secondary to eye inflammation, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.42X1	Glaucoma secondary to eye inflammation, left eye, mild stage	Diagnosis	ICD-10-CM
H40.42X4	Glaucoma secondary to eye inflammation, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.43X0	Glaucoma secondary to eye inflammation, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.43X3	Glaucoma secondary to eye inflammation, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.43X2	Glaucoma secondary to eye inflammation, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.43X1	Glaucoma secondary to eye inflammation, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.43X4	Glaucoma secondary to eye inflammation, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.60X0	Glaucoma secondary to drugs, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.60X3	Glaucoma secondary to drugs, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.60X2	Glaucoma secondary to drugs, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.60X1	Glaucoma secondary to drugs, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.60X4	Glaucoma secondary to drugs, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.61X0	Glaucoma secondary to drugs, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.61X3	Glaucoma secondary to drugs, right eye, severe stage	Diagnosis	ICD-10-CM
H40.61X2	Glaucoma secondary to drugs, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.61X1	Glaucoma secondary to drugs, right eye, mild stage	Diagnosis	ICD-10-CM
H40.61X4	Glaucoma secondary to drugs, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.62X0	Glaucoma secondary to drugs, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.62X3	Glaucoma secondary to drugs, left eye, severe stage	Diagnosis	ICD-10-CM
H40.62X2	Glaucoma secondary to drugs, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.62X1	Glaucoma secondary to drugs, left eye, mild stage	Diagnosis	ICD-10-CM
H40.62X4	Glaucoma secondary to drugs, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.63X0	Glaucoma secondary to drugs, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.63X3	Glaucoma secondary to drugs, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.63X2	Glaucoma secondary to drugs, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.63X1	Glaucoma secondary to drugs, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.63X4	Glaucoma secondary to drugs, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H42	Glaucoma in diseases classified elsewhere	Diagnosis	ICD-10-CM
Q15.0	Congenital glaucoma	Diagnosis	ICD-10-CM
H40.2290	Chronic angle-closure glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2293	Chronic angle-closure glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.2292	Chronic angle-closure glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.2291	Chronic angle-closure glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.2294	Chronic angle-closure glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.2210	Chronic angle-closure glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2213	Chronic angle-closure glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.2212	Chronic angle-closure glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.2211	Chronic angle-closure glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.2214	Chronic angle-closure glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
H40.2220	Chronic angle-closure glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2223	Chronic angle-closure glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.2222	Chronic angle-closure glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.2221	Chronic angle-closure glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.2224	Chronic angle-closure glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.2230	Chronic angle-closure glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.2233	Chronic angle-closure glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.2232	Chronic angle-closure glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.2231	Chronic angle-closure glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.2234	Chronic angle-closure glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1490	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1493	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1492	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1491	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1494	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1410	Capsular glaucoma with pseudoexfoliation of lens, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1413	Capsular glaucoma with pseudoexfoliation of lens, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1412	Capsular glaucoma with pseudoexfoliation of lens, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1411	Capsular glaucoma with pseudoexfoliation of lens, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1414	Capsular glaucoma with pseudoexfoliation of lens, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1420	Capsular glaucoma with pseudoexfoliation of lens, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1423	Capsular glaucoma with pseudoexfoliation of lens, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1422	Capsular glaucoma with pseudoexfoliation of lens, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1421	Capsular glaucoma with pseudoexfoliation of lens, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1424	Capsular glaucoma with pseudoexfoliation of lens, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1430	Capsular glaucoma with pseudoexfoliation of lens, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1433	Capsular glaucoma with pseudoexfoliation of lens, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1432	Capsular glaucoma with pseudoexfoliation of lens, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1431	Capsular glaucoma with pseudoexfoliation of lens, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1434	Capsular glaucoma with pseudoexfoliation of lens, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.839	Aqueous misdirection, unspecified eye	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
H40.831	Aqueous misdirection, right eye	Diagnosis	ICD-10-CM
H40.832	Aqueous misdirection, left eye	Diagnosis	ICD-10-CM
H40.833	Aqueous misdirection, bilateral	Diagnosis	ICD-10-CM
H40.219	Acute angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.211	Acute angle-closure glaucoma, right eye	Diagnosis	ICD-10-CM
H40.212	Acute angle-closure glaucoma, left eye	Diagnosis	ICD-10-CM
H40.213	Acute angle-closure glaucoma, bilateral	Diagnosis	ICD-10-CM
H44.519	Absolute glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H44.511	Absolute glaucoma, right eye	Diagnosis	ICD-10-CM
H44.512	Absolute glaucoma, left eye	Diagnosis	ICD-10-CM
H44.513	Absolute glaucoma, bilateral	Diagnosis	ICD-10-CM
Heart Failure			
I50.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.30	Unspecified diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.810	Right heart failure, unspecified	Diagnosis	ICD-10-CM
I50.814	Right heart failure due to left heart failure	Diagnosis	ICD-10-CM
I09.81	Rheumatic heart failure	Diagnosis	ICD-10-CM
I42.5	Other restrictive cardiomyopathy	Diagnosis	ICD-10-CM
I50.89	Other heart failure	Diagnosis	ICD-10-CM
I42.8	Other cardiomyopathies	Diagnosis	ICD-10-CM
P29.0	Neonatal cardiac failure	Diagnosis	ICD-10-CM
I50.1	Left ventricular failure, unspecified	Diagnosis	ICD-10-CM
I11.0	Hypertensive heart disease with heart failure	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
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
I50.83	High output heart failure	Diagnosis	ICD-10-CM
I50.9	Heart failure, unspecified	Diagnosis	ICD-10-CM
I50.84	End stage heart failure	Diagnosis	ICD-10-CM
I42.0	Dilated cardiomyopathy	Diagnosis	ICD-10-CM
I50.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.812	Chronic right heart failure	Diagnosis	ICD-10-CM
I50.32	Chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I43	Cardiomyopathy in diseases classified elsewhere	Diagnosis	ICD-10-CM
I42.7	Cardiomyopathy due to drug and external agent	Diagnosis	ICD-10-CM
I50.82	Biventricular heart failure	Diagnosis	ICD-10-CM
I42.6	Alcoholic cardiomyopathy	Diagnosis	ICD-10-CM
I50.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I50.811	Acute right heart failure	Diagnosis	ICD-10-CM
I50.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.813	Acute on chronic right heart failure	Diagnosis	ICD-10-CM
I50.33	Acute on chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.31	Acute diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
Hip Fracture			
S72.109C	Unspecified trochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.109B	Unspecified trochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.109A	Unspecified trochanteric fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.101C	Unspecified trochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.101B	Unspecified trochanteric fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.101A	Unspecified trochanteric fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.102C	Unspecified trochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.102B	Unspecified trochanteric fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.102A	Unspecified trochanteric fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.009A	Unspecified physeal fracture of upper end of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.001A	Unspecified physeal fracture of upper end of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.002A	Unspecified physeal fracture of upper end of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.019C	Unspecified intracapsular fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.019B	Unspecified intracapsular fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.019A	Unspecified intracapsular fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.011C	Unspecified intracapsular fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.011B	Unspecified intracapsular fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.011A	Unspecified intracapsular fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.012C	Unspecified intracapsular fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.012B	Unspecified intracapsular fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.012A	Unspecified intracapsular fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.509B	Unspecified fracture of unspecified pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.509A	Unspecified fracture of unspecified pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.609B	Unspecified fracture of unspecified ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.609A	Unspecified fracture of unspecified ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.309B	Unspecified fracture of unspecified ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.309A	Unspecified fracture of unspecified ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.409B	Unspecified fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.409A	Unspecified fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.501B	Unspecified fracture of right pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.501A	Unspecified fracture of right pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.601B	Unspecified fracture of right ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.601A	Unspecified fracture of right ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.301B	Unspecified fracture of right ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.301A	Unspecified fracture of right ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.401B	Unspecified fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.401A	Unspecified fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.502B	Unspecified fracture of left pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.502A	Unspecified fracture of left pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.602B	Unspecified fracture of left ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.602A	Unspecified fracture of left ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.302B	Unspecified fracture of left ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.302A	Unspecified fracture of left ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.402B	Unspecified fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.402A	Unspecified fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.059C	Unspecified fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.059B	Unspecified fracture of head of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.059A	Unspecified fracture of head of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.051C	Unspecified fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.051B	Unspecified fracture of head of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.051A	Unspecified fracture of head of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.052C	Unspecified fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.052B	Unspecified fracture of head of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.052A	Unspecified fracture of head of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
M84.353A	Stress fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.351A	Stress fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.350A	Stress fracture, pelvis, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.352A	Stress fracture, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.359A	Stress fracture, hip, unspecified, initial encounter for fracture	Diagnosis	ICD-10-CM
S79.019A	Salter-Harris Type I physeal fracture of upper end of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.011A	Salter-Harris Type I physeal fracture of upper end of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.012A	Salter-Harris Type I physeal fracture of upper end of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
M97.01XA	Periprosthetic fracture around internal prosthetic right hip joint, initial encounter	Diagnosis	ICD-10-CM
M97.02XA	Periprosthetic fracture around internal prosthetic left hip joint, initial encounter	Diagnosis	ICD-10-CM
M84.453A	Pathological fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.451A	Pathological fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.452A	Pathological fracture, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.459A	Pathological fracture, hip, unspecified, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.653A	Pathological fracture in other disease, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.651A	Pathological fracture in other disease, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.650A	Pathological fracture in other disease, pelvis, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.652A	Pathological fracture in other disease, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M84.659A	Pathological fracture in other disease, hip, unspecified, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.553A	Pathological fracture in neoplastic disease, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.551A	Pathological fracture in neoplastic disease, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.550A	Pathological fracture in neoplastic disease, pelvis, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.552A	Pathological fracture in neoplastic disease, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.559A	Pathological fracture in neoplastic disease, hip, unspecified, initial encounter for fracture	Diagnosis	ICD-10-CM
S32.599B	Other specified fracture of unspecified pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.599A	Other specified fracture of unspecified pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.699B	Other specified fracture of unspecified ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.699A	Other specified fracture of unspecified ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.499B	Other specified fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.499A	Other specified fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.591B	Other specified fracture of right pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.591A	Other specified fracture of right pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.691B	Other specified fracture of right ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.691A	Other specified fracture of right ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.491B	Other specified fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.491A	Other specified fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.592B	Other specified fracture of left pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.592A	Other specified fracture of left pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.692B	Other specified fracture of left ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.692A	Other specified fracture of left ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.492B	Other specified fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.492A	Other specified fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.099A	Other physeal fracture of upper end of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S79.091A	Other physal fracture of upper end of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.092A	Other physal fracture of upper end of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
M80.859A	Other osteoporosis with current pathological fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.851A	Other osteoporosis with current pathological fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.852A	Other osteoporosis with current pathological fracture, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
S32.399B	Other fracture of unspecified ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.399A	Other fracture of unspecified ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.391B	Other fracture of right ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.391A	Other fracture of right ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.392B	Other fracture of left ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.392A	Other fracture of left ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.099C	Other fracture of head and neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.099B	Other fracture of head and neck of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.099A	Other fracture of head and neck of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.091C	Other fracture of head and neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.091B	Other fracture of head and neck of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.091A	Other fracture of head and neck of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.092C	Other fracture of head and neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.092B	Other fracture of head and neck of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.092A	Other fracture of head and neck of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.456B	Nondisplaced transverse fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.456A	Nondisplaced transverse fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.454B	Nondisplaced transverse fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.454A	Nondisplaced transverse fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.455B	Nondisplaced transverse fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S32.455A	Nondisplaced transverse fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.26XC	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.26XB	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.26XA	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.24XC	Nondisplaced subtrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.24XB	Nondisplaced subtrochanteric fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.24XA	Nondisplaced subtrochanteric fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.25XC	Nondisplaced subtrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.25XB	Nondisplaced subtrochanteric fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.25XA	Nondisplaced subtrochanteric fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.036C	Nondisplaced midcervical fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.036B	Nondisplaced midcervical fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.036A	Nondisplaced midcervical fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.034C	Nondisplaced midcervical fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.034B	Nondisplaced midcervical fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.034A	Nondisplaced midcervical fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.035C	Nondisplaced midcervical fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.035B	Nondisplaced midcervical fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.035A	Nondisplaced midcervical fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.146C	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.146B	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.146A	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.144C	Nondisplaced intertrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.144B	Nondisplaced intertrochanteric fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.144A	Nondisplaced intertrochanteric fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.145C	Nondisplaced intertrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.145B	Nondisplaced intertrochanteric fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.145A	Nondisplaced intertrochanteric fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.426B	Nondisplaced fracture of posterior wall of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.426A	Nondisplaced fracture of posterior wall of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.424B	Nondisplaced fracture of posterior wall of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.424A	Nondisplaced fracture of posterior wall of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.425B	Nondisplaced fracture of posterior wall of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.425A	Nondisplaced fracture of posterior wall of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.446B	Nondisplaced fracture of posterior column [ilioischial] of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.446A	Nondisplaced fracture of posterior column [ilioischial] of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.444B	Nondisplaced fracture of posterior column [ilioischial] of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.444A	Nondisplaced fracture of posterior column [ilioischial] of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.445B	Nondisplaced fracture of posterior column [ilioischial] of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.445A	Nondisplaced fracture of posterior column [ilioischial] of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.476B	Nondisplaced fracture of medial wall of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.476A	Nondisplaced fracture of medial wall of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.474B	Nondisplaced fracture of medial wall of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.474A	Nondisplaced fracture of medial wall of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S32.475B	Nondisplaced fracture of medial wall of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.475A	Nondisplaced fracture of medial wall of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.126C	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.126B	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.126A	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.124C	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.124B	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.124A	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.125C	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.125B	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.125A	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.116C	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.116B	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.116A	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.114C	Nondisplaced fracture of greater trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.114B	Nondisplaced fracture of greater trochanter of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.114A	Nondisplaced fracture of greater trochanter of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.115C	Nondisplaced fracture of greater trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.115B	Nondisplaced fracture of greater trochanter of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.115A	Nondisplaced fracture of greater trochanter of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.026C	Nondisplaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.026B	Nondisplaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.026A	Nondisplaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.024C	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.024B	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.024A	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.025C	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.025B	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.025A	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.046C	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.046B	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.046A	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.044C	Nondisplaced fracture of base of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.044B	Nondisplaced fracture of base of neck of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.044A	Nondisplaced fracture of base of neck of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.045C	Nondisplaced fracture of base of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.045B	Nondisplaced fracture of base of neck of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.045A	Nondisplaced fracture of base of neck of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.416B	Nondisplaced fracture of anterior wall of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.416A	Nondisplaced fracture of anterior wall of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.414B	Nondisplaced fracture of anterior wall of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.414A	Nondisplaced fracture of anterior wall of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.415B	Nondisplaced fracture of anterior wall of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.415A	Nondisplaced fracture of anterior wall of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S32.436B	Nondisplaced fracture of anterior column [iliopubic] of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.436A	Nondisplaced fracture of anterior column [iliopubic] of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.434B	Nondisplaced fracture of anterior column [iliopubic] of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.434A	Nondisplaced fracture of anterior column [iliopubic] of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.435B	Nondisplaced fracture of anterior column [iliopubic] of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.435A	Nondisplaced fracture of anterior column [iliopubic] of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.486B	Nondisplaced dome fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.486A	Nondisplaced dome fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.484B	Nondisplaced dome fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.484A	Nondisplaced dome fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.485B	Nondisplaced dome fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.485A	Nondisplaced dome fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.616B	Nondisplaced avulsion fracture of unspecified ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.616A	Nondisplaced avulsion fracture of unspecified ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.316B	Nondisplaced avulsion fracture of unspecified ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.316A	Nondisplaced avulsion fracture of unspecified ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.614B	Nondisplaced avulsion fracture of right ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.614A	Nondisplaced avulsion fracture of right ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.314B	Nondisplaced avulsion fracture of right ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.314A	Nondisplaced avulsion fracture of right ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.615B	Nondisplaced avulsion fracture of left ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.615A	Nondisplaced avulsion fracture of left ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S32.315B	Nondisplaced avulsion fracture of left ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.315A	Nondisplaced avulsion fracture of left ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.466B	Nondisplaced associated transverse-posterior fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.466A	Nondisplaced associated transverse-posterior fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.464B	Nondisplaced associated transverse-posterior fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.464A	Nondisplaced associated transverse-posterior fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.465B	Nondisplaced associated transverse-posterior fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.465A	Nondisplaced associated transverse-posterior fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.066C	Nondisplaced articular fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.066B	Nondisplaced articular fracture of head of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.066A	Nondisplaced articular fracture of head of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.064C	Nondisplaced articular fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.064B	Nondisplaced articular fracture of head of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.064A	Nondisplaced articular fracture of head of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.065C	Nondisplaced articular fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.065B	Nondisplaced articular fracture of head of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.065A	Nondisplaced articular fracture of head of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.136C	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.136B	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.136A	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.134C	Nondisplaced apophyseal fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.134B	Nondisplaced apophyseal fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.134A	Nondisplaced apophyseal fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.135C	Nondisplaced apophyseal fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.135B	Nondisplaced apophyseal fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.135A	Nondisplaced apophyseal fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.82XB	Multiple fractures of pelvis without disruption of pelvic ring, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.82XA	Multiple fractures of pelvis without disruption of pelvic ring, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.811B	Multiple fractures of pelvis with unstable disruption of pelvic ring, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.811A	Multiple fractures of pelvis with unstable disruption of pelvic ring, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.810B	Multiple fractures of pelvis with stable disruption of pelvic ring, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.810A	Multiple fractures of pelvis with stable disruption of pelvic ring, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.9XXB	Fracture of unspecified parts of lumbosacral spine and pelvis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.9XXA	Fracture of unspecified parts of lumbosacral spine and pelvis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.009C	Fracture of unspecified part of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.009B	Fracture of unspecified part of neck of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.009A	Fracture of unspecified part of neck of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.001C	Fracture of unspecified part of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.001B	Fracture of unspecified part of neck of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.001A	Fracture of unspecified part of neck of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.002C	Fracture of unspecified part of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.002B	Fracture of unspecified part of neck of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.002A	Fracture of unspecified part of neck of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.519B	Fracture of superior rim of unspecified pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S32.519A	Fracture of superior rim of unspecified pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.511B	Fracture of superior rim of right pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.511A	Fracture of superior rim of right pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.512B	Fracture of superior rim of left pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.512A	Fracture of superior rim of left pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.89XB	Fracture of other parts of pelvis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.89XA	Fracture of other parts of pelvis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.453B	Displaced transverse fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.453A	Displaced transverse fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.451B	Displaced transverse fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.451A	Displaced transverse fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.452B	Displaced transverse fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.452A	Displaced transverse fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.23XC	Displaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.23XB	Displaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.23XA	Displaced subtrochanteric fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.21XC	Displaced subtrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.21XB	Displaced subtrochanteric fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.21XA	Displaced subtrochanteric fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.22XC	Displaced subtrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.22XB	Displaced subtrochanteric fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.22XA	Displaced subtrochanteric fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.033C	Displaced midcervical fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.033B	Displaced midcervical fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.033A	Displaced midcervical fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.031C	Displaced midcervical fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.031B	Displaced midcervical fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.031A	Displaced midcervical fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.032C	Displaced midcervical fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.032B	Displaced midcervical fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.032A	Displaced midcervical fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.143C	Displaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.143B	Displaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.143A	Displaced intertrochanteric fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.141C	Displaced intertrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.141B	Displaced intertrochanteric fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.141A	Displaced intertrochanteric fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.142C	Displaced intertrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.142B	Displaced intertrochanteric fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.142A	Displaced intertrochanteric fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.423B	Displaced fracture of posterior wall of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.423A	Displaced fracture of posterior wall of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.421B	Displaced fracture of posterior wall of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.421A	Displaced fracture of posterior wall of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.422B	Displaced fracture of posterior wall of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.422A	Displaced fracture of posterior wall of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.443B	Displaced fracture of posterior column [ilioischial] of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S32.443A	Displaced fracture of posterior column [ilioischial] of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.441B	Displaced fracture of posterior column [ilioischial] of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.441A	Displaced fracture of posterior column [ilioischial] of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.442B	Displaced fracture of posterior column [ilioischial] of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.442A	Displaced fracture of posterior column [ilioischial] of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.473B	Displaced fracture of medial wall of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.473A	Displaced fracture of medial wall of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.471B	Displaced fracture of medial wall of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.471A	Displaced fracture of medial wall of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.472B	Displaced fracture of medial wall of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.472A	Displaced fracture of medial wall of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.123C	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.123B	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.123A	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.121C	Displaced fracture of lesser trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.121B	Displaced fracture of lesser trochanter of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.121A	Displaced fracture of lesser trochanter of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.122C	Displaced fracture of lesser trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.122B	Displaced fracture of lesser trochanter of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.122A	Displaced fracture of lesser trochanter of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.113C	Displaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.113B	Displaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.113A	Displaced fracture of greater trochanter of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.111C	Displaced fracture of greater trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.111B	Displaced fracture of greater trochanter of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.111A	Displaced fracture of greater trochanter of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.112C	Displaced fracture of greater trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.112B	Displaced fracture of greater trochanter of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.112A	Displaced fracture of greater trochanter of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.023C	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.023B	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.023A	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.021C	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.021B	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.021A	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.022C	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.022B	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.022A	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.043C	Displaced fracture of base of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.043B	Displaced fracture of base of neck of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.043A	Displaced fracture of base of neck of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.041C	Displaced fracture of base of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.041B	Displaced fracture of base of neck of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.041A	Displaced fracture of base of neck of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.042C	Displaced fracture of base of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.042B	Displaced fracture of base of neck of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.042A	Displaced fracture of base of neck of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.413B	Displaced fracture of anterior wall of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.413A	Displaced fracture of anterior wall of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.411B	Displaced fracture of anterior wall of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.411A	Displaced fracture of anterior wall of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.412B	Displaced fracture of anterior wall of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.412A	Displaced fracture of anterior wall of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.433B	Displaced fracture of anterior column [iliopubic] of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.433A	Displaced fracture of anterior column [iliopubic] of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.431B	Displaced fracture of anterior column [iliopubic] of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.431A	Displaced fracture of anterior column [iliopubic] of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.432B	Displaced fracture of anterior column [iliopubic] of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.432A	Displaced fracture of anterior column [iliopubic] of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.483B	Displaced dome fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.483A	Displaced dome fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.481B	Displaced dome fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.481A	Displaced dome fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.482B	Displaced dome fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.482A	Displaced dome fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.613B	Displaced avulsion fracture of unspecified ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S32.613A	Displaced avulsion fracture of unspecified ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.313B	Displaced avulsion fracture of unspecified ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.313A	Displaced avulsion fracture of unspecified ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.611B	Displaced avulsion fracture of right ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.611A	Displaced avulsion fracture of right ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.311B	Displaced avulsion fracture of right ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.311A	Displaced avulsion fracture of right ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.612B	Displaced avulsion fracture of left ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.612A	Displaced avulsion fracture of left ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.312B	Displaced avulsion fracture of left ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.312A	Displaced avulsion fracture of left ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.463B	Displaced associated transverse-posterior fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.463A	Displaced associated transverse-posterior fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.461B	Displaced associated transverse-posterior fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.461A	Displaced associated transverse-posterior fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.462B	Displaced associated transverse-posterior fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.462A	Displaced associated transverse-posterior fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.063C	Displaced articular fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.063B	Displaced articular fracture of head of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.063A	Displaced articular fracture of head of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.061C	Displaced articular fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.061B	Displaced articular fracture of head of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.061A	Displaced articular fracture of head of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.062C	Displaced articular fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.062B	Displaced articular fracture of head of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.062A	Displaced articular fracture of head of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.133C	Displaced apophyseal fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.133B	Displaced apophyseal fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.133A	Displaced apophyseal fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.131C	Displaced apophyseal fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.131B	Displaced apophyseal fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.131A	Displaced apophyseal fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.132C	Displaced apophyseal fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.132B	Displaced apophyseal fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.132A	Displaced apophyseal fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
M80.059A	Age-related osteoporosis with current pathological fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.051A	Age-related osteoporosis with current pathological fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.052A	Age-related osteoporosis with current pathological fracture, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
HIV			
R75	Inconclusive laboratory evidence of human immunodeficiency virus [HIV]	Diagnosis	ICD-10-CM
B97.35	Human immunodeficiency virus, type 2 [HIV 2] as the cause of diseases classified elsewhere	Diagnosis	ICD-10-CM
B20	Human immunodeficiency virus [HIV] disease	Diagnosis	ICD-10-CM
Z21	Asymptomatic human immunodeficiency virus [HIV] infection status	Diagnosis	ICD-10-CM
HPV DNA Test			
87621	Infectious agent detection by nucleic acid (DNA or RNA); papillomavirus, human, amplified probe technique	Procedure	CPT-4
Hyperlipidemia			
E78.1	Pure hyperglyceridemia	Diagnosis	ICD-10-CM
E78.00	Pure hypercholesterolemia, unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E78.0	Pure hypercholesterolemia	Diagnosis	ICD-10-CM
E78.4	Other hyperlipidemia	Diagnosis	ICD-10-CM
E78.49	Other hyperlipidemia	Diagnosis	ICD-10-CM
E78.2	Mixed hyperlipidemia	Diagnosis	ICD-10-CM
E78.5	Hyperlipidemia, unspecified	Diagnosis	ICD-10-CM
E78.3	Hyperchylomicronemia	Diagnosis	ICD-10-CM
E78.01	Familial hypercholesterolemia	Diagnosis	ICD-10-CM
E78.41	Elevated Lipoprotein(a)	Diagnosis	ICD-10-CM
Hyperparathyroidism			
E21.0	Primary hyperparathyroidism	Diagnosis	ICD-10-CM
E21.1	Secondary hyperparathyroidism, not elsewhere classified	Diagnosis	ICD-10-CM
E21.2	Other hyperparathyroidism	Diagnosis	ICD-10-CM
E21.3	Hyperparathyroidism, unspecified	Diagnosis	ICD-10-CM
Hypertension			
I15.9	Secondary hypertension, unspecified	Diagnosis	ICD-10-CM
I15.0	Renovascular hypertension	Diagnosis	ICD-10-CM
N26.2	Page kidney	Diagnosis	ICD-10-CM
I15.8	Other secondary hypertension	Diagnosis	ICD-10-CM
H35.039	Hypertensive retinopathy, unspecified eye	Diagnosis	ICD-10-CM
H35.031	Hypertensive retinopathy, right eye	Diagnosis	ICD-10-CM
H35.032	Hypertensive retinopathy, left eye	Diagnosis	ICD-10-CM
H35.033	Hypertensive retinopathy, bilateral	Diagnosis	ICD-10-CM
I11.9	Hypertensive heart disease without heart failure	Diagnosis	ICD-10-CM
I11.0	Hypertensive heart disease with heart failure	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
I13.10	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
I13.2	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
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
I67.4	Hypertensive encephalopathy	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
I15.1	Hypertension secondary to other renal disorders	Diagnosis	ICD-10-CM
I15.2	Hypertension secondary to endocrine disorders	Diagnosis	ICD-10-CM
I10	Essential (primary) hypertension	Diagnosis	ICD-10-CM
Hyperthyroidism			
E02	Subclinical iodine-deficiency hypothyroidism	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E89.0	Postprocedural hypothyroidism	Diagnosis	ICD-10-CM
E03.3	Postinfectious hypothyroidism	Diagnosis	ICD-10-CM
E03.8	Other specified hypothyroidism	Diagnosis	ICD-10-CM
E01.8	Other iodine-deficiency related thyroid disorders and allied conditions	Diagnosis	ICD-10-CM
E03.9	Hypothyroidism, unspecified	Diagnosis	ICD-10-CM
E03.2	Hypothyroidism due to medicaments and other exogenous substances	Diagnosis	ICD-10-CM
E00.9	Congenital iodine-deficiency syndrome, unspecified	Diagnosis	ICD-10-CM
E00.0	Congenital iodine-deficiency syndrome, neurological type	Diagnosis	ICD-10-CM
E00.1	Congenital iodine-deficiency syndrome, myxedematous type	Diagnosis	ICD-10-CM
E00.2	Congenital iodine-deficiency syndrome, mixed type	Diagnosis	ICD-10-CM
E03.1	Congenital hypothyroidism without goiter	Diagnosis	ICD-10-CM
E03.0	Congenital hypothyroidism with diffuse goiter	Diagnosis	ICD-10-CM
E03.4	Atrophy of thyroid (acquired)	Diagnosis	ICD-10-CM
Intellectual Disability			
Q92.0	Whole chromosome trisomy, nonmosaicism (meiotic nondisjunction)	Diagnosis	ICD-10-CM
Q92.1	Whole chromosome trisomy, mosaicism (mitotic nondisjunction)	Diagnosis	ICD-10-CM
Q93.0	Whole chromosome monosomy, nonmosaicism (meiotic nondisjunction)	Diagnosis	ICD-10-CM
Q93.1	Whole chromosome monosomy, mosaicism (mitotic nondisjunction)	Diagnosis	ICD-10-CM
Q93.81	Velo-cardio-facial syndrome	Diagnosis	ICD-10-CM
F79	Unspecified intellectual disabilities	Diagnosis	ICD-10-CM
Q92.9	Trisomy and partial trisomy of autosomes, unspecified	Diagnosis	ICD-10-CM
Q90.2	Trisomy 21, translocation	Diagnosis	ICD-10-CM
Q90.0	Trisomy 21, nonmosaicism (meiotic nondisjunction)	Diagnosis	ICD-10-CM
Q90.1	Trisomy 21, mosaicism (mitotic nondisjunction)	Diagnosis	ICD-10-CM
Q91.3	Trisomy 18, unspecified	Diagnosis	ICD-10-CM
Q91.2	Trisomy 18, translocation	Diagnosis	ICD-10-CM
Q91.0	Trisomy 18, nonmosaicism (meiotic nondisjunction)	Diagnosis	ICD-10-CM
Q91.1	Trisomy 18, mosaicism (mitotic nondisjunction)	Diagnosis	ICD-10-CM
Q91.7	Trisomy 13, unspecified	Diagnosis	ICD-10-CM
Q91.6	Trisomy 13, translocation	Diagnosis	ICD-10-CM
Q91.4	Trisomy 13, nonmosaicism (meiotic nondisjunction)	Diagnosis	ICD-10-CM
Q91.5	Trisomy 13, mosaicism (mitotic nondisjunction)	Diagnosis	ICD-10-CM
Q92.7	Triploidy and polyploidy	Diagnosis	ICD-10-CM
F78.A1	SYNGAP1-related intellectual disability	Diagnosis	ICD-10-CM
E78.72	Smith-Lemli-Opitz syndrome	Diagnosis	ICD-10-CM
F72	Severe intellectual disabilities	Diagnosis	ICD-10-CM
F73	Profound intellectual disabilities	Diagnosis	ICD-10-CM
Q87.11	Prader-Willi syndrome	Diagnosis	ICD-10-CM
Q92.2	Partial trisomy	Diagnosis	ICD-10-CM
Q92.8	Other specified trisomies and partial trisomies of autosomes	Diagnosis	ICD-10-CM
Q89.8	Other specified congenital malformations	Diagnosis	ICD-10-CM
Q87.89	Other specified congenital malformation syndromes, not elsewhere classified	Diagnosis	ICD-10-CM
Q93.88	Other microdeletions	Diagnosis	ICD-10-CM

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

Code	Description	Code	
		Category	Code Type
F78	Other intellectual disabilities	Diagnosis	ICD-10-CM
F78.A9	Other genetic related intellectual disability	Diagnosis	ICD-10-CM
Q93.5	Other deletions of part of a chromosome	Diagnosis	ICD-10-CM
Q93.59	Other deletions of part of a chromosome	Diagnosis	ICD-10-CM
Q93.89	Other deletions from the autosomes	Diagnosis	ICD-10-CM
Q87.5	Other congenital malformation syndromes with other skeletal changes	Diagnosis	ICD-10-CM
Q87.19	Other congenital malformation syndromes predominantly associated with short stature	Diagnosis	ICD-10-CM
P04.3	Newborn affected by maternal use of alcohol	Diagnosis	ICD-10-CM
Q89.7	Multiple congenital malformations, not elsewhere classified	Diagnosis	ICD-10-CM
F71	Moderate intellectual disabilities	Diagnosis	ICD-10-CM
F70	Mild intellectual disabilities	Diagnosis	ICD-10-CM
Q92.61	Marker chromosomes in normal individual	Diagnosis	ICD-10-CM
Q92.62	Marker chromosomes in abnormal individual	Diagnosis	ICD-10-CM
Q99.2	Fragile X chromosome	Diagnosis	ICD-10-CM
Q86.0	Fetal alcohol syndrome (dysmorphic)	Diagnosis	ICD-10-CM
Q92.5	Duplications with other complex rearrangements	Diagnosis	ICD-10-CM
Q90.9	Down syndrome, unspecified	Diagnosis	ICD-10-CM
Q93.7	Deletions with other complex rearrangements	Diagnosis	ICD-10-CM
Q93.4	Deletion of short arm of chromosome 5	Diagnosis	ICD-10-CM
Q93.3	Deletion of short arm of chromosome 4	Diagnosis	ICD-10-CM
Q93.9	Deletion from autosomes, unspecified	Diagnosis	ICD-10-CM
Q87.2	Congenital malformation syndromes predominantly involving limbs	Diagnosis	ICD-10-CM
Q87.1	Congenital malformation syndromes predominantly associated with short stature	Diagnosis	ICD-10-CM
Q87.3	Congenital malformation syndromes involving early overgrowth	Diagnosis	ICD-10-CM
Q93.2	Chromosome replaced with ring, dicentric or isochromosome	Diagnosis	ICD-10-CM
E78.71	Barth syndrome	Diagnosis	ICD-10-CM
Q95.3	Balanced sex/autosomal rearrangement in abnormal individual	Diagnosis	ICD-10-CM
Q95.2	Balanced autosomal rearrangement in abnormal individual	Diagnosis	ICD-10-CM
Q93.51	Angelman syndrome	Diagnosis	ICD-10-CM
Q87.81	Alport syndrome	Diagnosis	ICD-10-CM
Insulin			
43755	Gastric intubation and aspiration, diagnostic; collection of multiple fractional specimens with gastric stimulation, single or double lumen tube (gastric secretory study) (eg, histamine, insulin, pentagastrin, calcium, secretin), includes drug administration	Procedure	CPT-4
80422	Glucagon tolerance panel; for insulinoma This panel must include the following: Glucose (82947 x 3) Insulin (83525 x 3)	Procedure	CPT-4
80434	Insulin tolerance panel; for ACTH insufficiency This panel must include the following: Cortisol (82533 x 5) Glucose (82947 x 5)	Procedure	CPT-4
80435	Insulin tolerance panel; for growth hormone deficiency This panel must include the following: Glucose (82947 x 5) Human growth hormone (HGH) (83003 x 5)	Procedure	CPT-4

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

Code	Description	Code Category	Code Type
81506	Endocrinology (type 2 diabetes), biochemical assays of seven analytes (glucose, HbA1c, insulin, hs-CRP, adiponectin, ferritin, interleukin 2-receptor alpha), utilizing serum or plasma, algorithm reporting a risk score	Procedure	CPT-4
83525	Insulin; total	Procedure	CPT-4
83526	INSULIN TOLERANCE TEST	Procedure	CPT-4
83527	Insulin; free	Procedure	CPT-4
83530	Inulin Clearance	Procedure	CPT-4
84206	Proinsulin	Procedure	CPT-4
86337	Insulin antibodies	Procedure	CPT-4
86338	Insulin Factor Antibodies, Ria	Procedure	CPT-4
91052	Gastric analysis test with injection of stimulant of gastric secretion (eg, histamine, insulin, pentagastrin, calcium and secretin)	Procedure	CPT-4
95180	Rapid desensitization procedure, each hour (eg, insulin, penicillin, equine serum)	Procedure	CPT-4
3E013VG	Introduction of Insulin into Subcutaneous Tissue, Percutaneous Approach	Procedure	ICD-10-PCS
3E030VG	Introduction of Insulin into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
3E033VG	Introduction of Insulin into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E040VG	Introduction of Insulin into Central Vein, Open Approach	Procedure	ICD-10-PCS
3E043VG	Introduction of Insulin into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E050VG	Introduction of Insulin into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
3E053VG	Introduction of Insulin into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E060VG	Introduction of Insulin into Central Artery, Open Approach	Procedure	ICD-10-PCS
3E063VG	Introduction of Insulin into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
A4230	Infusion set for external insulin pump, nonneedle cannula type	Procedure	HCPCS
A4231	Infusion set for external insulin pump, needle type	Procedure	HCPCS
A9274	External ambulatory insulin delivery system, disposable, each, includes all supplies and accessories	Procedure	HCPCS
E0784	External ambulatory infusion pump, insulin	Procedure	HCPCS
E0787	External ambulatory infusion pump, insulin, dosage rate adjustment using therapeutic continuous glucose sensing	Procedure	HCPCS
G9147	Outpatient Intravenous Insulin Treatment (OIVIT) either pulsatile or continuous, by any means, guided by the results of measurements for: respiratory quotient; and/or, urine urea nitrogen (UUN); and/or, arterial, venous or capillary glucose; and/or potassium concentration	Procedure	HCPCS
J1815	Injection, insulin, per 5 units	Procedure	HCPCS
J1817	Insulin for administration through DME (i.e., insulin pump) per 50 units	Procedure	HCPCS
J1820	Injection, insulin, up to 100 units	Procedure	HCPCS
K0548	Injection, insulin lispro, up to 50 units	Procedure	HCPCS
S1034	Artificial pancreas device system (e.g., low glucose suspend [LGS] feature) including continuous glucose monitor, blood glucose device, insulin pump and computer algorithm that communicates with all of the devices	Procedure	HCPCS
S5550	Insulin, rapid onset, 5 units	Procedure	HCPCS
S5551	Insulin, most rapid onset (Lispro or Aspart); 5 units	Procedure	HCPCS
S5552	Insulin, intermediate acting (NPH or LENTE); 5 units	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
S5553	Insulin, long acting; 5 units	Procedure	HCPCS
S5560	Insulin delivery device, reusable pen; 1.5 ml size	Procedure	HCPCS
S5561	Insulin delivery device, reusable pen; 3 ml size	Procedure	HCPCS
S5565	Insulin cartridge for use in insulin delivery device other than pump; 150 units	Procedure	HCPCS
S5566	Insulin cartridge for use in insulin delivery device other than pump; 300 units	Procedure	HCPCS
S5570	Insulin delivery device, disposable pen (including insulin); 1.5 ml size	Procedure	HCPCS
S5571	Insulin delivery device, disposable pen (including insulin); 3 ml size	Procedure	HCPCS
S9145	Insulin pump initiation, instruction in initial use of pump (pump not included)	Procedure	HCPCS
S9353	Home infusion therapy, continuous insulin infusion therapy; administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem	Procedure	HCPCS
Ischemic Heart Disease			
I20.0	Unstable angina	Diagnosis	ICD-10-CM
I25.6	Silent myocardial ischemia	Diagnosis	ICD-10-CM
I25.89	Other forms of chronic ischemic heart disease	Diagnosis	ICD-10-CM
I20.8	Other forms of angina pectoris	Diagnosis	ICD-10-CM
I24.8	Other forms of acute ischemic heart disease	Diagnosis	ICD-10-CM
I25.5	Ischemic cardiomyopathy	Diagnosis	ICD-10-CM
I24.1	Dressler's syndrome	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
I25.42	Coronary artery dissection	Diagnosis	ICD-10-CM
I25.41	Coronary artery aneurysm	Diagnosis	ICD-10-CM
I25.82	Chronic total occlusion of coronary artery	Diagnosis	ICD-10-CM
I25.9	Chronic ischemic heart disease, unspecified	Diagnosis	ICD-10-CM
I25.10	Atherosclerotic heart disease of native coronary artery without angina pectoris	Diagnosis	ICD-10-CM
I25.110	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.119	Atherosclerotic heart disease of native coronary artery with unspecified 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
I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.790	Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I25.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of 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
I25.730	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unstable 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
I25.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of 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
I25.811	Atherosclerosis of native coronary artery of transplanted heart without angina pectoris	Diagnosis	ICD-10-CM
I25.750	Atherosclerosis of native coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
I25.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified 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
I25.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.700	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unstable 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
I25.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.810	Atherosclerosis of coronary artery bypass graft(s) 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
I25.760	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris	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
I25.710	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unstable 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

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

Code	Description	Code Category	Code Type
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of 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
I25.720	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unstable 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
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of 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
I20.1	Angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.3	Aneurysm of heart	Diagnosis	ICD-10-CM
I24.0	Acute coronary thrombosis not resulting in myocardial infarction	Diagnosis	ICD-10-CM
Kawasaki Disease			
M30.3	Mucocutaneous lymph node syndrome [Kawasaki]	Diagnosis	ICD-10-CM
Learning Disability			
F80.4	Speech and language development delay due to hearing loss	Diagnosis	ICD-10-CM
F81.0	Specific reading disorder	Diagnosis	ICD-10-CM
F82	Specific developmental disorder of motor function	Diagnosis	ICD-10-CM
F80.82	Social pragmatic communication disorder	Diagnosis	ICD-10-CM
F80.0	Phonological disorder	Diagnosis	ICD-10-CM
F80.89	Other developmental disorders of speech and language	Diagnosis	ICD-10-CM
F81.89	Other developmental disorders of scholastic skills	Diagnosis	ICD-10-CM
F80.2	Mixed receptive-expressive language disorder	Diagnosis	ICD-10-CM
F81.2	Mixed receptive-expressive language disorder	Diagnosis	ICD-10-CM
F80.1	Mixed receptive-expressive language disorder	Diagnosis	ICD-10-CM
R48.0	Mixed receptive-expressive language disorder	Diagnosis	ICD-10-CM
F81.81	Mixed receptive-expressive language disorder	Diagnosis	ICD-10-CM
F80.9	Mixed receptive-expressive language disorder	Diagnosis	ICD-10-CM
F81.9	Mixed receptive-expressive language disorder	Diagnosis	ICD-10-CM
F80.81	Mixed receptive-expressive language disorder	Diagnosis	ICD-10-CM
H93.25	Mixed receptive-expressive language disorder	Diagnosis	ICD-10-CM
Leukemia and Lymphoma			
C85.10	Unspecified B-cell lymphoma, unspecified site	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
C85.15	Unspecified B-cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C85.11	Unspecified B-cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C85.14	Unspecified B-cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C85.12	Unspecified B-cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C85.16	Unspecified B-cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
C85.13	Unspecified B-cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C85.19	Unspecified B-cell lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C86.3	Subcutaneous panniculitis-like T-cell lymphoma	Diagnosis	ICD-10-CM
C83.00	Small cell B-cell lymphoma, unspecified site	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
C83.05	Small cell B-cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.01	Small cell B-cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.04	Small cell B-cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C83.02	Small cell B-cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.06	Small cell B-cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.03	Small cell B-cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.09	Small cell B-cell lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.10	Sezary disease, unspecified site	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
C84.15	Sezary disease, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.11	Sezary disease, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.14	Sezary disease, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.12	Sezary disease, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.16	Sezary disease, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.13	Sezary disease, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.19	Sezary disease, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C96.4	Sarcoma of dendritic cells (accessory cells)	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
C91.60	Prolymphocytic leukemia of T-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
C91.30	Prolymphocytic leukemia of B-cell type not having achieved remission	Diagnosis	ICD-10-CM
C86.6	Primary cutaneous CD30-positive T-cell proliferations	Diagnosis	ICD-10-CM
D45	Polycythemia vera	Diagnosis	ICD-10-CM
C90.10	Plasma cell leukemia not having achieved remission	Diagnosis	ICD-10-CM
C90.11	Plasma cell leukemia in remission	Diagnosis	ICD-10-CM
C90.12	Plasma cell leukemia in relapse	Diagnosis	ICD-10-CM
Z85.79	Personal history of other malignant neoplasms of lymphoid, hematopoietic and related tissues	Diagnosis	ICD-10-CM
Z85.72	Personal history of non-Hodgkin lymphomas	Diagnosis	ICD-10-CM
Z85.6	Personal history of leukemia	Diagnosis	ICD-10-CM
Z85.71	Personal history of Hodgkin lymphoma	Diagnosis	ICD-10-CM
C84.40	Peripheral T-cell lymphoma, not classified, unspecified site	Diagnosis	ICD-10-CM
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

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

Code	Description	Code Category	Code Type
C84.45	Peripheral T-cell lymphoma, not classified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.41	Peripheral T-cell lymphoma, not classified, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.44	Peripheral T-cell lymphoma, not classified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.42	Peripheral T-cell lymphoma, not classified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.46	Peripheral T-cell lymphoma, not classified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.43	Peripheral T-cell lymphoma, not classified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.49	Peripheral T-cell lymphoma, not classified, extranodal and solid organ	Diagnosis	ICD-10-CM
C82.80	Other types of follicular lymphoma, unspecified site	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
C82.85	Other types of follicular lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.81	Other types of follicular lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.84	Other types of follicular lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.82	Other types of follicular lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.86	Other types of follicular lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.83	Other types of follicular lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.89	Other types of follicular 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
C85.87	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
C85.85	Other specified types of non-Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C85.81	Other specified types of non-Hodgkin lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C85.84	Other specified types of non-Hodgkin lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C85.82	Other specified types of non-Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C85.86	Other specified types of non-Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C85.83	Other specified types of non-Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C85.89	Other specified types of non-Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C96.Z	Other specified malignant neoplasms of lymphoid, hematopoietic and related tissue	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
C94.80	Other specified leukemias not having achieved remission	Diagnosis	ICD-10-CM
C83.80	Other non-follicular lymphoma, unspecified site	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
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
C83.85	Other non-follicular lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.81	Other non-follicular lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.84	Other non-follicular lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C83.82	Other non-follicular lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.86	Other non-follicular lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.83	Other non-follicular lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.89	Other non-follicular lymphoma, extranodal and solid organ sites	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
C92.Z0	Other myeloid leukemia not having achieved remission	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
C84.Z0	Other mature T/NK-cell lymphomas, unspecified site	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.Z5	Other mature T/NK-cell lymphomas, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.Z1	Other mature T/NK-cell lymphomas, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.Z4	Other mature T/NK-cell lymphomas, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.Z2	Other mature T/NK-cell lymphomas, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.Z6	Other mature T/NK-cell lymphomas, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.Z3	Other mature T/NK-cell lymphomas, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.Z9	Other mature T/NK-cell lymphomas, extranodal and solid organ sites	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
C91.Z0	Other lymphoid leukemia not having achieved remission	Diagnosis	ICD-10-CM
C81.70	Other Hodgkin lymphoma, unspecified site	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
C81.75	Other Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.71	Other Hodgkin lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C81.74	Other Hodgkin lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C81.72	Other Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.76	Other Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.73	Other Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.79	Other Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C85.90	Non-Hodgkin lymphoma, unspecified, unspecified site	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

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

Code	Description	Code Category	Code Type
C85.95	Non-Hodgkin lymphoma, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C85.91	Non-Hodgkin lymphoma, unspecified, lymph nodes of head, face, and	Diagnosis	ICD-10-CM
C85.94	Non-Hodgkin lymphoma, unspecified, lymph nodes of axilla and upper	Diagnosis	ICD-10-CM
C85.92	Non-Hodgkin lymphoma, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C85.96	Non-Hodgkin lymphoma, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C85.93	Non-Hodgkin lymphoma, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C85.99	Non-Hodgkin lymphoma, unspecified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C83.90	Non-follicular (diffuse) lymphoma, unspecified, unspecified site	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
C83.95	Non-follicular (diffuse) lymphoma, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.91	Non-follicular (diffuse) lymphoma, unspecified, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.94	Non-follicular (diffuse) lymphoma, unspecified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C83.92	Non-follicular (diffuse) lymphoma, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.96	Non-follicular (diffuse) lymphoma, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.93	Non-follicular (diffuse) lymphoma, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.99	Non-follicular (diffuse) lymphoma, unspecified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C81.10	Nodular sclerosis Hodgkin lymphoma, unspecified site	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
C81.15	Nodular sclerosis Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.11	Nodular sclerosis Hodgkin lymphoma, lymph nodes of head, face, and	Diagnosis	ICD-10-CM
C81.14	Nodular sclerosis Hodgkin lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C81.12	Nodular sclerosis Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.16	Nodular sclerosis Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.13	Nodular sclerosis Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.19	Nodular sclerosis Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C81.00	Nodular lymphocyte predominant Hodgkin lymphoma, unspecified site	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
C81.05	Nodular lymphocyte predominant Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.01	Nodular lymphocyte predominant Hodgkin lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
C81.04	Nodular lymphocyte predominant Hodgkin lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C81.02	Nodular lymphocyte predominant Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.06	Nodular lymphocyte predominant Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.03	Nodular lymphocyte predominant Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.09	Nodular lymphocyte predominant Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
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
C92.90	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
C84.00	Mycosis fungoides, unspecified site	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
C84.05	Mycosis fungoides, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.01	Mycosis fungoides, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.04	Mycosis fungoides, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.02	Mycosis fungoides, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.06	Mycosis fungoides, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.03	Mycosis fungoides, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.09	Mycosis fungoides, extranodal and solid organ sites	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
C81.20	Mixed cellularity Hodgkin lymphoma, unspecified site	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
C81.25	Mixed cellularity Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.21	Mixed cellularity Hodgkin lymphoma, lymph nodes of head, face, and	Diagnosis	ICD-10-CM
C81.24	Mixed cellularity Hodgkin lymphoma, lymph nodes of axilla and upper	Diagnosis	ICD-10-CM
C81.22	Mixed cellularity Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.26	Mixed cellularity Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.23	Mixed cellularity Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.29	Mixed cellularity Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C85.20	Mediastinal (thymic) large B-cell lymphoma, unspecified site	Diagnosis	ICD-10-CM
C85.27	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 J. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS), Current Procedural Terminology, Fourth Edition (CPT-4), and Healthcare Common Procedure Coding System (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
C85.25	Mediastinal (thymic) large B-cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C85.21	Mediastinal (thymic) large B-cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C85.24	Mediastinal (thymic) large B-cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C85.22	Mediastinal (thymic) large B-cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C85.26	Mediastinal (thymic) large B-cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C85.23	Mediastinal (thymic) large B-cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C85.29	Mediastinal (thymic) large B-cell lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.90	Mature T/NK-cell lymphomas, unspecified, unspecified site	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
C84.95	Mature T/NK-cell lymphomas, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.91	Mature T/NK-cell lymphomas, unspecified, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.94	Mature T/NK-cell lymphomas, unspecified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.92	Mature T/NK-cell lymphomas, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.96	Mature T/NK-cell lymphomas, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.93	Mature T/NK-cell lymphomas, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.99	Mature T/NK-cell lymphomas, unspecified, extranodal and solid organ	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.A0	Mature B-cell leukemia Burkitt-type 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
C94.30	Mast cell leukemia not having achieved remission	Diagnosis	ICD-10-CM
C83.10	Mantle cell lymphoma, unspecified site	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
C83.15	Mantle cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.11	Mantle cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.14	Mantle cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C83.12	Mantle cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.16	Mantle cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.13	Mantle cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.19	Mantle cell lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C96.9	Malignant neoplasm of lymphoid, hematopoietic and related tissue, unspecified	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

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

Code	Description	Code Category	Code Type
C91.90	Lymphoid leukemia, unspecified not having achieved remission	Diagnosis	ICD-10-CM
C81.30	Lymphocyte depleted Hodgkin lymphoma, unspecified site	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
C81.35	Lymphocyte depleted Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.31	Lymphocyte depleted Hodgkin lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C81.34	Lymphocyte depleted Hodgkin lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C81.32	Lymphocyte depleted Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.36	Lymphocyte depleted Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.33	Lymphocyte depleted Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.39	Lymphocyte depleted Hodgkin lymphoma, extranodal and solid organ	Diagnosis	ICD-10-CM
C81.40	Lymphocyte-rich Hodgkin lymphoma, unspecified site	Diagnosis	ICD-10-CM
C81.47	Lymphocyte-rich Hodgkin lymphoma, spleen	Diagnosis	ICD-10-CM
C81.48	Lymphocyte-rich Hodgkin lymphoma, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C81.45	Lymphocyte-rich Hodgkin lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.41	Lymphocyte-rich Hodgkin lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C81.44	Lymphocyte-rich Hodgkin lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C81.42	Lymphocyte-rich Hodgkin lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.46	Lymphocyte-rich Hodgkin lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.43	Lymphocyte-rich Hodgkin lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.49	Lymphocyte-rich Hodgkin lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C83.50	Lymphoblastic (diffuse) lymphoma, unspecified site	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
C83.55	Lymphoblastic (diffuse) lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.51	Lymphoblastic (diffuse) lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.54	Lymphoblastic (diffuse) lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C83.52	Lymphoblastic (diffuse) lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.56	Lymphoblastic (diffuse) lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.53	Lymphoblastic (diffuse) lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.59	Lymphoblastic (diffuse) lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C95.91	Leukemia, unspecified, in remission	Diagnosis	ICD-10-CM
C95.92	Leukemia, unspecified, in relapse	Diagnosis	ICD-10-CM
C95.90	Leukemia, unspecified not having achieved remission	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
C81.90	Hodgkin lymphoma, unspecified, unspecified site	Diagnosis	ICD-10-CM
C81.97	Hodgkin lymphoma, unspecified, spleen	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
C81.98	Hodgkin lymphoma, unspecified, lymph nodes of multiple sites	Diagnosis	ICD-10-CM
C81.95	Hodgkin lymphoma, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C81.91	Hodgkin lymphoma, unspecified, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C81.94	Hodgkin lymphoma, unspecified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C81.92	Hodgkin lymphoma, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C81.96	Hodgkin lymphoma, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C81.93	Hodgkin lymphoma, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C81.99	Hodgkin lymphoma, unspecified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C86.1	Hepatosplenic T-cell lymphoma	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
C91.40	Hairy cell leukemia not having achieved remission	Diagnosis	ICD-10-CM
C82.90	Follicular lymphoma, unspecified, unspecified site	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
C82.95	Follicular lymphoma, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.91	Follicular lymphoma, unspecified, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.94	Follicular lymphoma, unspecified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.92	Follicular lymphoma, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.96	Follicular lymphoma, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.93	Follicular lymphoma, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.99	Follicular lymphoma, unspecified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.40	Follicular lymphoma grade IIIb, unspecified site	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
C82.45	Follicular lymphoma grade IIIb, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.41	Follicular lymphoma grade IIIb, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.44	Follicular lymphoma grade IIIb, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.42	Follicular lymphoma grade IIIb, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.46	Follicular lymphoma grade IIIb, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.43	Follicular lymphoma grade IIIb, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.49	Follicular lymphoma grade IIIb, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.30	Follicular lymphoma grade IIIa, unspecified site	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
C82.35	Follicular lymphoma grade IIIa, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.31	Follicular lymphoma grade IIIa, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.34	Follicular lymphoma grade IIIa, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.32	Follicular lymphoma grade IIIa, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.36	Follicular lymphoma grade IIIa, intrapelvic lymph nodes	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
C82.33	Follicular lymphoma grade IIIa, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.39	Follicular lymphoma grade IIIa, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.20	Follicular lymphoma grade III, unspecified, unspecified site	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
C82.25	Follicular lymphoma grade III, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.21	Follicular lymphoma grade III, unspecified, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.24	Follicular lymphoma grade III, unspecified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.22	Follicular lymphoma grade III, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.26	Follicular lymphoma grade III, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.23	Follicular lymphoma grade III, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.29	Follicular lymphoma grade III, unspecified, extranodal and solid organ	Diagnosis	ICD-10-CM
C82.10	Follicular lymphoma grade II, unspecified site	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
C82.15	Follicular lymphoma grade II, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.11	Follicular lymphoma grade II, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.14	Follicular lymphoma grade II, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.12	Follicular lymphoma grade II, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.16	Follicular lymphoma grade II, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.13	Follicular lymphoma grade II, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.19	Follicular lymphoma grade II, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.00	Follicular lymphoma grade I, unspecified site	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
C82.05	Follicular lymphoma grade I, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.01	Follicular lymphoma grade I, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.04	Follicular lymphoma grade I, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.02	Follicular lymphoma grade I, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.06	Follicular lymphoma grade I, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.03	Follicular lymphoma grade I, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.09	Follicular lymphoma grade I, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C86.0	Extranodal NK/T-cell lymphoma, nasal type	Diagnosis	ICD-10-CM
C88.4	Extranodal marginal zone B-cell lymphoma of mucosa-associated lymphoid tissue [MALT-lymphoma]	Diagnosis	ICD-10-CM
C86.2	Enteropathy-type (intestinal) T-cell lymphoma	Diagnosis	ICD-10-CM
C83.30	Diffuse large B-cell lymphoma, unspecified site	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

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

Code	Description	Code Category	Code Type
C83.35	Diffuse large B-cell lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.31	Diffuse large B-cell lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.34	Diffuse large B-cell lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C83.32	Diffuse large B-cell lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.36	Diffuse large B-cell lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.33	Diffuse large B-cell lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.39	Diffuse large B-cell lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C82.50	Diffuse follicle center lymphoma, unspecified site	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
C82.55	Diffuse follicle center lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.51	Diffuse follicle center lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.54	Diffuse follicle center lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.52	Diffuse follicle center lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.56	Diffuse follicle center lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.53	Diffuse follicle center lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.59	Diffuse follicle center lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.A0	Cutaneous T-cell lymphoma, unspecified, unspecified site	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.A5	Cutaneous T-cell lymphoma, unspecified, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.A4	Cutaneous T-cell lymphoma, unspecified, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.A2	Cutaneous T-cell lymphoma, unspecified, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.A6	Cutaneous T-cell lymphoma, unspecified, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.A3	Cutaneous T-cell lymphoma, unspecified, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.A9	Cutaneous T-cell lymphoma, unspecified, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.A1	Cutaneous T-cell lymphoma, unspecified lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.60	Cutaneous follicle center lymphoma, unspecified site	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
C82.65	Cutaneous follicle center lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C82.61	Cutaneous follicle center lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C82.64	Cutaneous follicle center lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C82.62	Cutaneous follicle center lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C82.66	Cutaneous follicle center lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C82.63	Cutaneous follicle center lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C82.69	Cutaneous follicle center lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C93.11	Chronic myelomonocytic leukemia, in remission	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
C93.12	Chronic myelomonocytic leukemia, in relapse	Diagnosis	ICD-10-CM
C93.10	Chronic myelomonocytic leukemia not having achieved remission	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
C91.10	Chronic lymphocytic leukemia of B-cell type not having achieved	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
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
C95.10	Chronic leukemia of unspecified cell type not having achieved remission	Diagnosis	ICD-10-CM
C83.70	Burkitt lymphoma, unspecified site	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
C83.75	Burkitt lymphoma, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C83.71	Burkitt lymphoma, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C83.74	Burkitt lymphoma, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C83.72	Burkitt lymphoma, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C83.76	Burkitt lymphoma, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C83.73	Burkitt lymphoma, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C83.79	Burkitt lymphoma, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C86.4	Blastic NK-cell lymphoma	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
C86.5	Angioimmunoblastic T-cell lymphoma	Diagnosis	ICD-10-CM
C84.60	Anaplastic large cell lymphoma, ALK-positive, unspecified site	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
C84.65	Anaplastic large cell lymphoma, ALK-positive, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.61	Anaplastic large cell lymphoma, ALK-positive, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.64	Anaplastic large cell lymphoma, ALK-positive, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.62	Anaplastic large cell lymphoma, ALK-positive, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.66	Anaplastic large cell lymphoma, ALK-positive, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.63	Anaplastic large cell lymphoma, ALK-positive, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.69	Anaplastic large cell lymphoma, ALK-positive, extranodal and solid organ sites	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
C84.70	Anaplastic large cell lymphoma, ALK-negative, unspecified site	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
C84.75	Anaplastic large cell lymphoma, ALK-negative, lymph nodes of inguinal region and lower limb	Diagnosis	ICD-10-CM
C84.71	Anaplastic large cell lymphoma, ALK-negative, lymph nodes of head, face, and neck	Diagnosis	ICD-10-CM
C84.74	Anaplastic large cell lymphoma, ALK-negative, lymph nodes of axilla and upper limb	Diagnosis	ICD-10-CM
C84.72	Anaplastic large cell lymphoma, ALK-negative, intrathoracic lymph nodes	Diagnosis	ICD-10-CM
C84.76	Anaplastic large cell lymphoma, ALK-negative, intrapelvic lymph nodes	Diagnosis	ICD-10-CM
C84.73	Anaplastic large cell lymphoma, ALK-negative, intra-abdominal lymph nodes	Diagnosis	ICD-10-CM
C84.79	Anaplastic large cell lymphoma, ALK-negative, extranodal and solid organ sites	Diagnosis	ICD-10-CM
C84.7A	Anaplastic large cell lymphoma, ALK-negative, breast	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
C91.50	Adult T-cell lymphoma/leukemia (HTLV-1-associated) not having achieved remission	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.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
C92.60	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
C92.00	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
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
C94.21	Acute megakaryoblastic leukemia, in remission	Diagnosis	ICD-10-CM
C94.22	Acute megakaryoblastic leukemia, in relapse	Diagnosis	ICD-10-CM
C94.20	Acute megakaryoblastic leukemia not having achieved remission	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
C91.01	Acute lymphoblastic leukemia, in remission	Diagnosis	ICD-10-CM
C91.02	Acute lymphoblastic leukemia, in relapse	Diagnosis	ICD-10-CM
C91.00	Acute lymphoblastic leukemia 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
C95.00	Acute leukemia of unspecified cell type not having achieved remission	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
Liver Disease			
K74.60	Unspecified cirrhosis of liver	Diagnosis	ICD-10-CM
K71.9	Toxic liver disease, unspecified	Diagnosis	ICD-10-CM
K71.8	Toxic liver disease with other disorders of liver	Diagnosis	ICD-10-CM
K71.11	Toxic liver disease with hepatic necrosis, with coma	Diagnosis	ICD-10-CM
K71.7	Toxic liver disease with fibrosis and cirrhosis of liver	Diagnosis	ICD-10-CM
K71.0	Toxic liver disease with cholestasis	Diagnosis	ICD-10-CM
K74.4	Secondary biliary cirrhosis	Diagnosis	ICD-10-CM
K74.3	Primary biliary cirrhosis	Diagnosis	ICD-10-CM
K76.6	Portal hypertension	Diagnosis	ICD-10-CM
K75.1	Phlebitis of portal vein	Diagnosis	ICD-10-CM
K75.89	Other specified inflammatory liver diseases	Diagnosis	ICD-10-CM
K76.89	Other specified diseases of liver	Diagnosis	ICD-10-CM
K74.69	Other cirrhosis of liver	Diagnosis	ICD-10-CM
K75.81	Nonalcoholic steatohepatitis (NASH)	Diagnosis	ICD-10-CM
Z94.4	Liver transplant status	Diagnosis	ICD-10-CM
K77	Liver disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
K76.9	Liver disease, unspecified	Diagnosis	ICD-10-CM
K75.9	Inflammatory liver disease, unspecified	Diagnosis	ICD-10-CM
K76.3	Infarction of liver	Diagnosis	ICD-10-CM
K76.7	Hepatorenal syndrome	Diagnosis	ICD-10-CM
K76.81	Hepatopulmonary syndrome	Diagnosis	ICD-10-CM
R16.0	Hepatomegaly, not elsewhere classified	Diagnosis	ICD-10-CM
R16.2	Hepatomegaly with splenomegaly, not elsewhere classified	Diagnosis	ICD-10-CM
K76.5	Hepatic veno-occlusive disease	Diagnosis	ICD-10-CM
K74.1	Hepatic sclerosis	Diagnosis	ICD-10-CM
K74.00	Hepatic fibrosis, unspecified	Diagnosis	ICD-10-CM
K74.01	Hepatic fibrosis, early fibrosis	Diagnosis	ICD-10-CM
K74.02	Hepatic fibrosis, advanced fibrosis	Diagnosis	ICD-10-CM
K74.2	Hepatic fibrosis with hepatic sclerosis	Diagnosis	ICD-10-CM
K74.0	Hepatic fibrosis	Diagnosis	ICD-10-CM
K72.90	Hepatic failure, unspecified without coma	Diagnosis	ICD-10-CM
K72.91	Hepatic failure, unspecified with coma	Diagnosis	ICD-10-CM
K76.0	Fatty (change of) liver, not elsewhere classified	Diagnosis	ICD-10-CM
Z48.23	Encounter for aftercare following liver transplant	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
K76.1	Chronic passive congestion of liver	Diagnosis	ICD-10-CM
K72.10	Chronic hepatic failure without coma	Diagnosis	ICD-10-CM
K72.11	Chronic hepatic failure with coma	Diagnosis	ICD-10-CM
K83.0	Cholangitis	Diagnosis	ICD-10-CM
K76.2	Central hemorrhagic necrosis of liver	Diagnosis	ICD-10-CM
K80.34	Calculus of bile duct with chronic cholangitis without obstruction	Diagnosis	ICD-10-CM
K80.35	Calculus of bile duct with chronic cholangitis with obstruction	Diagnosis	ICD-10-CM
K80.30	Calculus of bile duct with cholangitis, unspecified, without obstruction	Diagnosis	ICD-10-CM
K80.31	Calculus of bile duct with cholangitis, unspecified, with obstruction	Diagnosis	ICD-10-CM
K80.32	Calculus of bile duct with acute cholangitis without obstruction	Diagnosis	ICD-10-CM
K80.33	Calculus of bile duct with acute cholangitis with obstruction	Diagnosis	ICD-10-CM
K80.36	Calculus of bile duct with acute and chronic cholangitis without obstruction	Diagnosis	ICD-10-CM
K80.37	Calculus of bile duct with acute and chronic cholangitis with obstruction	Diagnosis	ICD-10-CM
K74.5	Biliary cirrhosis, unspecified	Diagnosis	ICD-10-CM
K70.9	Alcoholic liver disease, unspecified	Diagnosis	ICD-10-CM
K70.10	Alcoholic hepatitis without ascites	Diagnosis	ICD-10-CM
K70.11	Alcoholic hepatitis with ascites	Diagnosis	ICD-10-CM
K70.40	Alcoholic hepatic failure without coma	Diagnosis	ICD-10-CM
K70.41	Alcoholic hepatic failure with coma	Diagnosis	ICD-10-CM
K70.2	Alcoholic fibrosis and sclerosis of liver	Diagnosis	ICD-10-CM
K70.0	Alcoholic fatty liver	Diagnosis	ICD-10-CM
K70.30	Alcoholic cirrhosis of liver without ascites	Diagnosis	ICD-10-CM
K70.31	Alcoholic cirrhosis of liver with ascites	Diagnosis	ICD-10-CM
K72.00	Acute and subacute hepatic failure without coma	Diagnosis	ICD-10-CM
K72.01	Acute and subacute hepatic failure with coma	Diagnosis	ICD-10-CM
K75.0	Abscess of liver	Diagnosis	ICD-10-CM
0W9F40Z	Drainage of Abdominal Wall with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0W9F30Z	Drainage of Abdominal Wall with Drainage Device, Percutaneous	Procedure	ICD-10-PCS
0W9F3ZZ	Drainage of Abdominal Wall, Percutaneous Approach	Procedure	ICD-10-PCS
0W9F4ZZ	Drainage of Abdominal Wall, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9S40Z	Drainage of Greater Omentum with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9S30Z	Drainage of Greater Omentum with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0D9S3ZZ	Drainage of Greater Omentum, Percutaneous Approach	Procedure	ICD-10-PCS
0D9S4ZZ	Drainage of Greater Omentum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9T40Z	Drainage of Lesser Omentum with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9T30Z	Drainage of Lesser Omentum with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0D9T4ZZ	Drainage of Lesser Omentum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9V30Z	Drainage of Mesentery with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS

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

Code	Description	Code	
		Category	Code Type
0D9V40Z	Drainage of Mesentery with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9V4ZZ	Drainage of Mesentery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9T3ZZ	Drainage of Lesser Omentum, Percutaneous Approach	Procedure	ICD-10-PCS
0D9V3ZZ	Drainage of Mesentery, Percutaneous Approach	Procedure	ICD-10-PCS
0D9W3ZZ	Drainage of Peritoneum, Percutaneous Approach	Procedure	ICD-10-PCS
0W9J30Z	Drainage of Pelvic Cavity with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0W9J3ZZ	Drainage of Pelvic Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
0W9G40Z	Drainage of Peritoneal Cavity with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0W9G30Z	Drainage of Peritoneal Cavity with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0W9G3ZZ	Drainage of Peritoneal Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
0W9G4ZZ	Drainage of Peritoneal Cavity, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9W30Z	Drainage of Peritoneum with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0D9W40Z	Drainage of Peritoneum with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9W4ZZ	Drainage of Peritoneum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0DL58DZ	Occlusion of Esophagus with Intraluminal Device, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0DL57DZ	Occlusion of Esophagus with Intraluminal Device, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
06L33ZZ	Occlusion of Esophageal Vein, Percutaneous Approach	Procedure	ICD-10-PCS
06L34ZZ	Occlusion of Esophageal Vein, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
06L24ZZ	Occlusion of Gastric Vein, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
06L30ZZ	Occlusion of Esophageal Vein, Open Approach	Procedure	ICD-10-PCS
06L20ZZ	Occlusion of Gastric Vein, Open Approach	Procedure	ICD-10-PCS
06L23ZZ	Occlusion of Gastric Vein, Percutaneous Approach	Procedure	ICD-10-PCS
Mammogram			
Z12.31	Encounter for screening mammogram for malignant neoplasm of breast	Diagnosis	ICD-10-CM
Z12.39	Encounter for other screening for malignant neoplasm of breast	Diagnosis	ICD-10-CM
0159T	Computer-aided detection, including computer algorithm analysis of MRI image data for lesion detection/characterization, pharmacokinetic analysis, with further physician review for interpretation, breast MRI (List separately in addition to code for primary procedure)	Procedure	CPT-3
76082	Computer aided detection (computer algorithm analysis of digital image data for lesion detection) with further physician review for interpretation, with or without digitization of film radiographic images; diagnostic mammography (List separately in addition to code for primary procedure)	Procedure	CPT-4
76083	Computer aided detection (computer algorithm analysis of digital image data for lesion detection) with further physician review for interpretation, with or without digitization of film radiographic images; screening mammography (List separately in addition to code for primary procedure)	Procedure	CPT-4

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

Code	Description	Code Category	Code Type
76085	Digitization of film radiographic images with computer analysis for lesion detection and further physician review for interpretation, mammography (List separately in addition to code for primary procedure)	Procedure	CPT-4
76090	Mammography; unilateral	Procedure	CPT-4
76091	Mammography; bilateral	Procedure	CPT-4
76092	Screening mammography, bilateral (two view film study of each breast)	Procedure	CPT-4
77051	Computer-aided detection (computer algorithm analysis of digital image data for lesion detection) with further review for interpretation, with or without digitization of film radiographic images; diagnostic mammography (List separately in addition to code for primary procedure)	Procedure	CPT-4
77052	Computer-aided detection (computer algorithm analysis of digital image data for lesion detection) with further review for interpretation, with or without digitization of film radiographic images; screening mammography (List separately in addition to code for primary procedure)	Procedure	CPT-4
77055	Mammography; unilateral	Procedure	CPT-4
77056	Mammography; bilateral	Procedure	CPT-4
77057	Screening mammography, bilateral (2-view study of each breast)	Procedure	CPT-4
G0202	Screening mammography, bilateral (2-view study of each breast), including computer-aided detection (CAD) when performed	Procedure	HCPCS
G0204	Diagnostic mammography, including computer-aided detection (CAD) when performed; bilateral	Procedure	HCPCS
G0206	Diagnostic mammography, including computer-aided detection (CAD) when performed; unilateral	Procedure	HCPCS
G0207	Diagnostic mammography, film processed to produce digital image analyzed for potential abnormalities, unilateral, all views	Procedure	HCPCS
G0236	Digitization of film radiographic images with computer analysis for lesion detection, or computer analysis of digital mammogram for lesion detection, and further physician review for interpretation, diagnostic mammography (list separately in addition to code for primary procedure)	Procedure	HCPCS

Mental and Physical Impairment

Combo Code	Mental or Physical Impairment	CC
Migraine		
G44.1	Vascular headache, not elsewhere classified	Diagnosis ICD-10-CM
G44.209	Tension-type headache, unspecified, not intractable	Diagnosis ICD-10-CM
G44.201	Tension-type headache, unspecified, intractable	Diagnosis ICD-10-CM
G44.059	Short lasting unilateral neuralgiform headache with conjunctival injection and tearing (SUNCT), not intractable	Diagnosis ICD-10-CM
G44.051	Short lasting unilateral neuralgiform headache with conjunctival injection and tearing (SUNCT), intractable	Diagnosis ICD-10-CM
G44.53	Primary thunderclap headache	Diagnosis ICD-10-CM
G44.85	Primary stabbing headache	Diagnosis ICD-10-CM
G44.84	Primary exertional headache	Diagnosis ICD-10-CM
G44.83	Primary cough headache	Diagnosis ICD-10-CM
G44.309	Post-traumatic headache, unspecified, not intractable	Diagnosis ICD-10-CM

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

Code	Description	Code Category	Code Type
G44.301	Post-traumatic headache, unspecified, intractable	Diagnosis	ICD-10-CM
G43.509	Persistent migraine aura without cerebral infarction, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.501	Persistent migraine aura without cerebral infarction, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.519	Persistent migraine aura without cerebral infarction, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.511	Persistent migraine aura without cerebral infarction, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.609	Persistent migraine aura with cerebral infarction, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.601	Persistent migraine aura with cerebral infarction, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.619	Persistent migraine aura with cerebral infarction, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.611	Persistent migraine aura with cerebral infarction, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.C0	Periodic headache syndromes in child or adult, not intractable	Diagnosis	ICD-10-CM
G43.C1	Periodic headache syndromes in child or adult, intractable	Diagnosis	ICD-10-CM
G44.099	Other trigeminal autonomic cephalgias (TAC), not intractable	Diagnosis	ICD-10-CM
G44.091	Other trigeminal autonomic cephalgias (TAC), intractable	Diagnosis	ICD-10-CM
G43.809	Other migraine, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.801	Other migraine, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.819	Other migraine, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.811	Other migraine, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G44.89	Other headache syndrome	Diagnosis	ICD-10-CM
G44.59	Other complicated headache syndrome	Diagnosis	ICD-10-CM
G43.B0	Ophthalmoplegic migraine, not intractable	Diagnosis	ICD-10-CM
G43.B1	Ophthalmoplegic migraine, intractable	Diagnosis	ICD-10-CM
G44.52	New daily persistent headache (NDPH)	Diagnosis	ICD-10-CM
G43.909	Migraine, unspecified, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.901	Migraine, unspecified, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.919	Migraine, unspecified, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.911	Migraine, unspecified, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.009	Migraine without aura, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.001	Migraine without aura, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.019	Migraine without aura, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.011	Migraine without aura, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.109	Migraine with aura, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.101	Migraine with aura, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.119	Migraine with aura, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.111	Migraine with aura, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.829	Menstrual migraine, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.821	Menstrual migraine, not intractable, with status migrainosus	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
G43.839	Menstrual migraine, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.831	Menstrual migraine, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G44.81	Hypnic headache	Diagnosis	ICD-10-CM
G43.409	Hemiplegic migraine, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.401	Hemiplegic migraine, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.419	Hemiplegic migraine, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.411	Hemiplegic migraine, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G44.51	Hemicrania continua	Diagnosis	ICD-10-CM
G44.82	Headache associated with sexual activity	Diagnosis	ICD-10-CM
G44.219	Episodic tension-type headache, not intractable	Diagnosis	ICD-10-CM
G44.211	Episodic tension-type headache, intractable	Diagnosis	ICD-10-CM
G44.039	Episodic paroxysmal hemicrania, not intractable	Diagnosis	ICD-10-CM
G44.031	Episodic paroxysmal hemicrania, intractable	Diagnosis	ICD-10-CM
G44.019	Episodic cluster headache, not intractable	Diagnosis	ICD-10-CM
G44.011	Episodic cluster headache, intractable	Diagnosis	ICD-10-CM
G44.40	Drug-induced headache, not elsewhere classified, not intractable	Diagnosis	ICD-10-CM
G44.41	Drug-induced headache, not elsewhere classified, intractable	Diagnosis	ICD-10-CM
G43.A0	Cyclical vomiting, in migraine, not intractable	Diagnosis	ICD-10-CM
G43.A1	Cyclical vomiting, in migraine, intractable	Diagnosis	ICD-10-CM
G44.009	Cluster headache syndrome, unspecified, not intractable	Diagnosis	ICD-10-CM
G44.001	Cluster headache syndrome, unspecified, intractable	Diagnosis	ICD-10-CM
G44.229	Chronic tension-type headache, not intractable	Diagnosis	ICD-10-CM
G44.221	Chronic tension-type headache, intractable	Diagnosis	ICD-10-CM
G44.329	Chronic post-traumatic headache, not intractable	Diagnosis	ICD-10-CM
G44.321	Chronic post-traumatic headache, intractable	Diagnosis	ICD-10-CM
G44.049	Chronic paroxysmal hemicrania, not intractable	Diagnosis	ICD-10-CM
G44.041	Chronic paroxysmal hemicrania, intractable	Diagnosis	ICD-10-CM
G43.709	Chronic migraine without aura, not intractable, without status	Diagnosis	ICD-10-CM
G43.701	Chronic migraine without aura, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.719	Chronic migraine without aura, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.711	Chronic migraine without aura, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G44.029	Chronic cluster headache, not intractable	Diagnosis	ICD-10-CM
G44.021	Chronic cluster headache, intractable	Diagnosis	ICD-10-CM
G44.86	Cervicogenic headache	Diagnosis	ICD-10-CM
G44.319	Acute post-traumatic headache, not intractable	Diagnosis	ICD-10-CM
G44.311	Acute post-traumatic headache, intractable	Diagnosis	ICD-10-CM
G43.D0	Abdominal migraine, not intractable	Diagnosis	ICD-10-CM
G43.D1	Abdominal migraine, intractable	Diagnosis	ICD-10-CM
Mobility Impairment			
G04.1	Tropical spastic paraplegia	Diagnosis	ICD-10-CM
G83.84	Todd's paralysis (postepileptic)	Diagnosis	ICD-10-CM
G81.10	Spastic hemiplegia affecting unspecified side	Diagnosis	ICD-10-CM
G81.13	Spastic hemiplegia affecting right nondominant side	Diagnosis	ICD-10-CM
G81.11	Spastic hemiplegia affecting right dominant side	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
G81.14	Spastic hemiplegia affecting left nondominant side	Diagnosis	ICD-10-CM
G81.12	Spastic hemiplegia affecting left dominant side	Diagnosis	ICD-10-CM
G82.50	Quadriplegia, unspecified	Diagnosis	ICD-10-CM
G82.54	Quadriplegia, C5-C7 incomplete	Diagnosis	ICD-10-CM
G82.53	Quadriplegia, C5-C7 complete	Diagnosis	ICD-10-CM
G82.52	Quadriplegia, C1-C4 incomplete	Diagnosis	ICD-10-CM
G82.51	Quadriplegia, C1-C4 complete	Diagnosis	ICD-10-CM
G83.83	Posterior cord syndrome	Diagnosis	ICD-10-CM
G82.20	Paraplegia, unspecified	Diagnosis	ICD-10-CM
G82.22	Paraplegia, incomplete	Diagnosis	ICD-10-CM
G82.21	Paraplegia, complete	Diagnosis	ICD-10-CM
G83.9	Paralytic syndrome, unspecified	Diagnosis	ICD-10-CM
G83.89	Other specified paralytic syndromes	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
I69.963	Other paralytic syndrome following unspecified cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.961	Other paralytic syndrome following unspecified cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.964	Other paralytic syndrome following unspecified cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.962	Other paralytic syndrome following unspecified cerebrovascular disease affecting left 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
I69.263	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.261	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting right 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
I69.262	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.865	Other paralytic syndrome following other cerebrovascular disease,	Diagnosis	ICD-10-CM
I69.869	Other paralytic syndrome following other cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.863	Other paralytic syndrome following other cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.861	Other paralytic syndrome following other cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I69.864	Other paralytic syndrome following other cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.862	Other paralytic syndrome following other cerebrovascular disease affecting left 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
I69.063	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.061	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.064	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.062	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting left 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
I69.163	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.161	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.164	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.162	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting left 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
I69.363	Other paralytic syndrome following cerebral infarction affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.361	Other paralytic syndrome following cerebral infarction affecting right dominant side	Diagnosis	ICD-10-CM
I69.364	Other paralytic syndrome following cerebral infarction affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.362	Other paralytic syndrome following cerebral infarction affecting left dominant side	Diagnosis	ICD-10-CM
G83.30	Monoplegia, unspecified affecting unspecified side	Diagnosis	ICD-10-CM
G83.33	Monoplegia, unspecified affecting right nondominant side	Diagnosis	ICD-10-CM
G83.31	Monoplegia, unspecified affecting right dominant side	Diagnosis	ICD-10-CM
G83.34	Monoplegia, unspecified affecting left nondominant side	Diagnosis	ICD-10-CM
G83.32	Monoplegia, unspecified affecting left dominant side	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I69.939	Monoplegia of upper limb following unspecified cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.933	Monoplegia of upper limb following unspecified cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.931	Monoplegia of upper limb following unspecified cerebrovascular disease affecting right 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
I69.932	Monoplegia of upper limb following unspecified cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.239	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.233	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.231	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting right 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
I69.232	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.839	Monoplegia of upper limb following other cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.833	Monoplegia of upper limb following other cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.831	Monoplegia of upper limb following other cerebrovascular disease affecting right 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
I69.832	Monoplegia of upper limb following other cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.039	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.033	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.031	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting right 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
I69.032	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.139	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.133	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I69.131	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting right 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
I69.132	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.339	Monoplegia of upper limb following cerebral infarction affecting unspecified side	Diagnosis	ICD-10-CM
I69.333	Monoplegia of upper limb following cerebral infarction affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.331	Monoplegia of upper limb following cerebral infarction affecting right dominant side	Diagnosis	ICD-10-CM
I69.334	Monoplegia of upper limb following cerebral infarction affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.332	Monoplegia of upper limb following cerebral infarction affecting left dominant side	Diagnosis	ICD-10-CM
G83.20	Monoplegia of upper limb affecting unspecified side	Diagnosis	ICD-10-CM
G83.23	Monoplegia of upper limb affecting right nondominant side	Diagnosis	ICD-10-CM
G83.21	Monoplegia of upper limb affecting right dominant side	Diagnosis	ICD-10-CM
G83.24	Monoplegia of upper limb affecting left nondominant side	Diagnosis	ICD-10-CM
G83.22	Monoplegia of upper limb affecting left dominant side	Diagnosis	ICD-10-CM
I69.949	Monoplegia of lower limb following unspecified cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.943	Monoplegia of lower limb following unspecified cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.941	Monoplegia of lower limb following unspecified cerebrovascular disease affecting right 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
I69.942	Monoplegia of lower limb following unspecified cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.249	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting unspecified 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
I69.241	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting right 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
I69.242	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.849	Monoplegia of lower limb following other cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I69.843	Monoplegia of lower limb following other cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.841	Monoplegia of lower limb following other cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.844	Monoplegia of lower limb following other cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.842	Monoplegia of lower limb following other cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.049	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.043	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.041	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting right 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
I69.042	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.149	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.143	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.141	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting right 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
I69.142	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.349	Monoplegia of lower limb following cerebral infarction affecting unspecified side	Diagnosis	ICD-10-CM
I69.343	Monoplegia of lower limb following cerebral infarction affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.341	Monoplegia of lower limb following cerebral infarction affecting right dominant side	Diagnosis	ICD-10-CM
I69.344	Monoplegia of lower limb following cerebral infarction affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.342	Monoplegia of lower limb following cerebral infarction affecting left dominant side	Diagnosis	ICD-10-CM
G83.10	Monoplegia of lower limb affecting unspecified side	Diagnosis	ICD-10-CM
G83.13	Monoplegia of lower limb affecting right nondominant side	Diagnosis	ICD-10-CM
G83.11	Monoplegia of lower limb affecting right dominant side	Diagnosis	ICD-10-CM
G83.14	Monoplegia of lower limb affecting left nondominant side	Diagnosis	ICD-10-CM
G83.12	Monoplegia of lower limb affecting left dominant side	Diagnosis	ICD-10-CM
G83.5	Locked-in state	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
G11.4	Hereditary spastic paraplegia	Diagnosis	ICD-10-CM
G81.90	Hemiplegia, unspecified affecting unspecified side	Diagnosis	ICD-10-CM
G81.93	Hemiplegia, unspecified affecting right nondominant side	Diagnosis	ICD-10-CM
G81.91	Hemiplegia, unspecified affecting right dominant side	Diagnosis	ICD-10-CM
G81.94	Hemiplegia, unspecified affecting left nondominant side	Diagnosis	ICD-10-CM
G81.92	Hemiplegia, unspecified affecting left dominant side	Diagnosis	ICD-10-CM
I69.959	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.953	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.951	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.954	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.952	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.259	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.253	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.251	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting right 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
I69.252	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.859	Hemiplegia and hemiparesis following other cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.853	Hemiplegia and hemiparesis following other cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.851	Hemiplegia and hemiparesis following other cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.854	Hemiplegia and hemiparesis following other cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.852	Hemiplegia and hemiparesis following other cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.059	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.053	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.051	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.054	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I69.052	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.159	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.153	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.151	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.154	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.152	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.359	Hemiplegia and hemiparesis following cerebral infarction affecting unspecified side	Diagnosis	ICD-10-CM
I69.353	Hemiplegia and hemiparesis following cerebral infarction affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.351	Hemiplegia and hemiparesis following cerebral infarction affecting right dominant side	Diagnosis	ICD-10-CM
I69.354	Hemiplegia and hemiparesis following cerebral infarction affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.352	Hemiplegia and hemiparesis following cerebral infarction affecting left dominant side	Diagnosis	ICD-10-CM
G81.00	Flaccid hemiplegia affecting unspecified side	Diagnosis	ICD-10-CM
G81.03	Flaccid hemiplegia affecting right nondominant side	Diagnosis	ICD-10-CM
G81.01	Flaccid hemiplegia affecting right dominant side	Diagnosis	ICD-10-CM
G81.04	Flaccid hemiplegia affecting left nondominant side	Diagnosis	ICD-10-CM
G81.02	Flaccid hemiplegia affecting left dominant side	Diagnosis	ICD-10-CM
G83.0	Diplegia of upper limbs	Diagnosis	ICD-10-CM
G83.4	Cauda equina syndrome	Diagnosis	ICD-10-CM
G83.81	Brown-Sequard syndrome	Diagnosis	ICD-10-CM
G83.82	Anterior cord syndrome	Diagnosis	ICD-10-CM
Multiple Sclerosis			
G37.4	Subacute necrotizing myelitis of central nervous system	Diagnosis	ICD-10-CM
G37.8	Other specified demyelinating diseases of central nervous system	Diagnosis	ICD-10-CM
G36.8	Other specified acute disseminated demyelination	Diagnosis	ICD-10-CM
G36.0	Neuromyelitis optica [Devic]	Diagnosis	ICD-10-CM
G35	Multiple sclerosis	Diagnosis	ICD-10-CM
G37.9	Demyelinating disease of central nervous system, unspecified	Diagnosis	ICD-10-CM
G37.2	Central pontine myelinolysis	Diagnosis	ICD-10-CM
G37.1	Central demyelination of corpus callosum	Diagnosis	ICD-10-CM
G37.3	Acute transverse myelitis in demyelinating disease of central nervous system	Diagnosis	ICD-10-CM
G36.9	Acute disseminated demyelination, unspecified	Diagnosis	ICD-10-CM
G36.1	Acute and subacute hemorrhagic leukoencephalitis [Hurst]	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
Muscular Dystrophy			
G71.220	X-linked myotubular myopathy	Diagnosis	ICD-10-CM
G71.09	Other specified muscular dystrophies	Diagnosis	ICD-10-CM
G71.29	Other congenital myopathy	Diagnosis	ICD-10-CM
G71.228	Other centronuclear myopathy	Diagnosis	ICD-10-CM
G71.21	Nemaline myopathy	Diagnosis	ICD-10-CM
G71.11	Myotonic muscular dystrophy	Diagnosis	ICD-10-CM
G71.00	Muscular dystrophy, unspecified	Diagnosis	ICD-10-CM
G71.0	Muscular dystrophy	Diagnosis	ICD-10-CM
G71.02	Facioscapulohumeral muscular dystrophy	Diagnosis	ICD-10-CM
G71.01	Duchenne or Becker muscular dystrophy	Diagnosis	ICD-10-CM
G71.20	Congenital myopathy, unspecified	Diagnosis	ICD-10-CM
G71.2	Congenital myopathies	Diagnosis	ICD-10-CM
Non-Alzheimer's Dementia			
F01.50	Vascular dementia without behavioral disturbance	Diagnosis	ICD-10-CM
F01.51	Vascular dementia with behavioral disturbance	Diagnosis	ICD-10-CM
F03.90	Unspecified dementia without behavioral disturbance	Diagnosis	ICD-10-CM
F03.91	Unspecified dementia with behavioral disturbance	Diagnosis	ICD-10-CM
G13.8	Systemic atrophy primarily affecting central nervous system in other diseases classified elsewhere	Diagnosis	ICD-10-CM
G31.1	Senile degeneration of brain, not elsewhere classified	Diagnosis	ICD-10-CM
G31.01	Pick's disease	Diagnosis	ICD-10-CM
G31.09	Other frontotemporal dementia	Diagnosis	ICD-10-CM
G94	Other disorders of brain in diseases classified elsewhere	Diagnosis	ICD-10-CM
G31.83	Dementia with Lewy bodies	Diagnosis	ICD-10-CM
F02.80	Dementia in other diseases classified elsewhere without behavioral disturbance	Diagnosis	ICD-10-CM
F02.81	Dementia in other diseases classified elsewhere with behavioral disturbance	Diagnosis	ICD-10-CM
F05	Delirium due to known physiological condition	Diagnosis	ICD-10-CM
G31.2	Degeneration of nervous system due to alcohol	Diagnosis	ICD-10-CM
R41.81	Age-related cognitive decline	Diagnosis	ICD-10-CM
Obesity			
E66.09	Other obesity due to excess calories	Diagnosis	ICD-10-CM
E66.8	Other obesity	Diagnosis	ICD-10-CM
E66.9	Obesity, unspecified	Diagnosis	ICD-10-CM
E66.2	Morbid (severe) obesity with alveolar hypoventilation	Diagnosis	ICD-10-CM
E66.01	Morbid (severe) obesity due to excess calories	Diagnosis	ICD-10-CM
E66.1	Drug-induced obesity	Diagnosis	ICD-10-CM
Z68.45	Body mass index [BMI] 70 or greater, adult	Diagnosis	ICD-10-CM
Z68.44	Body mass index [BMI] 60.0-69.9, adult	Diagnosis	ICD-10-CM
Z68.43	Body mass index [BMI] 50.0-59.9, adult	Diagnosis	ICD-10-CM
Z68.42	Body mass index [BMI] 45.0-49.9, adult	Diagnosis	ICD-10-CM
Z68.41	Body mass index [BMI] 40.0-44.9, adult	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
Z68.39	Body mass index [BMI] 39.0-39.9, adult	Diagnosis	ICD-10-CM
Z68.38	Body mass index [BMI] 38.0-38.9, adult	Diagnosis	ICD-10-CM
Z68.37	Body mass index [BMI] 37.0-37.9, adult	Diagnosis	ICD-10-CM
Z68.36	Body mass index [BMI] 36.0-36.9, adult	Diagnosis	ICD-10-CM
Z68.35	Body mass index [BMI] 35.0-35.9, adult	Diagnosis	ICD-10-CM
Z68.34	Body mass index [BMI] 34.0-34.9, adult	Diagnosis	ICD-10-CM
Z68.33	Body mass index [BMI] 33.0-33.9, adult	Diagnosis	ICD-10-CM
Z68.32	Body mass index [BMI] 32.0-32.9, adult	Diagnosis	ICD-10-CM
Z68.31	Body mass index [BMI] 31.0-31.9, adult	Diagnosis	ICD-10-CM
Z68.30	Body mass index [BMI] 30.0-30.9, adult	Diagnosis	ICD-10-CM
Opioid Disorder			
T40.604D	Poisoning by unspecified narcotics, undetermined, subsequent encounter	Diagnosis	ICD-10-CM
T40.604S	Poisoning by unspecified narcotics, undetermined, sequela	Diagnosis	ICD-10-CM
T40.604A	Poisoning by unspecified narcotics, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.602D	Poisoning by unspecified narcotics, intentional self-harm, subsequent encounter	Diagnosis	ICD-10-CM
T40.602S	Poisoning by unspecified narcotics, intentional self-harm, sequela	Diagnosis	ICD-10-CM
T40.602A	Poisoning by unspecified narcotics, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.603D	Poisoning by unspecified narcotics, assault, subsequent encounter	Diagnosis	ICD-10-CM
T40.603S	Poisoning by unspecified narcotics, assault, sequela	Diagnosis	ICD-10-CM
T40.603A	Poisoning by unspecified narcotics, assault, initial encounter	Diagnosis	ICD-10-CM
T40.601D	Poisoning by unspecified narcotics, accidental (unintentional), subsequent encounter	Diagnosis	ICD-10-CM
T40.601S	Poisoning by unspecified narcotics, accidental (unintentional), sequela	Diagnosis	ICD-10-CM
T40.601A	Poisoning by unspecified narcotics, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.424D	Poisoning by tramadol, undetermined, subsequent encounter	Diagnosis	ICD-10-CM
T40.424S	Poisoning by tramadol, undetermined, sequela	Diagnosis	ICD-10-CM
T40.424A	Poisoning by tramadol, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.422D	Poisoning by tramadol, intentional self-harm, subsequent encounter	Diagnosis	ICD-10-CM
T40.422S	Poisoning by tramadol, intentional self-harm, sequela	Diagnosis	ICD-10-CM
T40.422A	Poisoning by tramadol, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.423D	Poisoning by tramadol, assault, subsequent encounter	Diagnosis	ICD-10-CM
T40.423S	Poisoning by tramadol, assault, sequela	Diagnosis	ICD-10-CM
T40.423A	Poisoning by tramadol, assault, initial encounter	Diagnosis	ICD-10-CM
T40.421D	Poisoning by tramadol, accidental (unintentional), subsequent encounter	Diagnosis	ICD-10-CM
T40.421S	Poisoning by tramadol, accidental (unintentional), sequela	Diagnosis	ICD-10-CM
T40.421A	Poisoning by tramadol, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.494D	Poisoning by other synthetic narcotics, undetermined, subsequent encounter	Diagnosis	ICD-10-CM
T40.4X4D	Poisoning by other synthetic narcotics, undetermined, subsequent encounter	Diagnosis	ICD-10-CM
T40.494S	Poisoning by other synthetic narcotics, undetermined, sequela	Diagnosis	ICD-10-CM
T40.4X4S	Poisoning by other synthetic narcotics, undetermined, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
T40.494A	Poisoning by other synthetic narcotics, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.4X4A	Poisoning by other synthetic narcotics, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.4X2D	Poisoning by other synthetic narcotics, intentional self-harm, subsequent encounter	Diagnosis	ICD-10-CM
T40.492D	Poisoning by other synthetic narcotics, intentional self-harm, subsequent encounter	Diagnosis	ICD-10-CM
T40.492S	Poisoning by other synthetic narcotics, intentional self-harm, sequela	Diagnosis	ICD-10-CM
T40.4X2S	Poisoning by other synthetic narcotics, intentional self-harm, sequela	Diagnosis	ICD-10-CM
T40.492A	Poisoning by other synthetic narcotics, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.4X2A	Poisoning by other synthetic narcotics, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.493D	Poisoning by other synthetic narcotics, assault, subsequent encounter	Diagnosis	ICD-10-CM
T40.4X3D	Poisoning by other synthetic narcotics, assault, subsequent encounter	Diagnosis	ICD-10-CM
T40.493S	Poisoning by other synthetic narcotics, assault, sequela	Diagnosis	ICD-10-CM
T40.4X3S	Poisoning by other synthetic narcotics, assault, sequela	Diagnosis	ICD-10-CM
T40.493A	Poisoning by other synthetic narcotics, assault, initial encounter	Diagnosis	ICD-10-CM
T40.4X3A	Poisoning by other synthetic narcotics, assault, initial encounter	Diagnosis	ICD-10-CM
T40.4X1D	Poisoning by other synthetic narcotics, accidental (unintentional), subsequent encounter	Diagnosis	ICD-10-CM
T40.491D	Poisoning by other synthetic narcotics, accidental (unintentional), subsequent encounter	Diagnosis	ICD-10-CM
T40.4X1S	Poisoning by other synthetic narcotics, accidental (unintentional), sequela	Diagnosis	ICD-10-CM
T40.491S	Poisoning by other synthetic narcotics, accidental (unintentional), sequela	Diagnosis	ICD-10-CM
T40.4X1A	Poisoning by other synthetic narcotics, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.491A	Poisoning by other synthetic narcotics, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.2X4D	Poisoning by other opioids, undetermined, subsequent encounter	Diagnosis	ICD-10-CM
T40.2X4S	Poisoning by other opioids, undetermined, sequela	Diagnosis	ICD-10-CM
T40.2X4A	Poisoning by other opioids, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.2X2D	Poisoning by other opioids, intentional self-harm, subsequent encounter	Diagnosis	ICD-10-CM
T40.2X2S	Poisoning by other opioids, intentional self-harm, sequela	Diagnosis	ICD-10-CM
T40.2X2A	Poisoning by other opioids, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.2X3D	Poisoning by other opioids, assault, subsequent encounter	Diagnosis	ICD-10-CM
T40.2X3S	Poisoning by other opioids, assault, sequela	Diagnosis	ICD-10-CM
T40.2X3A	Poisoning by other opioids, assault, initial encounter	Diagnosis	ICD-10-CM
T40.2X1D	Poisoning by other opioids, accidental (unintentional), subsequent encounter	Diagnosis	ICD-10-CM
T40.2X1S	Poisoning by other opioids, accidental (unintentional), sequela	Diagnosis	ICD-10-CM
T40.2X1A	Poisoning by other opioids, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.694D	Poisoning by other narcotics, undetermined, subsequent encounter	Diagnosis	ICD-10-CM
T40.694S	Poisoning by other narcotics, undetermined, sequela	Diagnosis	ICD-10-CM
T40.694A	Poisoning by other narcotics, undetermined, initial encounter	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
T40.692D	Poisoning by other narcotics, intentional self-harm, subsequent encounter	Diagnosis	ICD-10-CM
T40.692S	Poisoning by other narcotics, intentional self-harm, sequela	Diagnosis	ICD-10-CM
T40.692A	Poisoning by other narcotics, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.693D	Poisoning by other narcotics, assault, subsequent encounter	Diagnosis	ICD-10-CM
T40.693S	Poisoning by other narcotics, assault, sequela	Diagnosis	ICD-10-CM
T40.693A	Poisoning by other narcotics, assault, initial encounter	Diagnosis	ICD-10-CM
T40.691D	Poisoning by other narcotics, accidental (unintentional), subsequent encounter	Diagnosis	ICD-10-CM
T40.691S	Poisoning by other narcotics, accidental (unintentional), sequela	Diagnosis	ICD-10-CM
T40.691A	Poisoning by other narcotics, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.0X4D	Poisoning by opium, undetermined, subsequent encounter	Diagnosis	ICD-10-CM
T40.0X4S	Poisoning by opium, undetermined, sequela	Diagnosis	ICD-10-CM
T40.0X4A	Poisoning by opium, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.0X2D	Poisoning by opium, intentional self-harm, subsequent encounter	Diagnosis	ICD-10-CM
T40.0X2S	Poisoning by opium, intentional self-harm, sequela	Diagnosis	ICD-10-CM
T40.0X2A	Poisoning by opium, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.0X3D	Poisoning by opium, assault, subsequent encounter	Diagnosis	ICD-10-CM
T40.0X3S	Poisoning by opium, assault, sequela	Diagnosis	ICD-10-CM
T40.0X3A	Poisoning by opium, assault, initial encounter	Diagnosis	ICD-10-CM
T40.0X1D	Poisoning by opium, accidental (unintentional), subsequent encounter	Diagnosis	ICD-10-CM
T40.0X1S	Poisoning by opium, accidental (unintentional), sequela	Diagnosis	ICD-10-CM
T40.0X1A	Poisoning by opium, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.3X4D	Poisoning by methadone, undetermined, subsequent encounter	Diagnosis	ICD-10-CM
T40.3X4S	Poisoning by methadone, undetermined, sequela	Diagnosis	ICD-10-CM
T40.3X4A	Poisoning by methadone, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.3X2D	Poisoning by methadone, intentional self-harm, subsequent encounter	Diagnosis	ICD-10-CM
T40.3X2S	Poisoning by methadone, intentional self-harm, sequela	Diagnosis	ICD-10-CM
T40.3X2A	Poisoning by methadone, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.3X3D	Poisoning by methadone, assault, subsequent encounter	Diagnosis	ICD-10-CM
T40.3X3S	Poisoning by methadone, assault, sequela	Diagnosis	ICD-10-CM
T40.3X3A	Poisoning by methadone, assault, initial encounter	Diagnosis	ICD-10-CM
T40.3X1D	Poisoning by methadone, accidental (unintentional), subsequent encounter	Diagnosis	ICD-10-CM
T40.3X1S	Poisoning by methadone, accidental (unintentional), sequela	Diagnosis	ICD-10-CM
T40.3X1A	Poisoning by methadone, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.1X4D	Poisoning by heroin, undetermined, subsequent encounter	Diagnosis	ICD-10-CM
T40.1X4S	Poisoning by heroin, undetermined, sequela	Diagnosis	ICD-10-CM
T40.1X4A	Poisoning by heroin, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.1X2D	Poisoning by heroin, intentional self-harm, subsequent encounter	Diagnosis	ICD-10-CM
T40.1X2S	Poisoning by heroin, intentional self-harm, sequela	Diagnosis	ICD-10-CM
T40.1X2A	Poisoning by heroin, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.1X3D	Poisoning by heroin, assault, subsequent encounter	Diagnosis	ICD-10-CM
T40.1X3S	Poisoning by heroin, assault, sequela	Diagnosis	ICD-10-CM
T40.1X3A	Poisoning by heroin, assault, initial encounter	Diagnosis	ICD-10-CM
T40.1X1D	Poisoning by heroin, accidental (unintentional), subsequent encounter	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
T40.1X1S	Poisoning by heroin, accidental (unintentional), sequela	Diagnosis	ICD-10-CM
T40.1X1A	Poisoning by heroin, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.414D	Poisoning by fentanyl or fentanyl analogs, undetermined, subsequent encounter	Diagnosis	ICD-10-CM
T40.414S	Poisoning by fentanyl or fentanyl analogs, undetermined, sequela	Diagnosis	ICD-10-CM
T40.414A	Poisoning by fentanyl or fentanyl analogs, undetermined, initial	Diagnosis	ICD-10-CM
T40.412D	Poisoning by fentanyl or fentanyl analogs, intentional self-harm, subsequent encounter	Diagnosis	ICD-10-CM
T40.412S	Poisoning by fentanyl or fentanyl analogs, intentional self-harm, sequela	Diagnosis	ICD-10-CM
T40.412A	Poisoning by fentanyl or fentanyl analogs, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.413D	Poisoning by fentanyl or fentanyl analogs, assault, subsequent encounter	Diagnosis	ICD-10-CM
T40.413S	Poisoning by fentanyl or fentanyl analogs, assault, sequela	Diagnosis	ICD-10-CM
T40.413A	Poisoning by fentanyl or fentanyl analogs, assault, initial encounter	Diagnosis	ICD-10-CM
T40.411D	Poisoning by fentanyl or fentanyl analogs, accidental (unintentional), subsequent encounter	Diagnosis	ICD-10-CM
T40.411S	Poisoning by fentanyl or fentanyl analogs, accidental (unintentional), sequela	Diagnosis	ICD-10-CM
T40.411A	Poisoning by fentanyl or fentanyl analogs, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
F11.90	Opioid use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F11.93	Opioid use, unspecified with withdrawal	Diagnosis	ICD-10-CM
F11.99	Opioid use, unspecified with unspecified opioid-induced disorder	Diagnosis	ICD-10-CM
F11.988	Opioid use, unspecified with other opioid-induced disorder	Diagnosis	ICD-10-CM
F11.982	Opioid use, unspecified with opioid-induced sleep disorder	Diagnosis	ICD-10-CM
F11.981	Opioid use, unspecified with opioid-induced sexual dysfunction	Diagnosis	ICD-10-CM
F11.959	Opioid use, unspecified with opioid-induced psychotic disorder,	Diagnosis	ICD-10-CM
F11.951	Opioid use, unspecified with opioid-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F11.950	Opioid use, unspecified with opioid-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F11.94	Opioid use, unspecified with opioid-induced mood disorder	Diagnosis	ICD-10-CM
F11.929	Opioid use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F11.920	Opioid use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F11.922	Opioid use, unspecified with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F11.921	Opioid use, unspecified with intoxication delirium	Diagnosis	ICD-10-CM
F11.20	Opioid dependence, uncomplicated	Diagnosis	ICD-10-CM
F11.23	Opioid dependence with withdrawal	Diagnosis	ICD-10-CM
F11.29	Opioid dependence with unspecified opioid-induced disorder	Diagnosis	ICD-10-CM
F11.288	Opioid dependence with other opioid-induced disorder	Diagnosis	ICD-10-CM
F11.282	Opioid dependence with opioid-induced sleep disorder	Diagnosis	ICD-10-CM
F11.281	Opioid dependence with opioid-induced sexual dysfunction	Diagnosis	ICD-10-CM
F11.259	Opioid dependence with opioid-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F11.251	Opioid dependence with opioid-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F11.250	Opioid dependence with opioid-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F11.24	Opioid dependence with opioid-induced mood disorder	Diagnosis	ICD-10-CM
F11.229	Opioid dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F11.220	Opioid dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F11.222	Opioid dependence with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F11.221	Opioid dependence with intoxication delirium	Diagnosis	ICD-10-CM
F11.10	Opioid abuse, uncomplicated	Diagnosis	ICD-10-CM
F11.13	Opioid abuse with withdrawal	Diagnosis	ICD-10-CM
F11.19	Opioid abuse with unspecified opioid-induced disorder	Diagnosis	ICD-10-CM
F11.188	Opioid abuse with other opioid-induced disorder	Diagnosis	ICD-10-CM
F11.182	Opioid abuse with opioid-induced sleep disorder	Diagnosis	ICD-10-CM
F11.181	Opioid abuse with opioid-induced sexual dysfunction	Diagnosis	ICD-10-CM
F11.159	Opioid abuse with opioid-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F11.151	Opioid abuse with opioid-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F11.150	Opioid abuse with opioid-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F11.14	Opioid abuse with opioid-induced mood disorder	Diagnosis	ICD-10-CM
F11.129	Opioid abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F11.120	Opioid abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F11.122	Opioid abuse with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F11.121	Opioid abuse with intoxication delirium	Diagnosis	ICD-10-CM
T40.605D	Adverse effect of unspecified narcotics, subsequent encounter	Diagnosis	ICD-10-CM
T40.605S	Adverse effect of unspecified narcotics, sequela	Diagnosis	ICD-10-CM
T40.605A	Adverse effect of unspecified narcotics, initial encounter	Diagnosis	ICD-10-CM
T40.425D	Adverse effect of tramadol, subsequent encounter	Diagnosis	ICD-10-CM
T40.425S	Adverse effect of tramadol, sequela	Diagnosis	ICD-10-CM
T40.425A	Adverse effect of tramadol, initial encounter	Diagnosis	ICD-10-CM
T40.4X5D	Adverse effect of other synthetic narcotics, subsequent encounter	Diagnosis	ICD-10-CM
T40.495D	Adverse effect of other synthetic narcotics, subsequent encounter	Diagnosis	ICD-10-CM
T40.495S	Adverse effect of other synthetic narcotics, sequela	Diagnosis	ICD-10-CM
T40.4X5S	Adverse effect of other synthetic narcotics, sequela	Diagnosis	ICD-10-CM
T40.4X5A	Adverse effect of other synthetic narcotics, initial encounter	Diagnosis	ICD-10-CM
T40.495A	Adverse effect of other synthetic narcotics, initial encounter	Diagnosis	ICD-10-CM
T40.2X5D	Adverse effect of other opioids, subsequent encounter	Diagnosis	ICD-10-CM
T40.2X5S	Adverse effect of other opioids, sequela	Diagnosis	ICD-10-CM
T40.2X5A	Adverse effect of other opioids, initial encounter	Diagnosis	ICD-10-CM
T40.695D	Adverse effect of other narcotics, subsequent encounter	Diagnosis	ICD-10-CM
T40.695S	Adverse effect of other narcotics, sequela	Diagnosis	ICD-10-CM
T40.695A	Adverse effect of other narcotics, initial encounter	Diagnosis	ICD-10-CM
T40.0X5D	Adverse effect of opium, subsequent encounter	Diagnosis	ICD-10-CM
T40.0X5S	Adverse effect of opium, sequela	Diagnosis	ICD-10-CM
T40.0X5A	Adverse effect of opium, initial encounter	Diagnosis	ICD-10-CM
T40.3X5D	Adverse effect of methadone, subsequent encounter	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
T40.3X5S	Adverse effect of methadone, sequela	Diagnosis	ICD-10-CM
T40.3X5A	Adverse effect of methadone, initial encounter	Diagnosis	ICD-10-CM
T40.415D	Adverse effect of fentanyl or fentanyl analogs, subsequent encounter	Diagnosis	ICD-10-CM
T40.415S	Adverse effect of fentanyl or fentanyl analogs, sequela	Diagnosis	ICD-10-CM
T40.415A	Adverse effect of fentanyl or fentanyl analogs, initial encounter	Diagnosis	ICD-10-CM
HZ86ZZZ	Medication Management for Substance Abuse Treatment, Clonidine	Procedure	ICD-10-PCS
HZ85ZZZ	Medication Management for Substance Abuse Treatment, Naloxone	Procedure	ICD-10-PCS
HZ81ZZZ	Medication Management for Substance Abuse Treatment, Methadone Maintenance	Procedure	ICD-10-PCS
HZ84ZZZ	Medication Management for Substance Abuse Treatment, Naltrexone	Procedure	ICD-10-PCS
HZ94ZZZ	Pharmacotherapy for Substance Abuse Treatment, Naltrexone	Procedure	ICD-10-PCS
HZ96ZZZ	Pharmacotherapy for Substance Abuse Treatment, Clonidine	Procedure	ICD-10-PCS
HZ95ZZZ	Pharmacotherapy for Substance Abuse Treatment, Naloxone	Procedure	ICD-10-PCS
HZ91ZZZ	Pharmacotherapy for Substance Abuse Treatment, Methadone Maintenance	Procedure	ICD-10-PCS
Organ Transplant			
T86.00	Unspecified complication of bone marrow transplant	Diagnosis	ICD-10-CM
T86.01	Bone marrow transplant rejection	Diagnosis	ICD-10-CM
T86.02	Bone marrow transplant failure	Diagnosis	ICD-10-CM
T86.03	Bone marrow transplant infection	Diagnosis	ICD-10-CM
T86.09	Other complications of bone marrow transplant	Diagnosis	ICD-10-CM
T86.10	Unspecified complication of kidney transplant	Diagnosis	ICD-10-CM
T86.11	Kidney transplant rejection	Diagnosis	ICD-10-CM
T86.12	Kidney transplant failure	Diagnosis	ICD-10-CM
T86.13	Kidney transplant infection	Diagnosis	ICD-10-CM
T86.19	Other complication of kidney transplant	Diagnosis	ICD-10-CM
T86.20	Unspecified complication of heart transplant	Diagnosis	ICD-10-CM
T86.21	Heart transplant rejection	Diagnosis	ICD-10-CM
T86.22	Heart transplant failure	Diagnosis	ICD-10-CM
T86.23	Heart transplant infection	Diagnosis	ICD-10-CM
T86.290	Cardiac allograft vasculopathy	Diagnosis	ICD-10-CM
T86.298	Other complications of heart transplant	Diagnosis	ICD-10-CM
T86.30	Unspecified complication of heart-lung transplant	Diagnosis	ICD-10-CM
T86.31	Heart-lung transplant rejection	Diagnosis	ICD-10-CM
T86.32	Heart-lung transplant failure	Diagnosis	ICD-10-CM
T86.33	Heart-lung transplant infection	Diagnosis	ICD-10-CM
T86.39	Other complications of heart-lung transplant	Diagnosis	ICD-10-CM
T86.40	Unspecified complication of liver transplant	Diagnosis	ICD-10-CM
T86.41	Liver transplant rejection	Diagnosis	ICD-10-CM
T86.42	Liver transplant failure	Diagnosis	ICD-10-CM
T86.43	Liver transplant infection	Diagnosis	ICD-10-CM
T86.49	Other complications of liver transplant	Diagnosis	ICD-10-CM
T86.5	Complications of stem cell transplant	Diagnosis	ICD-10-CM
T86.810	Lung transplant rejection	Diagnosis	ICD-10-CM

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

Code	Description	Code	
		Category	Code Type
T86.811	Lung transplant failure	Diagnosis	ICD-10-CM
T86.812	Lung transplant infection	Diagnosis	ICD-10-CM
T86.818	Other complications of lung transplant	Diagnosis	ICD-10-CM
T86.819	Unspecified complication of lung transplant	Diagnosis	ICD-10-CM
T86.830	Bone graft rejection	Diagnosis	ICD-10-CM
T86.831	Bone graft failure	Diagnosis	ICD-10-CM
T86.832	Bone graft infection	Diagnosis	ICD-10-CM
T86.838	Other complications of bone graft	Diagnosis	ICD-10-CM
T86.839	Unspecified complication of bone graft	Diagnosis	ICD-10-CM
T86.850	Intestine transplant rejection	Diagnosis	ICD-10-CM
T86.851	Intestine transplant failure	Diagnosis	ICD-10-CM
T86.852	Intestine transplant infection	Diagnosis	ICD-10-CM
T86.858	Other complications of intestine transplant	Diagnosis	ICD-10-CM
T86.859	Unspecified complication of intestine transplant	Diagnosis	ICD-10-CM
T86.890	Other transplanted tissue rejection	Diagnosis	ICD-10-CM
T86.891	Other transplanted tissue failure	Diagnosis	ICD-10-CM
T86.892	Other transplanted tissue infection	Diagnosis	ICD-10-CM
T86.898	Other complications of other transplanted tissue	Diagnosis	ICD-10-CM
T86.899	Unspecified complication of other transplanted tissue	Diagnosis	ICD-10-CM
T86.90	Unspecified complication of unspecified transplanted organ and tissue	Diagnosis	ICD-10-CM
T86.91	Unspecified transplanted organ and tissue rejection	Diagnosis	ICD-10-CM
T86.92	Unspecified transplanted organ and tissue failure	Diagnosis	ICD-10-CM
T86.93	Unspecified transplanted organ and tissue infection	Diagnosis	ICD-10-CM
T86.99	Other complications of unspecified transplanted organ and tissue	Diagnosis	ICD-10-CM
Z48.03	Encounter for change or removal of drains	Diagnosis	ICD-10-CM
Z48.89	Encounter for other specified surgical aftercare	Diagnosis	ICD-10-CM
02YA0Z0	Transplantation of Heart, Allogeneic, Open Approach	Procedure	ICD-10-PCS
02YA0Z1	Transplantation of Heart, Syngeneic, Open Approach	Procedure	ICD-10-PCS
02YA0Z2	Transplantation of Heart, Zooplastic, Open Approach	Procedure	ICD-10-PCS
07YP0Z0	Transplantation of Spleen, Allogeneic, Open Approach	Procedure	ICD-10-PCS
07YP0Z1	Transplantation of Spleen, Syngeneic, Open Approach	Procedure	ICD-10-PCS
07YP0Z2	Transplantation of Spleen, Zooplastic, Open Approach	Procedure	ICD-10-PCS
0BYC0Z0	Transplantation of Right Upper Lung Lobe, Allogeneic, Open Approach	Procedure	ICD-10-PCS
0BYC0Z1	Transplantation of Right Upper Lung Lobe, Syngeneic, Open Approach	Procedure	ICD-10-PCS
0BYC0Z2	Transplantation of Right Upper Lung Lobe, Zooplastic, Open Approach	Procedure	ICD-10-PCS
0BYD0Z0	Transplantation of Right Middle Lung Lobe, Allogeneic, Open Approach	Procedure	ICD-10-PCS
0BYD0Z1	Transplantation of Right Middle Lung Lobe, Syngeneic, Open Approach	Procedure	ICD-10-PCS
0BYD0Z2	Transplantation of Right Middle Lung Lobe, Zooplastic, Open Approach	Procedure	ICD-10-PCS
0BYF0Z0	Transplantation of Right Lower Lung Lobe, Allogeneic, Open Approach	Procedure	ICD-10-PCS
0BYF0Z1	Transplantation of Right Lower Lung Lobe, Syngeneic, Open Approach	Procedure	ICD-10-PCS
0BYF0Z2	Transplantation of Right Lower Lung Lobe, Zooplastic, Open Approach	Procedure	ICD-10-PCS
0BYG0Z0	Transplantation of Left Upper Lung Lobe, Allogeneic, Open Approach	Procedure	ICD-10-PCS
0BYG0Z1	Transplantation of Left Upper Lung Lobe, Syngeneic, Open Approach	Procedure	ICD-10-PCS
0BYG0Z2	Transplantation of Left Upper Lung Lobe, Zooplastic, Open Approach	Procedure	ICD-10-PCS

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

Code	Description	Code Category	Code Type
OBYH0Z0	Transplantation of Lung Lingula, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OBYH0Z1	Transplantation of Lung Lingula, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OBYH0Z2	Transplantation of Lung Lingula, Zooplastic, Open Approach	Procedure	ICD-10-PCS
OBYJ0Z0	Transplantation of Left Lower Lung Lobe, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OBYJ0Z1	Transplantation of Left Lower Lung Lobe, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OBYJ0Z2	Transplantation of Left Lower Lung Lobe, Zooplastic, Open Approach	Procedure	ICD-10-PCS
OBYK0Z0	Transplantation of Right Lung, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OBYK0Z1	Transplantation of Right Lung, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OBYK0Z2	Transplantation of Right Lung, Zooplastic, Open Approach	Procedure	ICD-10-PCS
OBYL0Z0	Transplantation of Left Lung, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OBYL0Z1	Transplantation of Left Lung, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OBYL0Z2	Transplantation of Left Lung, Zooplastic, Open Approach	Procedure	ICD-10-PCS
OBYM0Z0	Transplantation of Bilateral Lungs, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OBYM0Z1	Transplantation of Bilateral Lungs, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OBYM0Z2	Transplantation of Bilateral Lungs, Zooplastic, Open Approach	Procedure	ICD-10-PCS
ODBB0ZZ	Excision of Ileum, Open Approach	Procedure	ICD-10-PCS
ODBB3ZZ	Excision of Ileum, Percutaneous Approach	Procedure	ICD-10-PCS
ODBB4ZZ	Excision of Ileum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
ODBB7ZZ	Excision of Ileum, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
ODBB8ZZ	Excision of Ileum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
ODY80Z0	Transplantation of Small Intestine, Allogeneic, Open Approach	Procedure	ICD-10-PCS
ODY80Z1	Transplantation of Small Intestine, Syngeneic, Open Approach	Procedure	ICD-10-PCS
ODY80Z2	Transplantation of Small Intestine, Zooplastic, Open Approach	Procedure	ICD-10-PCS
ODYE0Z0	Transplantation of Large Intestine, Allogeneic, Open Approach	Procedure	ICD-10-PCS
ODYE0Z1	Transplantation of Large Intestine, Syngeneic, Open Approach	Procedure	ICD-10-PCS
ODYE0Z2	Transplantation of Large Intestine, Zooplastic, Open Approach	Procedure	ICD-10-PCS
OFSG0ZZ	Reposition Pancreas, Open Approach	Procedure	ICD-10-PCS
OFSG4ZZ	Reposition Pancreas, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OFY00Z0	Transplantation of Liver, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OFY00Z1	Transplantation of Liver, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OFY00Z2	Transplantation of Liver, Zooplastic, Open Approach	Procedure	ICD-10-PCS
OFYG0Z0	Transplantation of Pancreas, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OFYG0Z1	Transplantation of Pancreas, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OFYG0Z2	Transplantation of Pancreas, Zooplastic, Open Approach	Procedure	ICD-10-PCS
OT16078	Bypass Right Ureter to Colon with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT1607A	Bypass Right Ureter to Ileum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT1607B	Bypass Right Ureter to Bladder with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT1607C	Bypass Right Ureter to Ileocutaneous with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT160J8	Bypass Right Ureter to Colon with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
OT160JA	Bypass Right Ureter to Ileum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS

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

Code	Description	Code Category	Code Type
OT160JB	Bypass Right Ureter to Bladder with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
OT160JC	Bypass Right Ureter to Ileocutaneous with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
OT160K8	Bypass Right Ureter to Colon with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT160KA	Bypass Right Ureter to Ileum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT160KB	Bypass Right Ureter to Bladder with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT160KC	Bypass Right Ureter to Ileocutaneous with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT160Z8	Bypass Right Ureter to Colon, Open Approach	Procedure	ICD-10-PCS
OT160ZA	Bypass Right Ureter to Ileum, Open Approach	Procedure	ICD-10-PCS
OT160ZB	Bypass Right Ureter to Bladder, Open Approach	Procedure	ICD-10-PCS
OT160ZC	Bypass Right Ureter to Ileocutaneous, Open Approach	Procedure	ICD-10-PCS
OT16478	Bypass Right Ureter to Colon with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT1647A	Bypass Right Ureter to Ileum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT1647B	Bypass Right Ureter to Bladder with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT1647C	Bypass Right Ureter to Ileocutaneous with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT164J8	Bypass Right Ureter to Colon with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT164JA	Bypass Right Ureter to Ileum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT164JB	Bypass Right Ureter to Bladder with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT164JC	Bypass Right Ureter to Ileocutaneous with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT164K8	Bypass Right Ureter to Colon with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT164KA	Bypass Right Ureter to Ileum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT164KB	Bypass Right Ureter to Bladder with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT164KC	Bypass Right Ureter to Ileocutaneous with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT164Z8	Bypass Right Ureter to Colon, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT164ZA	Bypass Right Ureter to Ileum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT164ZB	Bypass Right Ureter to Bladder, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT164ZC	Bypass Right Ureter to Ileocutaneous, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

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

Code	Description	Code Category	Code Type
OT17078	Bypass Left Ureter to Colon with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT1707A	Bypass Left Ureter to Ileum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT1707B	Bypass Left Ureter to Bladder with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT1707C	Bypass Left Ureter to Ileocutaneous with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT170J8	Bypass Left Ureter to Colon with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
OT170JA	Bypass Left Ureter to Ileum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
OT170JB	Bypass Left Ureter to Bladder with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
OT170JC	Bypass Left Ureter to Ileocutaneous with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
OT170K8	Bypass Left Ureter to Colon with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT170KA	Bypass Left Ureter to Ileum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT170KB	Bypass Left Ureter to Bladder with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT170KC	Bypass Left Ureter to Ileocutaneous with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT170Z8	Bypass Left Ureter to Colon, Open Approach	Procedure	ICD-10-PCS
OT170ZA	Bypass Left Ureter to Ileum, Open Approach	Procedure	ICD-10-PCS
OT170ZB	Bypass Left Ureter to Bladder, Open Approach	Procedure	ICD-10-PCS
OT170ZC	Bypass Left Ureter to Ileocutaneous, Open Approach	Procedure	ICD-10-PCS
OT17478	Bypass Left Ureter to Colon with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT1747A	Bypass Left Ureter to Ileum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT1747B	Bypass Left Ureter to Bladder with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT1747C	Bypass Left Ureter to Ileocutaneous with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT174J8	Bypass Left Ureter to Colon with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT174JA	Bypass Left Ureter to Ileum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT174JB	Bypass Left Ureter to Bladder with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT174JC	Bypass Left Ureter to Ileocutaneous with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT174K8	Bypass Left Ureter to Colon with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

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

Code	Description	Code Category	Code Type
OT174KA	Bypass Left Ureter to Ileum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT174KB	Bypass Left Ureter to Bladder with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT174KC	Bypass Left Ureter to Ileocutaneous with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT174Z8	Bypass Left Ureter to Colon, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT174ZA	Bypass Left Ureter to Ileum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT174ZB	Bypass Left Ureter to Bladder, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT174ZC	Bypass Left Ureter to Ileocutaneous, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT18078	Bypass Bilateral Ureters to Colon with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT1807A	Bypass Bilateral Ureters to Ileum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT1807B	Bypass Bilateral Ureters to Bladder with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT1807C	Bypass Bilateral Ureters to Ileocutaneous with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT180J8	Bypass Bilateral Ureters to Colon with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
OT180JA	Bypass Bilateral Ureters to Ileum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
OT180JB	Bypass Bilateral Ureters to Bladder with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
OT180JC	Bypass Bilateral Ureters to Ileocutaneous with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
OT180K8	Bypass Bilateral Ureters to Colon with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT180KA	Bypass Bilateral Ureters to Ileum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT180KB	Bypass Bilateral Ureters to Bladder with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT180KC	Bypass Bilateral Ureters to Ileocutaneous with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
OT180Z8	Bypass Bilateral Ureters to Colon, Open Approach	Procedure	ICD-10-PCS
OT180ZA	Bypass Bilateral Ureters to Ileum, Open Approach	Procedure	ICD-10-PCS
OT180ZB	Bypass Bilateral Ureters to Bladder, Open Approach	Procedure	ICD-10-PCS
OT180ZC	Bypass Bilateral Ureters to Ileocutaneous, Open Approach	Procedure	ICD-10-PCS
OT18478	Bypass Bilateral Ureters to Colon with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT1847A	Bypass Bilateral Ureters to Ileum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT1847B	Bypass Bilateral Ureters to Bladder with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

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

Code	Description	Code Category	Code Type
OT1847C	Bypass Bilateral Ureters to Ileocutaneous with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT184J8	Bypass Bilateral Ureters to Colon with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT184JA	Bypass Bilateral Ureters to Ileum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT184JB	Bypass Bilateral Ureters to Bladder with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT184JC	Bypass Bilateral Ureters to Ileocutaneous with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT184K8	Bypass Bilateral Ureters to Colon with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT184KA	Bypass Bilateral Ureters to Ileum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT184KB	Bypass Bilateral Ureters to Bladder with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT184KC	Bypass Bilateral Ureters to Ileocutaneous with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT184Z8	Bypass Bilateral Ureters to Colon, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT184ZA	Bypass Bilateral Ureters to Ileum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT184ZB	Bypass Bilateral Ureters to Bladder, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OT184ZC	Bypass Bilateral Ureters to Ileocutaneous, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OTS00ZZ	Reposition Right Kidney, Open Approach	Procedure	ICD-10-PCS
OTS10ZZ	Reposition Left Kidney, Open Approach	Procedure	ICD-10-PCS
OTY00Z0	Transplantation of Right Kidney, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OTY00Z1	Transplantation of Right Kidney, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OTY00Z2	Transplantation of Right Kidney, Zooplastic, Open Approach	Procedure	ICD-10-PCS
OTY10Z0	Transplantation of Left Kidney, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OTY10Z1	Transplantation of Left Kidney, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OTY10Z2	Transplantation of Left Kidney, Zooplastic, Open Approach	Procedure	ICD-10-PCS
OUY00Z0	Transplantation of Right Ovary, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OUY00Z1	Transplantation of Right Ovary, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OUY00Z2	Transplantation of Right Ovary, Zooplastic, Open Approach	Procedure	ICD-10-PCS
OUY10Z0	Transplantation of Left Ovary, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OUY10Z1	Transplantation of Left Ovary, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OUY10Z2	Transplantation of Left Ovary, Zooplastic, Open Approach	Procedure	ICD-10-PCS
OVS90ZZ	Reposition Right Testis, Open Approach	Procedure	ICD-10-PCS
OVS93ZZ	Reposition Right Testis, Percutaneous Approach	Procedure	ICD-10-PCS
OVS94ZZ	Reposition Right Testis, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OVS98ZZ	Reposition Right Testis, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
OVS80ZZ	Reposition Left Testis, Open Approach	Procedure	ICD-10-PCS
OVS83ZZ	Reposition Left Testis, Percutaneous Approach	Procedure	ICD-10-PCS
OVS84ZZ	Reposition Left Testis, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

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

Code	Description	Code Category	Code Type
0VSB8ZZ	Reposition Left Testis, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0VSCOZZ	Reposition Bilateral Testes, Open Approach	Procedure	ICD-10-PCS
0VSC3ZZ	Reposition Bilateral Testes, Percutaneous Approach	Procedure	ICD-10-PCS
0VSC4ZZ	Reposition Bilateral Testes, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0VSC8ZZ	Reposition Bilateral Testes, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
30230AZ	Transfusion of Embryonic Stem Cells into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30230G0	Transfusion of Autologous Bone Marrow into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30230G2	Transfusion of Allogeneic Related Bone Marrow into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30230G3	Transfusion of Allogeneic Unrelated Bone Marrow into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30230G4	Transfusion of Allogeneic Unspecified Bone Marrow into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30230X0	Transfusion of Autologous Cord Blood Stem Cells into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30230X2	Transfusion of Allogeneic Related Cord Blood Stem Cells into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30230X3	Transfusion of Allogeneic Unrelated Cord Blood Stem Cells into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30230X4	Transfusion of Allogeneic Unspecified Cord Blood Stem Cells into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30230Y0	Transfusion of Autologous Hematopoietic Stem Cells into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30230Y2	Transfusion of Allogeneic Related Hematopoietic Stem Cells into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30230Y3	Transfusion of Allogeneic Unrelated Hematopoietic Stem Cells into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30230Y4	Transfusion of Allogeneic Unspecified Hematopoietic Stem Cells into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30233AZ	Transfusion of Embryonic Stem Cells into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30233G0	Transfusion of Autologous Bone Marrow into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30233G2	Transfusion of Allogeneic Related Bone Marrow into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30233G3	Transfusion of Allogeneic Unrelated Bone Marrow into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30233G4	Transfusion of Allogeneic Unspecified Bone Marrow into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30233X0	Transfusion of Autologous Cord Blood Stem Cells into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30233X2	Transfusion of Allogeneic Related Cord Blood Stem Cells into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS

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

Code	Description	Code Category	Code Type
30233X3	Transfusion of Allogeneic Unrelated Cord Blood Stem Cells into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30233X4	Transfusion of Allogeneic Unspecified Cord Blood Stem Cells into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30233Y0	Transfusion of Autologous Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30233Y2	Transfusion of Allogeneic Related Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30233Y3	Transfusion of Allogeneic Unrelated Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30233Y4	Transfusion of Allogeneic Unspecified Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30240AZ	Transfusion of Embryonic Stem Cells into Central Vein, Open Approach	Procedure	ICD-10-PCS
30240G0	Transfusion of Autologous Bone Marrow into Central Vein, Open	Procedure	ICD-10-PCS
30240G2	Transfusion of Allogeneic Related Bone Marrow into Central Vein, Open Approach	Procedure	ICD-10-PCS
30240G3	Transfusion of Allogeneic Unrelated Bone Marrow into Central Vein, Open Approach	Procedure	ICD-10-PCS
30240G4	Transfusion of Allogeneic Unspecified Bone Marrow into Central Vein, Open Approach	Procedure	ICD-10-PCS
30240X0	Transfusion of Autologous Cord Blood Stem Cells into Central Vein, Open Approach	Procedure	ICD-10-PCS
30240X2	Transfusion of Allogeneic Related Cord Blood Stem Cells into Central Vein, Open Approach	Procedure	ICD-10-PCS
30240X3	Transfusion of Allogeneic Unrelated Cord Blood Stem Cells into Central Vein, Open Approach	Procedure	ICD-10-PCS
30240X4	Transfusion of Allogeneic Unspecified Cord Blood Stem Cells into Central Vein, Open Approach	Procedure	ICD-10-PCS
30240Y0	Transfusion of Autologous Hematopoietic Stem Cells into Central Vein, Open Approach	Procedure	ICD-10-PCS
30240Y2	Transfusion of Allogeneic Related Hematopoietic Stem Cells into Central Vein, Open Approach	Procedure	ICD-10-PCS
30240Y3	Transfusion of Allogeneic Unrelated Hematopoietic Stem Cells into Central Vein, Open Approach	Procedure	ICD-10-PCS
30240Y4	Transfusion of Allogeneic Unspecified Hematopoietic Stem Cells into Central Vein, Open Approach	Procedure	ICD-10-PCS
30243AZ	Transfusion of Embryonic Stem Cells into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30243G0	Transfusion of Autologous Bone Marrow into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30243G2	Transfusion of Allogeneic Related Bone Marrow into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30243G3	Transfusion of Allogeneic Unrelated Bone Marrow into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS

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

Code	Description	Code Category	Code Type
30243G4	Transfusion of Allogeneic Unspecified Bone Marrow into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30243X0	Transfusion of Autologous Cord Blood Stem Cells into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30243X2	Transfusion of Allogeneic Related Cord Blood Stem Cells into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30243X3	Transfusion of Allogeneic Unrelated Cord Blood Stem Cells into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30243X4	Transfusion of Allogeneic Unspecified Cord Blood Stem Cells into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30243Y0	Transfusion of Autologous Hematopoietic Stem Cells into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30243Y2	Transfusion of Allogeneic Related Hematopoietic Stem Cells into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30243Y3	Transfusion of Allogeneic Unrelated Hematopoietic Stem Cells into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30243Y4	Transfusion of Allogeneic Unspecified Hematopoietic Stem Cells into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30250G0	Transfusion of Autologous Bone Marrow into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
30250G1	Transfusion of Nonautologous Bone Marrow into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
30250X0	Transfusion of Autologous Cord Blood Stem Cells into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
30250X1	Transfusion of Nonautologous Cord Blood Stem Cells into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
30250Y0	Transfusion of Autologous Hematopoietic Stem Cells into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
30250Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
30253G0	Transfusion of Autologous Bone Marrow into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
30253G1	Transfusion of Nonautologous Bone Marrow into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
30253X0	Transfusion of Autologous Cord Blood Stem Cells into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
30253X1	Transfusion of Nonautologous Cord Blood Stem Cells into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
30253Y0	Transfusion of Autologous Hematopoietic Stem Cells into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
30253Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
30260G0	Transfusion of Autologous Bone Marrow into Central Artery, Open Approach	Procedure	ICD-10-PCS

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

Code	Description	Code Category	Code Type
30260G1	Transfusion of Nonautologous Bone Marrow into Central Artery, Open Approach	Procedure	ICD-10-PCS
30260X0	Transfusion of Autologous Cord Blood Stem Cells into Central Artery, Open Approach	Procedure	ICD-10-PCS
30260X1	Transfusion of Nonautologous Cord Blood Stem Cells into Central Artery, Open Approach	Procedure	ICD-10-PCS
30260Y0	Transfusion of Autologous Hematopoietic Stem Cells into Central Artery, Open Approach	Procedure	ICD-10-PCS
30260Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Central Artery, Open Approach	Procedure	ICD-10-PCS
30263G0	Transfusion of Autologous Bone Marrow into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
30263G1	Transfusion of Nonautologous Bone Marrow into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
30263X0	Transfusion of Autologous Cord Blood Stem Cells into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
30263X1	Transfusion of Nonautologous Cord Blood Stem Cells into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
30263Y0	Transfusion of Autologous Hematopoietic Stem Cells into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
30263Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E03005	Introduction of Other Antineoplastic into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
3E030U0	Introduction of Autologous Pancreatic Islet Cells into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
3E030U1	Introduction of Nonautologous Pancreatic Islet Cells into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
3E03305	Introduction of Other Antineoplastic into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E033U0	Introduction of Autologous Pancreatic Islet Cells into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E033U1	Introduction of Nonautologous Pancreatic Islet Cells into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E04005	Introduction of Other Antineoplastic into Central Vein, Open Approach	Procedure	ICD-10-PCS
3E04305	Introduction of Other Antineoplastic into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E05005	Introduction of Other Antineoplastic into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
3E05305	Introduction of Other Antineoplastic into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E06005	Introduction of Other Antineoplastic into Central Artery, Open Approach	Procedure	ICD-10-PCS
3E06305	Introduction of Other Antineoplastic into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS

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

Code	Description	Code Category	Code Type
3E0J3U0	Introduction of Autologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Percutaneous Approach	Procedure	ICD-10-PCS
3E0J3U1	Introduction of Nonautologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Percutaneous Approach	Procedure	ICD-10-PCS
3E0J7U0	Introduction of Autologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0J7U1	Introduction of Nonautologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0J8U0	Introduction of Autologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0J8U1	Introduction of Nonautologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
00580	Anesthesia for heart transplant or heart/lung transplant	Procedure	CPT-4
32850	Donor pneumonectomy(s) (including cold preservation), from cadaver donor	Procedure	CPT-4
32851	Lung transplant, single; without cardiopulmonary bypass	Procedure	CPT-4
32852	Lung transplant, single; with cardiopulmonary bypass	Procedure	CPT-4
32853	Lung transplant, double (bilateral sequential or en bloc); without cardiopulmonary bypass	Procedure	CPT-4
32854	Lung transplant, double (bilateral sequential or en bloc); with cardiopulmonary bypass	Procedure	CPT-4
32855	Backbench standard preparation of cadaver donor lung allograft prior to transplantation, including dissection of allograft from surrounding soft tissues to prepare pulmonary venous/atrial cuff, pulmonary artery, and bronchus; unilateral	Procedure	CPT-4
32856	Backbench standard preparation of cadaver donor lung allograft prior to transplantation, including dissection of allograft from surrounding soft tissues to prepare pulmonary venous/atrial cuff, pulmonary artery, and bronchus; bilateral	Procedure	CPT-4
33933	Backbench standard preparation of cadaver donor heart/lung allograft prior to transplantation, including dissection of allograft from surrounding soft tissues to prepare aorta, superior vena cava, inferior vena cava, and trachea for implantation	Procedure	CPT-4
33945	Heart transplant, with or without recipient cardiectomy	Procedure	CPT-4
38205	Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection; allogeneic	Procedure	CPT-4
38206	Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection; autologous	Procedure	CPT-4
38207	Transplant preparation of hematopoietic progenitor cells; cryopreservation and storage	Procedure	CPT-4
38208	Transplant preparation of hematopoietic progenitor cells; thawing of previously frozen harvest, without washing, per donor	Procedure	CPT-4
38209	Transplant preparation of hematopoietic progenitor cells; thawing of previously frozen harvest, with washing, per donor	Procedure	CPT-4

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

Code	Description	Code Category	Code Type
38210	Transplant preparation of hematopoietic progenitor cells; specific cell depletion within harvest, T-cell depletion	Procedure	CPT-4
38211	Transplant preparation of hematopoietic progenitor cells; tumor cell depletion	Procedure	CPT-4
38212	Transplant preparation of hematopoietic progenitor cells; red blood cell removal	Procedure	CPT-4
38213	Transplant preparation of hematopoietic progenitor cells; platelet depletion	Procedure	CPT-4
38214	Transplant preparation of hematopoietic progenitor cells; plasma (volume) depletion	Procedure	CPT-4
38215	Transplant preparation of hematopoietic progenitor cells; cell concentration in plasma, mononuclear, or buffy coat layer	Procedure	CPT-4
38240	Hematopoietic progenitor cell (HPC); allogeneic transplantation per donor	Procedure	CPT-4
38241	Bone marrow or blood-derived peripheral stem cell transplantation; autologous	Procedure	CPT-4
38242	Allogeneic lymphocyte infusions	Procedure	CPT-4
44132	Donor enterectomy (including cold preservation), open; from cadaver donor	Procedure	CPT-4
44133	Donor enterectomy (including cold preservation), open; partial, from living donor	Procedure	CPT-4
44135	Intestinal allotransplantation; from cadaver donor	Procedure	CPT-4
44136	Intestinal allotransplantation; from living donor	Procedure	CPT-4
44137	Removal of transplanted intestinal allograft, complete	Procedure	CPT-4
44715	Backbench standard preparation of cadaver or living donor intestine allograft prior to transplantation, including mobilization and fashioning of the superior mesenteric artery and vein	Procedure	CPT-4
44720	Backbench reconstruction of cadaver or living donor intestine allograft prior to transplantation; venous anastomosis, each	Procedure	CPT-4
44721	Backbench reconstruction of cadaver or living donor intestine allograft prior to transplantation; arterial anastomosis, each	Procedure	CPT-4
47135	Liver allotransplantation, orthotopic, partial or whole, from cadaver or living donor, any age	Procedure	CPT-4
47136	Liver allotransplantation; heterotopic, partial or whole, from cadaver or living donor, any age	Procedure	CPT-4
47143	Backbench standard preparation of cadaver donor whole liver graft prior to allotransplantation, including cholecystectomy, if necessary, and dissection and removal of surrounding soft tissues to prepare the vena cava, portal vein, hepatic artery, and common bile duct for implantation; without trisegment or lobe split	Procedure	CPT-4

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

Code	Description	Code Category	Code Type
47144	Backbench standard preparation of cadaver donor whole liver graft prior to allotransplantation, including cholecystectomy, if necessary, and dissection and removal of surrounding soft tissues to prepare the vena cava, portal vein, hepatic artery, and common bile duct for implantation; with trisegment split of whole liver graft into 2 partial liver grafts (ie, left lateral segment [segments II and III] and right trisegment [segments I and IV through VIII])	Procedure	CPT-4
47145	Backbench standard preparation of cadaver donor whole liver graft prior to allotransplantation, including cholecystectomy, if necessary, and dissection and removal of surrounding soft tissues to prepare the vena cava, portal vein, hepatic artery, and common bile duct for implantation; with lobe split of whole liver graft into 2 partial liver grafts (ie, left lobe [segments II, III, and IV] and right lobe [segments I and V through VIII])	Procedure	CPT-4
47146	Backbench reconstruction of cadaver or living donor liver graft prior to allotransplantation; venous anastomosis, each	Procedure	CPT-4
47147	Backbench reconstruction of cadaver or living donor liver graft prior to allotransplantation; arterial anastomosis, each	Procedure	CPT-4
48160	Pancreatectomy, total or subtotal, with autologous transplantation of pancreas or pancreatic islet cells	Procedure	CPT-4
48550	Donor pancreatectomy (including cold preservation), with or without duodenal segment for transplantation	Procedure	CPT-4
48551	Backbench standard preparation of cadaver donor pancreas allograft prior to transplantation, including dissection of allograft from surrounding soft tissues, splenectomy, duodenotomy, ligation of bile duct, ligation of mesenteric vessels, and Y-graft arterial anastomoses from iliac artery to superior mesenteric artery and to splenic artery	Procedure	CPT-4
48552	Backbench reconstruction of cadaver donor pancreas allograft prior to transplantation, venous anastomosis, each	Procedure	CPT-4
48554	Transplantation of pancreatic allograft	Procedure	CPT-4
48556	Removal of transplanted pancreatic allograft	Procedure	CPT-4
50300	Donor nephrectomy, with preparation and maintenance of allograft, from cadaver donor, unilateral or bilateral	Procedure	CPT-4
50320	Donor nephrectomy (including cold preservation); open, from living donor	Procedure	CPT-4
50323	Backbench standard preparation of cadaver donor renal allograft prior to transplantation, including dissection and removal of perinephric fat, diaphragmatic and retroperitoneal attachments, excision of adrenal gland, and preparation of ureter(s), renal vein(s), and renal artery(s), ligating branches, as necessary	Procedure	CPT-4
50325	Backbench standard preparation of living donor renal allograft (open or laparoscopic) prior to transplantation, including dissection and removal of perinephric fat and preparation of ureter(s), renal vein(s), and renal artery(s), ligating branches, as necessary	Procedure	CPT-4
50327	Backbench reconstruction of cadaver or living donor renal allograft prior to transplantation; venous anastomosis, each	Procedure	CPT-4

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

Code	Description	Code Category	Code Type
50328	Backbench reconstruction of cadaver or living donor renal allograft prior to transplantation; arterial anastomosis, each	Procedure	CPT-4
50329	Backbench reconstruction of cadaver or living donor renal allograft prior to transplantation; ureteral anastomosis, each	Procedure	CPT-4
50340	Recipient nephrectomy (separate procedure)	Procedure	CPT-4
50360	Renal allotransplantation, implantation of graft; excluding donor and recipient nephrectomy	Procedure	CPT-4
50365	Renal allotransplantation, implantation of graft; with recipient nephrectomy	Procedure	CPT-4
50370	Removal of transplanted renal allograft	Procedure	CPT-4
50380	RENAL AUTOTRANSPLANTATION REIMPLANTATION KIDNEY	Procedure	CPT-4
50547	Laparoscopy, surgical; donor nephrectomy (including cold preservation), from living donor	Procedure	CPT-4
54680	TRANSPL TESTIS TO THIGH	Procedure	CPT-4
Osteoporosis			
M81.8	Other osteoporosis without current pathological fracture	Diagnosis	ICD-10-CM
M80.88XA	Other osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture	Diagnosis	ICD-10-CM
M80.80XA	Other osteoporosis with current pathological fracture, unspecified site, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.819A	Other osteoporosis with current pathological fracture, unspecified shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.869A	Other osteoporosis with current pathological fracture, unspecified lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.829A	Other osteoporosis with current pathological fracture, unspecified humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.849A	Other osteoporosis with current pathological fracture, unspecified hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.839A	Other osteoporosis with current pathological fracture, unspecified forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.859A	Other osteoporosis with current pathological fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.879A	Other osteoporosis with current pathological fracture, unspecified ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.811A	Other osteoporosis with current pathological fracture, right shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.861A	Other osteoporosis with current pathological fracture, right lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.821A	Other osteoporosis with current pathological fracture, right humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.841A	Other osteoporosis with current pathological fracture, right hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.831A	Other osteoporosis with current pathological fracture, right forearm, initial encounter for fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M80.851A	Other osteoporosis with current pathological fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.871A	Other osteoporosis with current pathological fracture, right ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.8AXA	Other osteoporosis with current pathological fracture, other site, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.812A	Other osteoporosis with current pathological fracture, left shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.862A	Other osteoporosis with current pathological fracture, left lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.822A	Other osteoporosis with current pathological fracture, left humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.842A	Other osteoporosis with current pathological fracture, left hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.832A	Other osteoporosis with current pathological fracture, left forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.852A	Other osteoporosis with current pathological fracture, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.872A	Other osteoporosis with current pathological fracture, left ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M81.6	Localized osteoporosis [Lequesne]	Diagnosis	ICD-10-CM
M81.0	Age-related osteoporosis without current pathological fracture	Diagnosis	ICD-10-CM
M80.08XA	Age-related osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture	Diagnosis	ICD-10-CM
M80.00XA	Age-related osteoporosis with current pathological fracture, unspecified site, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.019A	Age-related osteoporosis with current pathological fracture, unspecified shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.069A	Age-related osteoporosis with current pathological fracture, unspecified lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.029A	Age-related osteoporosis with current pathological fracture, unspecified humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.049A	Age-related osteoporosis with current pathological fracture, unspecified hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.039A	Age-related osteoporosis with current pathological fracture, unspecified forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.059A	Age-related osteoporosis with current pathological fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.079A	Age-related osteoporosis with current pathological fracture, unspecified ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.011A	Age-related osteoporosis with current pathological fracture, right shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.061A	Age-related osteoporosis with current pathological fracture, right lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M80.021A	Age-related osteoporosis with current pathological fracture, right humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.041A	Age-related osteoporosis with current pathological fracture, right hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.031A	Age-related osteoporosis with current pathological fracture, right forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.051A	Age-related osteoporosis with current pathological fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.071A	Age-related osteoporosis with current pathological fracture, right ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.0AXA	Age-related osteoporosis with current pathological fracture, other site, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.012A	Age-related osteoporosis with current pathological fracture, left shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.062A	Age-related osteoporosis with current pathological fracture, left lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.022A	Age-related osteoporosis with current pathological fracture, left humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.042A	Age-related osteoporosis with current pathological fracture, left hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.032A	Age-related osteoporosis with current pathological fracture, left forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.052A	Age-related osteoporosis with current pathological fracture, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.072A	Age-related osteoporosis with current pathological fracture, left ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
Other Infections			
B59	Pneumocystosis	Diagnosis	ICD-10-CM
B34.3	Parvovirus infection, unspecified	Diagnosis	ICD-10-CM
B26.0	Mumps orchitis	Diagnosis	ICD-10-CM
B26.1	Mumps meningitis	Diagnosis	ICD-10-CM
B26.2	Mumps encephalitis	Diagnosis	ICD-10-CM
B26.3	Mumps pancreatitis	Diagnosis	ICD-10-CM
B26.81	Mumps hepatitis	Diagnosis	ICD-10-CM
B26.82	Mumps myocarditis	Diagnosis	ICD-10-CM
B26.83	Mumps nephritis	Diagnosis	ICD-10-CM
B26.84	Mumps polyneuropathy	Diagnosis	ICD-10-CM
B26.85	Mumps arthritis	Diagnosis	ICD-10-CM
B26.89	Other mumps complications	Diagnosis	ICD-10-CM
B26.9	Mumps without complication	Diagnosis	ICD-10-CM
B39.0	Acute pulmonary histoplasmosis capsulati	Diagnosis	ICD-10-CM
B39.1	Chronic pulmonary histoplasmosis capsulati	Diagnosis	ICD-10-CM
B39.2	Pulmonary histoplasmosis capsulati, unspecified	Diagnosis	ICD-10-CM
B39.3	Disseminated histoplasmosis capsulati	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
B39.4	Histoplasmosis capsulati, unspecified	Diagnosis	ICD-10-CM
B39.5	Histoplasmosis duboisii	Diagnosis	ICD-10-CM
B39.9	Histoplasmosis, unspecified	Diagnosis	ICD-10-CM
G02	Meningitis in other infectious and parasitic diseases classified elsewhere	Diagnosis	ICD-10-CM
H32	Chorioretinal disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
I32	Pericarditis in diseases classified elsewhere	Diagnosis	ICD-10-CM
I39	Endocarditis and heart valve disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
J17	Pneumonia in diseases classified elsewhere	Diagnosis	ICD-10-CM
A60.00	Herpesviral infection of urogenital system, unspecified	Diagnosis	ICD-10-CM
A60.01	Herpesviral infection of penis	Diagnosis	ICD-10-CM
A60.02	Herpesviral infection of other male genital organs	Diagnosis	ICD-10-CM
A60.03	Herpesviral cervicitis	Diagnosis	ICD-10-CM
A60.04	Herpesviral vulvovaginitis	Diagnosis	ICD-10-CM
A60.09	Herpesviral infection of other urogenital tract	Diagnosis	ICD-10-CM
A60.1	Herpesviral infection of perianal skin and rectum	Diagnosis	ICD-10-CM
A60.9	Anogenital herpesviral infection, unspecified	Diagnosis	ICD-10-CM
B00.0	Eczema herpeticum	Diagnosis	ICD-10-CM
B00.1	Herpesviral vesicular dermatitis	Diagnosis	ICD-10-CM
B00.2	Herpesviral gingivostomatitis and pharyngotonsillitis	Diagnosis	ICD-10-CM
B00.3	Herpesviral meningitis	Diagnosis	ICD-10-CM
B00.4	Herpesviral encephalitis	Diagnosis	ICD-10-CM
B00.50	Herpesviral ocular disease, unspecified	Diagnosis	ICD-10-CM
B00.51	Herpesviral iridocyclitis	Diagnosis	ICD-10-CM
B00.52	Herpesviral keratitis	Diagnosis	ICD-10-CM
B00.53	Herpesviral conjunctivitis	Diagnosis	ICD-10-CM
B00.59	Other herpesviral disease of eye	Diagnosis	ICD-10-CM
B00.7	Disseminated herpesviral disease	Diagnosis	ICD-10-CM
B00.81	Herpesviral hepatitis	Diagnosis	ICD-10-CM
B00.82	Herpes simplex myelitis	Diagnosis	ICD-10-CM
B00.89	Other herpesviral infection	Diagnosis	ICD-10-CM
B00.9	Herpesviral infection, unspecified	Diagnosis	ICD-10-CM
B02.0	Zoster encephalitis	Diagnosis	ICD-10-CM
B02.1	Zoster meningitis	Diagnosis	ICD-10-CM
B02.21	Postherpetic geniculate ganglionitis	Diagnosis	ICD-10-CM
B02.22	Postherpetic trigeminal neuralgia	Diagnosis	ICD-10-CM
B02.23	Postherpetic polyneuropathy	Diagnosis	ICD-10-CM
B02.24	Postherpetic myelitis	Diagnosis	ICD-10-CM
B02.29	Other postherpetic nervous system involvement	Diagnosis	ICD-10-CM
B02.30	Zoster ocular disease, unspecified	Diagnosis	ICD-10-CM
B02.31	Zoster conjunctivitis	Diagnosis	ICD-10-CM
B02.32	Zoster iridocyclitis	Diagnosis	ICD-10-CM
B02.33	Zoster keratitis	Diagnosis	ICD-10-CM
B02.34	Zoster scleritis	Diagnosis	ICD-10-CM
B02.39	Other herpes zoster eye disease	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
B02.7	Disseminated zoster	Diagnosis	ICD-10-CM
B02.8	Zoster with other complications	Diagnosis	ICD-10-CM
B02.9	Zoster without complications	Diagnosis	ICD-10-CM
B10.01	Human herpesvirus 6 encephalitis	Diagnosis	ICD-10-CM
B10.09	Other human herpesvirus encephalitis	Diagnosis	ICD-10-CM
J09.X1	Influenza due to identified novel influenza A virus with pneumonia	Diagnosis	ICD-10-CM
J09.X2	Influenza due to identified novel influenza A virus with other respiratory manifestations	Diagnosis	ICD-10-CM
J09.X3	Influenza due to identified novel influenza A virus with gastrointestinal manifestations	Diagnosis	ICD-10-CM
J09.X9	Influenza due to identified novel influenza A virus with other manifestations	Diagnosis	ICD-10-CM
J10.00	Influenza due to other identified influenza virus with unspecified type of pneumonia	Diagnosis	ICD-10-CM
J10.01	Influenza due to other identified influenza virus with the same other identified influenza virus pneumonia	Diagnosis	ICD-10-CM
J10.08	Influenza due to other identified influenza virus with other specified pneumonia	Diagnosis	ICD-10-CM
J10.1	Influenza due to other identified influenza virus with other respiratory manifestations	Diagnosis	ICD-10-CM
J10.2	Influenza due to other identified influenza virus with gastrointestinal manifestations	Diagnosis	ICD-10-CM
J10.81	Influenza due to other identified influenza virus with encephalopathy	Diagnosis	ICD-10-CM
J10.82	Influenza due to other identified influenza virus with myocarditis	Diagnosis	ICD-10-CM
J10.83	Influenza due to other identified influenza virus with otitis media	Diagnosis	ICD-10-CM
J10.89	Influenza due to other identified influenza virus with other manifestations	Diagnosis	ICD-10-CM
J11.00	Influenza due to unidentified influenza virus with unspecified type of pneumonia	Diagnosis	ICD-10-CM
J11.08	Influenza due to unidentified influenza virus with specified pneumonia	Diagnosis	ICD-10-CM
J11.1	Influenza due to unidentified influenza virus with other respiratory manifestations	Diagnosis	ICD-10-CM
J11.2	Influenza due to unidentified influenza virus with gastrointestinal manifestations	Diagnosis	ICD-10-CM
J11.81	Influenza due to unidentified influenza virus with encephalopathy	Diagnosis	ICD-10-CM
J11.82	Influenza due to unidentified influenza virus with myocarditis	Diagnosis	ICD-10-CM
J11.83	Influenza due to unidentified influenza virus with otitis media	Diagnosis	ICD-10-CM
J11.89	Influenza due to unidentified influenza virus with other manifestations	Diagnosis	ICD-10-CM
J12.9	Viral pneumonia, unspecified	Diagnosis	ICD-10-CM
B27.00	Gammaherpesviral mononucleosis without complication	Diagnosis	ICD-10-CM
B27.01	Gammaherpesviral mononucleosis with polyneuropathy	Diagnosis	ICD-10-CM
B27.02	Gammaherpesviral mononucleosis with meningitis	Diagnosis	ICD-10-CM
B27.09	Gammaherpesviral mononucleosis with other complications	Diagnosis	ICD-10-CM
B27.10	Cytomegaloviral mononucleosis without complications	Diagnosis	ICD-10-CM
B27.11	Cytomegaloviral mononucleosis with polyneuropathy	Diagnosis	ICD-10-CM

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

Code	Description	Code	
		Category	Code Type
B27.12	Cytomegaloviral mononucleosis with meningitis	Diagnosis	ICD-10-CM
B27.19	Cytomegaloviral mononucleosis with other complication	Diagnosis	ICD-10-CM
B27.80	Other infectious mononucleosis without complication	Diagnosis	ICD-10-CM
B27.81	Other infectious mononucleosis with polyneuropathy	Diagnosis	ICD-10-CM
B27.82	Other infectious mononucleosis with meningitis	Diagnosis	ICD-10-CM
B27.89	Other infectious mononucleosis with other complication	Diagnosis	ICD-10-CM
B27.90	Infectious mononucleosis, unspecified without complication	Diagnosis	ICD-10-CM
B27.91	Infectious mononucleosis, unspecified with polyneuropathy	Diagnosis	ICD-10-CM
B27.92	Infectious mononucleosis, unspecified with meningitis	Diagnosis	ICD-10-CM
B27.99	Infectious mononucleosis, unspecified with other complication	Diagnosis	ICD-10-CM
B25.0	Cytomegaloviral pneumonitis	Diagnosis	ICD-10-CM
B25.1	Cytomegaloviral hepatitis	Diagnosis	ICD-10-CM
B25.2	Cytomegaloviral pancreatitis	Diagnosis	ICD-10-CM
B25.8	Other cytomegaloviral diseases	Diagnosis	ICD-10-CM
B25.9	Cytomegaloviral disease, unspecified	Diagnosis	ICD-10-CM
B08.4	Enteroviral vesicular stomatitis with exanthem	Diagnosis	ICD-10-CM
B08.5	Enteroviral vesicular pharyngitis	Diagnosis	ICD-10-CM
B33.0	Epidemic myalgia	Diagnosis	ICD-10-CM
B33.20	Viral carditis, unspecified	Diagnosis	ICD-10-CM
B33.21	Viral endocarditis	Diagnosis	ICD-10-CM
B33.22	Viral myocarditis	Diagnosis	ICD-10-CM
B33.23	Viral pericarditis	Diagnosis	ICD-10-CM
B34.1	Enterovirus infection, unspecified	Diagnosis	ICD-10-CM
B97.11	Coxsackievirus as the cause of diseases classified elsewhere	Diagnosis	ICD-10-CM
J20.3	Acute bronchitis due to coxsackievirus	Diagnosis	ICD-10-CM
Pap Smear			
Z01.42	Encounter for cervical smear to confirm findings of recent normal smear following initial abnormal smear	Diagnosis	ICD-10-CM
Z12.4	Encounter for screening for malignant neoplasm of cervix	Diagnosis	ICD-10-CM
88141	Cytopathology, cervical or vaginal (any reporting system), requiring interpretation by physician	Procedure	CPT-4
88142	Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; manual screening under physician supervision	Procedure	CPT-4
88143	Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; with manual screening and rescreening under physician supervision	Procedure	CPT-4
88144	Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; with manual screening and computer-assisted rescreening under physician supervision	Procedure	CPT-4
88145	Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; with manual screening and computer-assisted rescreening using cell selection and review under physician supervision	Procedure	CPT-4

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

Code	Description	Code Category	Code Type
88147	Cytopathology smears, cervical or vaginal; screening by automated system under physician supervision	Procedure	CPT-4
88148	Cytopathology smears, cervical or vaginal; screening by automated system with manual rescreening under physician supervision	Procedure	CPT-4
88150	CYTPH SMEARS CERV/VAG 1-3; SCRN TECH PHYS SUPER	Procedure	CPT-4
88151	CYTOPATH SMEARS CERV/VAG 1-3; REQ PHYS INTERPT	Procedure	CPT-4
88152	Cytopathology, slides, cervical or vaginal; with manual screening and computer-assisted rescreening under physician supervision	Procedure	CPT-4
88153	Cytopathology, slides, cervical or vaginal; with manual screening and rescreening under physician supervision	Procedure	CPT-4
88154	Cytopathology, slides, cervical or vaginal; with manual screening and computer-assisted rescreening using cell selection and review under physician supervision	Procedure	CPT-4
88155	CYTOPATH SMEARS CERV/VAG 1-3; W/DEF HORMONL EVAL	Procedure	CPT-4
88164	Cytopathology, slides, cervical or vaginal (the Bethesda System); manual screening under physician supervision	Procedure	CPT-4
88165	Cytopathology, slides, cervical or vaginal (the Bethesda System); with manual screening and rescreening under physician supervision	Procedure	CPT-4
88166	Cytopathology, slides, cervical or vaginal (the Bethesda System); with manual screening and computer-assisted rescreening under physician supervision	Procedure	CPT-4
88167	Cytopathology, slides, cervical or vaginal (the Bethesda System); with manual screening and computer-assisted rescreening using cell selection and review under physician supervision	Procedure	CPT-4
88174	Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; screening by automated system, under physician supervision	Procedure	CPT-4
88175	Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; with screening by automated system and manual rescreening or review, under physician supervision	Procedure	CPT-4
G0101	Cervical or vaginal cancer screening; pelvic and clinical breast examination	Procedure	HCPCS
G0123	Screening cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation, screening by cytotechnologist under physician supervision	Procedure	HCPCS
G0124	Screening cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation, requiring interpretation by physician	Procedure	HCPCS
G0141	Screening cytopathology smears, cervical or vaginal, performed by automated system, with manual rescreening, requiring interpretation by physician	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
G0143	Screening cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation, with manual screening and rescreening by cytotechnologist under physician supervision	Procedure	HCPCS
G0144	Screening cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation, with screening by automated system, under physician supervision	Procedure	HCPCS
G0145	Screening cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation, with screening by automated system and manual rescreening under physician supervision	Procedure	HCPCS
P3000	Screening Papanicolaou smear, cervical or vaginal, up to three smears, by technician under physician supervision	Procedure	HCPCS
P3001	Screening Papanicolaou smear, cervical or vaginal, up to three smears, requiring interpretation by physician	Procedure	HCPCS
Q0091	Screening Papanicolaou smear; obtaining, preparing and conveyance of cervical or vaginal smear to laboratory	Procedure	HCPCS
Parkinson's Disease			
G21.4	Vascular parkinsonism	Diagnosis	ICD-10-CM
G21.9	Secondary parkinsonism, unspecified	Diagnosis	ICD-10-CM
G21.3	Postencephalitic parkinsonism	Diagnosis	ICD-10-CM
G20	Parkinson's disease	Diagnosis	ICD-10-CM
G21.8	Other secondary parkinsonism	Diagnosis	ICD-10-CM
G21.19	Other drug induced secondary parkinsonism	Diagnosis	ICD-10-CM
G21.11	Neuroleptic induced parkinsonism	Diagnosis	ICD-10-CM
G31.83	Dementia with Lewy bodies	Diagnosis	ICD-10-CM
Peripheral Vascular Disease			
I70.209	Unspecified atherosclerosis of native arteries of extremities, unspecified extremity	Diagnosis	ICD-10-CM
I70.201	Unspecified atherosclerosis of native arteries of extremities, right leg	Diagnosis	ICD-10-CM
I70.208	Unspecified atherosclerosis of native arteries of extremities, other extremity	Diagnosis	ICD-10-CM
I70.202	Unspecified atherosclerosis of native arteries of extremities, left leg	Diagnosis	ICD-10-CM
I70.203	Unspecified atherosclerosis of native arteries of extremities, bilateral legs	Diagnosis	ICD-10-CM
E11.51	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E11.52	Type 2 diabetes mellitus with diabetic peripheral angiopathy with	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	Diagnosis	ICD-10-CM
I73.9	Peripheral vascular disease, unspecified	Diagnosis	ICD-10-CM
I73.89	Other specified peripheral vascular diseases	Diagnosis	ICD-10-CM
E13.51	Other specified diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E13.52	Other specified diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
I79.8	Other disorders of arteries, arterioles and capillaries in diseases classified elsewhere	Diagnosis	ICD-10-CM
I70.299	Other atherosclerosis of native arteries of extremities, unspecified extremity	Diagnosis	ICD-10-CM
I70.291	Other atherosclerosis of native arteries of extremities, right leg	Diagnosis	ICD-10-CM
I70.298	Other atherosclerosis of native arteries of extremities, other extremity	Diagnosis	ICD-10-CM
I70.292	Other atherosclerosis of native arteries of extremities, left leg	Diagnosis	ICD-10-CM
I70.293	Other atherosclerosis of native arteries of extremities, bilateral legs	Diagnosis	ICD-10-CM
I73.81	Erythromelalgia	Diagnosis	ICD-10-CM
E09.51	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E09.52	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E08.51	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E08.52	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
I70.92	Chronic total occlusion of artery of the extremities	Diagnosis	ICD-10-CM
I70.1	Atherosclerosis of renal artery	Diagnosis	ICD-10-CM
I70.239	Atherosclerosis of native arteries of right leg with ulceration of unspecified site	Diagnosis	ICD-10-CM
I70.231	Atherosclerosis of native arteries of right leg with ulceration of thigh	Diagnosis	ICD-10-CM
I70.238	Atherosclerosis of native arteries of right leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
I70.235	Atherosclerosis of native arteries of right leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
I70.234	Atherosclerosis of native arteries of right leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
I70.232	Atherosclerosis of native arteries of right leg with ulceration of calf	Diagnosis	ICD-10-CM
I70.233	Atherosclerosis of native arteries of right leg with ulceration of ankle	Diagnosis	ICD-10-CM
I70.25	Atherosclerosis of native arteries of other extremities with ulceration	Diagnosis	ICD-10-CM
I70.249	Atherosclerosis of native arteries of left leg with ulceration of unspecified site	Diagnosis	ICD-10-CM
I70.241	Atherosclerosis of native arteries of left leg with ulceration of thigh	Diagnosis	ICD-10-CM
I70.248	Atherosclerosis of native arteries of left leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
I70.245	Atherosclerosis of native arteries of left leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
I70.244	Atherosclerosis of native arteries of left leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
I70.242	Atherosclerosis of native arteries of left leg with ulceration of calf	Diagnosis	ICD-10-CM
I70.243	Atherosclerosis of native arteries of left leg with ulceration of ankle	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I70.229	Atherosclerosis of native arteries of extremities with rest pain, unspecified extremity	Diagnosis	ICD-10-CM
I70.221	Atherosclerosis of native arteries of extremities with rest pain, right leg	Diagnosis	ICD-10-CM
I70.228	Atherosclerosis of native arteries of extremities with rest pain, other extremity	Diagnosis	ICD-10-CM
I70.222	Atherosclerosis of native arteries of extremities with rest pain, left leg	Diagnosis	ICD-10-CM
I70.223	Atherosclerosis of native arteries of extremities with rest pain, bilateral legs	Diagnosis	ICD-10-CM
I70.219	Atherosclerosis of native arteries of extremities with intermittent claudication, unspecified extremity	Diagnosis	ICD-10-CM
I70.211	Atherosclerosis of native arteries of extremities with intermittent claudication, right leg	Diagnosis	ICD-10-CM
I70.218	Atherosclerosis of native arteries of extremities with intermittent claudication, other extremity	Diagnosis	ICD-10-CM
I70.212	Atherosclerosis of native arteries of extremities with intermittent claudication, left leg	Diagnosis	ICD-10-CM
I70.213	Atherosclerosis of native arteries of extremities with intermittent claudication, bilateral legs	Diagnosis	ICD-10-CM
I70.0	Atherosclerosis of aorta	Diagnosis	ICD-10-CM
I79.1	Aortitis in diseases classified elsewhere	Diagnosis	ICD-10-CM
Personality Disorder			
F69	Unspecified disorder of adult personality and behavior	Diagnosis	ICD-10-CM
F21	Schizotypal disorder	Diagnosis	ICD-10-CM
F60.1	Schizoid personality disorder	Diagnosis	ICD-10-CM
F60.9	Personality disorder, unspecified	Diagnosis	ICD-10-CM
F60.0	Paranoid personality disorder	Diagnosis	ICD-10-CM
F60.89	Other specific personality disorders	Diagnosis	ICD-10-CM
F60.5	Obsessive-compulsive personality disorder	Diagnosis	ICD-10-CM
F60.81	Narcissistic personality disorder	Diagnosis	ICD-10-CM
F60.4	Histrionic personality disorder	Diagnosis	ICD-10-CM
F68.11	Factitious disorder imposed on self, with predominantly psychological signs and symptoms	Diagnosis	ICD-10-CM
F68.12	Factitious disorder imposed on self, with predominantly physical signs and symptoms	Diagnosis	ICD-10-CM
F68.13	Factitious disorder imposed on self, with combined psychological and physical signs and symptoms	Diagnosis	ICD-10-CM
F68.10	Factitious disorder imposed on self, unspecified	Diagnosis	ICD-10-CM
F34.1	Dysthymic disorder	Diagnosis	ICD-10-CM
F60.7	Dependent personality disorder	Diagnosis	ICD-10-CM
F34.0	Cyclothymic disorder	Diagnosis	ICD-10-CM
F60.3	Borderline personality disorder	Diagnosis	ICD-10-CM
F60.6	Avoidant personality disorder	Diagnosis	ICD-10-CM
F60.2	Antisocial personality disorder	Diagnosis	ICD-10-CM
Pneumonia			

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

Code	Description	Code Category	Code Type
A37.91	Whooping cough, unspecified species with pneumonia	Diagnosis	ICD-10-CM
A37.81	Whooping cough due to other Bordetella species with pneumonia	Diagnosis	ICD-10-CM
A37.01	Whooping cough due to Bordetella pertussis with pneumonia	Diagnosis	ICD-10-CM
A37.11	Whooping cough due to Bordetella parapertussis with pneumonia	Diagnosis	ICD-10-CM
J12.9	Viral pneumonia, unspecified	Diagnosis	ICD-10-CM
J95.851	Ventilator associated pneumonia	Diagnosis	ICD-10-CM
B01.2	Varicella pneumonia	Diagnosis	ICD-10-CM
J15.9	Unspecified bacterial pneumonia	Diagnosis	ICD-10-CM
A01.03	Typhoid pneumonia	Diagnosis	ICD-10-CM
B95.3	Streptococcus pneumoniae as the cause of diseases classified elsewhere	Diagnosis	ICD-10-CM
A40.3	Sepsis due to Streptococcus pneumoniae	Diagnosis	ICD-10-CM
A02.22	Salmonella pneumonia	Diagnosis	ICD-10-CM
B06.81	Rubella pneumonia	Diagnosis	ICD-10-CM
J12.1	Respiratory syncytial virus pneumonia	Diagnosis	ICD-10-CM
A21.2	Pulmonary tularemia	Diagnosis	ICD-10-CM
B58.3	Pulmonary toxoplasmosis	Diagnosis	ICD-10-CM
B41.0	Pulmonary paracoccidioidomycosis	Diagnosis	ICD-10-CM
A43.0	Pulmonary nocardiosis	Diagnosis	ICD-10-CM
A31.0	Pulmonary mycobacterial infection	Diagnosis	ICD-10-CM
B39.2	Pulmonary histoplasmosis capsulati, unspecified	Diagnosis	ICD-10-CM
B38.2	Pulmonary coccidioidomycosis, unspecified	Diagnosis	ICD-10-CM
B37.1	Pulmonary candidiasis	Diagnosis	ICD-10-CM
B40.2	Pulmonary blastomycosis, unspecified	Diagnosis	ICD-10-CM
A22.1	Pulmonary anthrax	Diagnosis	ICD-10-CM
A42.0	Pulmonary actinomycosis	Diagnosis	ICD-10-CM
A20.2	Pneumonic plague	Diagnosis	ICD-10-CM
J18.9	Pneumonia, unspecified organism	Diagnosis	ICD-10-CM
J17	Pneumonia in diseases classified elsewhere	Diagnosis	ICD-10-CM
J15.3	Pneumonia due to streptococcus, group B	Diagnosis	ICD-10-CM
J13	Pneumonia due to Streptococcus pneumoniae	Diagnosis	ICD-10-CM
J15.20	Pneumonia due to staphylococcus, unspecified	Diagnosis	ICD-10-CM
J12.81	Pneumonia due to SARS-associated coronavirus	Diagnosis	ICD-10-CM
J15.1	Pneumonia due to Pseudomonas	Diagnosis	ICD-10-CM
J15.4	Pneumonia due to other streptococci	Diagnosis	ICD-10-CM
J15.29	Pneumonia due to other staphylococcus	Diagnosis	ICD-10-CM
J16.8	Pneumonia due to other specified infectious organisms	Diagnosis	ICD-10-CM
J15.8	Pneumonia due to other specified bacteria	Diagnosis	ICD-10-CM
J15.6	Pneumonia due to other Gram-negative bacteria	Diagnosis	ICD-10-CM
J15.7	Pneumonia due to Mycoplasma pneumoniae	Diagnosis	ICD-10-CM
J15.211	Pneumonia due to Methicillin susceptible Staphylococcus aureus	Diagnosis	ICD-10-CM
J15.212	Pneumonia due to Methicillin resistant Staphylococcus aureus	Diagnosis	ICD-10-CM
J15.0	Pneumonia due to Klebsiella pneumoniae	Diagnosis	ICD-10-CM
J14	Pneumonia due to Hemophilus influenzae	Diagnosis	ICD-10-CM
J15.5	Pneumonia due to Escherichia coli	Diagnosis	ICD-10-CM

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

Code	Description	Code	
		Category	Code Type
J12.82	Pneumonia due to coronavirus disease 2019	Diagnosis	ICD-10-CM
B59	Pneumocystosis	Diagnosis	ICD-10-CM
Z87.01	Personal history of pneumonia (recurrent)	Diagnosis	ICD-10-CM
J12.2	Parainfluenza virus pneumonia	Diagnosis	ICD-10-CM
B66.4	Paragonimiasis	Diagnosis	ICD-10-CM
J12.89	Other viral pneumonia	Diagnosis	ICD-10-CM
J18.8	Other pneumonia, unspecified organism	Diagnosis	ICD-10-CM
J84.178	Other interstitial pulmonary diseases with fibrosis in diseases classified elsewhere	Diagnosis	ICD-10-CM
B96.0	Mycoplasma pneumoniae [M. pneumoniae] as the cause of diseases classified elsewhere	Diagnosis	ICD-10-CM
B05.2	Measles complicated by pneumonia	Diagnosis	ICD-10-CM
J84.2	Lymphoid interstitial pneumonia	Diagnosis	ICD-10-CM
J18.1	Lobar pneumonia, unspecified organism	Diagnosis	ICD-10-CM
A48.1	Legionnaires' disease	Diagnosis	ICD-10-CM
B96.1	Klebsiella pneumoniae [K. pneumoniae] as the cause of diseases classified elsewhere	Diagnosis	ICD-10-CM
J11.00	Influenza due to unidentified influenza virus with unspecified type of pneumonia	Diagnosis	ICD-10-CM
J11.08	Influenza due to unidentified influenza virus with specified pneumonia	Diagnosis	ICD-10-CM
J10.00	Influenza due to other identified influenza virus with unspecified type of pneumonia	Diagnosis	ICD-10-CM
J10.01	Influenza due to other identified influenza virus with the same other identified influenza virus pneumonia	Diagnosis	ICD-10-CM
J10.08	Influenza due to other identified influenza virus with other specified pneumonia	Diagnosis	ICD-10-CM
J09.X1	Influenza due to identified novel influenza A virus with pneumonia	Diagnosis	ICD-10-CM
J84.111	Idiopathic interstitial pneumonia, not otherwise specified	Diagnosis	ICD-10-CM
J18.2	Hypostatic pneumonia, unspecified organism	Diagnosis	ICD-10-CM
J12.3	Human metapneumovirus pneumonia	Diagnosis	ICD-10-CM
A54.84	Gonococcal pneumonia	Diagnosis	ICD-10-CM
B67.1	Echinococcus granulosus infection of lung	Diagnosis	ICD-10-CM
A50.04	Early congenital syphilitic pneumonia	Diagnosis	ICD-10-CM
J84.117	Desquamative interstitial pneumonia	Diagnosis	ICD-10-CM
J84.116	Cryptogenic organizing pneumonia	Diagnosis	ICD-10-CM
P23.9	Congenital pneumonia, unspecified	Diagnosis	ICD-10-CM
P23.0	Congenital pneumonia due to viral agent	Diagnosis	ICD-10-CM
P23.3	Congenital pneumonia due to streptococcus, group B	Diagnosis	ICD-10-CM
P23.2	Congenital pneumonia due to staphylococcus	Diagnosis	ICD-10-CM
P23.5	Congenital pneumonia due to Pseudomonas	Diagnosis	ICD-10-CM
P23.8	Congenital pneumonia due to other organisms	Diagnosis	ICD-10-CM
P23.6	Congenital pneumonia due to other bacterial agents	Diagnosis	ICD-10-CM
P23.4	Congenital pneumonia due to Escherichia coli	Diagnosis	ICD-10-CM
P23.1	Congenital pneumonia due to Chlamydia	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
J16.0	Chlamydial pneumonia	Diagnosis	ICD-10-CM
J18.0	Bronchopneumonia, unspecified organism	Diagnosis	ICD-10-CM
B77.81	Ascariasis pneumonia	Diagnosis	ICD-10-CM
A06.5	Amebic lung abscess	Diagnosis	ICD-10-CM
J12.0	Adenoviral pneumonia	Diagnosis	ICD-10-CM
B39.0	Acute pulmonary histoplasmosis capsulati	Diagnosis	ICD-10-CM
B38.0	Acute pulmonary coccidioidomycosis	Diagnosis	ICD-10-CM
B40.0	Acute pulmonary blastomycosis	Diagnosis	ICD-10-CM
J20.0	Acute bronchitis due to Mycoplasma pneumoniae	Diagnosis	ICD-10-CM
J85.1	Abscess of lung with pneumonia	Diagnosis	ICD-10-CM
Pressure/Chronic Ulcer			
L89.95	Pressure ulcer of unspecified site, unstageable	Diagnosis	ICD-10-CM
L89.90	Pressure ulcer of unspecified site, unspecified stage	Diagnosis	ICD-10-CM
L89.94	Pressure ulcer of unspecified site, stage 4	Diagnosis	ICD-10-CM
L89.93	Pressure ulcer of unspecified site, stage 3	Diagnosis	ICD-10-CM
L89.92	Pressure ulcer of unspecified site, stage 2	Diagnosis	ICD-10-CM
L89.91	Pressure ulcer of unspecified site, stage 1	Diagnosis	ICD-10-CM
L89.100	Pressure ulcer of unspecified part of back, unstageable	Diagnosis	ICD-10-CM
L89.109	Pressure ulcer of unspecified part of back, unspecified stage	Diagnosis	ICD-10-CM
L89.104	Pressure ulcer of unspecified part of back, stage 4	Diagnosis	ICD-10-CM
L89.103	Pressure ulcer of unspecified part of back, stage 3	Diagnosis	ICD-10-CM
L89.102	Pressure ulcer of unspecified part of back, stage 2	Diagnosis	ICD-10-CM
L89.101	Pressure ulcer of unspecified part of back, stage 1	Diagnosis	ICD-10-CM
L89.200	Pressure ulcer of unspecified hip, unstageable	Diagnosis	ICD-10-CM
L89.209	Pressure ulcer of unspecified hip, unspecified stage	Diagnosis	ICD-10-CM
L89.204	Pressure ulcer of unspecified hip, stage 4	Diagnosis	ICD-10-CM
L89.203	Pressure ulcer of unspecified hip, stage 3	Diagnosis	ICD-10-CM
L89.202	Pressure ulcer of unspecified hip, stage 2	Diagnosis	ICD-10-CM
L89.201	Pressure ulcer of unspecified hip, stage 1	Diagnosis	ICD-10-CM
L89.600	Pressure ulcer of unspecified heel, unstageable	Diagnosis	ICD-10-CM
L89.609	Pressure ulcer of unspecified heel, unspecified stage	Diagnosis	ICD-10-CM
L89.604	Pressure ulcer of unspecified heel, stage 4	Diagnosis	ICD-10-CM
L89.603	Pressure ulcer of unspecified heel, stage 3	Diagnosis	ICD-10-CM
L89.602	Pressure ulcer of unspecified heel, stage 2	Diagnosis	ICD-10-CM
L89.601	Pressure ulcer of unspecified heel, stage 1	Diagnosis	ICD-10-CM
L89.000	Pressure ulcer of unspecified elbow, unstageable	Diagnosis	ICD-10-CM
L89.009	Pressure ulcer of unspecified elbow, unspecified stage	Diagnosis	ICD-10-CM
L89.004	Pressure ulcer of unspecified elbow, stage 4	Diagnosis	ICD-10-CM
L89.003	Pressure ulcer of unspecified elbow, stage 3	Diagnosis	ICD-10-CM
L89.002	Pressure ulcer of unspecified elbow, stage 2	Diagnosis	ICD-10-CM
L89.001	Pressure ulcer of unspecified elbow, stage 1	Diagnosis	ICD-10-CM
L89.300	Pressure ulcer of unspecified buttock, unstageable	Diagnosis	ICD-10-CM
L89.309	Pressure ulcer of unspecified buttock, unspecified stage	Diagnosis	ICD-10-CM
L89.304	Pressure ulcer of unspecified buttock, stage 4	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L89.303	Pressure ulcer of unspecified buttock, stage 3	Diagnosis	ICD-10-CM
L89.302	Pressure ulcer of unspecified buttock, stage 2	Diagnosis	ICD-10-CM
L89.301	Pressure ulcer of unspecified buttock, stage 1	Diagnosis	ICD-10-CM
L89.500	Pressure ulcer of unspecified ankle, unstageable	Diagnosis	ICD-10-CM
L89.509	Pressure ulcer of unspecified ankle, unspecified stage	Diagnosis	ICD-10-CM
L89.504	Pressure ulcer of unspecified ankle, stage 4	Diagnosis	ICD-10-CM
L89.503	Pressure ulcer of unspecified ankle, stage 3	Diagnosis	ICD-10-CM
L89.502	Pressure ulcer of unspecified ankle, stage 2	Diagnosis	ICD-10-CM
L89.501	Pressure ulcer of unspecified ankle, stage 1	Diagnosis	ICD-10-CM
L89.150	Pressure ulcer of sacral region, unstageable	Diagnosis	ICD-10-CM
L89.159	Pressure ulcer of sacral region, unspecified stage	Diagnosis	ICD-10-CM
L89.154	Pressure ulcer of sacral region, stage 4	Diagnosis	ICD-10-CM
L89.153	Pressure ulcer of sacral region, stage 3	Diagnosis	ICD-10-CM
L89.152	Pressure ulcer of sacral region, stage 2	Diagnosis	ICD-10-CM
L89.151	Pressure ulcer of sacral region, stage 1	Diagnosis	ICD-10-CM
L89.110	Pressure ulcer of right upper back, unstageable	Diagnosis	ICD-10-CM
L89.119	Pressure ulcer of right upper back, unspecified stage	Diagnosis	ICD-10-CM
L89.114	Pressure ulcer of right upper back, stage 4	Diagnosis	ICD-10-CM
L89.113	Pressure ulcer of right upper back, stage 3	Diagnosis	ICD-10-CM
L89.112	Pressure ulcer of right upper back, stage 2	Diagnosis	ICD-10-CM
L89.111	Pressure ulcer of right upper back, stage 1	Diagnosis	ICD-10-CM
L89.130	Pressure ulcer of right lower back, unstageable	Diagnosis	ICD-10-CM
L89.139	Pressure ulcer of right lower back, unspecified stage	Diagnosis	ICD-10-CM
L89.134	Pressure ulcer of right lower back, stage 4	Diagnosis	ICD-10-CM
L89.133	Pressure ulcer of right lower back, stage 3	Diagnosis	ICD-10-CM
L89.132	Pressure ulcer of right lower back, stage 2	Diagnosis	ICD-10-CM
L89.131	Pressure ulcer of right lower back, stage 1	Diagnosis	ICD-10-CM
L89.210	Pressure ulcer of right hip, unstageable	Diagnosis	ICD-10-CM
L89.219	Pressure ulcer of right hip, unspecified stage	Diagnosis	ICD-10-CM
L89.214	Pressure ulcer of right hip, stage 4	Diagnosis	ICD-10-CM
L89.213	Pressure ulcer of right hip, stage 3	Diagnosis	ICD-10-CM
L89.212	Pressure ulcer of right hip, stage 2	Diagnosis	ICD-10-CM
L89.211	Pressure ulcer of right hip, stage 1	Diagnosis	ICD-10-CM
L89.610	Pressure ulcer of right heel, unstageable	Diagnosis	ICD-10-CM
L89.619	Pressure ulcer of right heel, unspecified stage	Diagnosis	ICD-10-CM
L89.614	Pressure ulcer of right heel, stage 4	Diagnosis	ICD-10-CM
L89.613	Pressure ulcer of right heel, stage 3	Diagnosis	ICD-10-CM
L89.612	Pressure ulcer of right heel, stage 2	Diagnosis	ICD-10-CM
L89.611	Pressure ulcer of right heel, stage 1	Diagnosis	ICD-10-CM
L89.010	Pressure ulcer of right elbow, unstageable	Diagnosis	ICD-10-CM
L89.019	Pressure ulcer of right elbow, unspecified stage	Diagnosis	ICD-10-CM
L89.014	Pressure ulcer of right elbow, stage 4	Diagnosis	ICD-10-CM
L89.013	Pressure ulcer of right elbow, stage 3	Diagnosis	ICD-10-CM
L89.012	Pressure ulcer of right elbow, stage 2	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L89.011	Pressure ulcer of right elbow, stage 1	Diagnosis	ICD-10-CM
L89.310	Pressure ulcer of right buttock, unstageable	Diagnosis	ICD-10-CM
L89.319	Pressure ulcer of right buttock, unspecified stage	Diagnosis	ICD-10-CM
L89.314	Pressure ulcer of right buttock, stage 4	Diagnosis	ICD-10-CM
L89.313	Pressure ulcer of right buttock, stage 3	Diagnosis	ICD-10-CM
L89.312	Pressure ulcer of right buttock, stage 2	Diagnosis	ICD-10-CM
L89.311	Pressure ulcer of right buttock, stage 1	Diagnosis	ICD-10-CM
L89.510	Pressure ulcer of right ankle, unstageable	Diagnosis	ICD-10-CM
L89.519	Pressure ulcer of right ankle, unspecified stage	Diagnosis	ICD-10-CM
L89.514	Pressure ulcer of right ankle, stage 4	Diagnosis	ICD-10-CM
L89.513	Pressure ulcer of right ankle, stage 3	Diagnosis	ICD-10-CM
L89.512	Pressure ulcer of right ankle, stage 2	Diagnosis	ICD-10-CM
L89.511	Pressure ulcer of right ankle, stage 1	Diagnosis	ICD-10-CM
L89.890	Pressure ulcer of other site, unstageable	Diagnosis	ICD-10-CM
L89.899	Pressure ulcer of other site, unspecified stage	Diagnosis	ICD-10-CM
L89.894	Pressure ulcer of other site, stage 4	Diagnosis	ICD-10-CM
L89.893	Pressure ulcer of other site, stage 3	Diagnosis	ICD-10-CM
L89.892	Pressure ulcer of other site, stage 2	Diagnosis	ICD-10-CM
L89.891	Pressure ulcer of other site, stage 1	Diagnosis	ICD-10-CM
L89.120	Pressure ulcer of left upper back, unstageable	Diagnosis	ICD-10-CM
L89.129	Pressure ulcer of left upper back, unspecified stage	Diagnosis	ICD-10-CM
L89.124	Pressure ulcer of left upper back, stage 4	Diagnosis	ICD-10-CM
L89.123	Pressure ulcer of left upper back, stage 3	Diagnosis	ICD-10-CM
L89.122	Pressure ulcer of left upper back, stage 2	Diagnosis	ICD-10-CM
L89.121	Pressure ulcer of left upper back, stage 1	Diagnosis	ICD-10-CM
L89.140	Pressure ulcer of left lower back, unstageable	Diagnosis	ICD-10-CM
L89.149	Pressure ulcer of left lower back, unspecified stage	Diagnosis	ICD-10-CM
L89.144	Pressure ulcer of left lower back, stage 4	Diagnosis	ICD-10-CM
L89.143	Pressure ulcer of left lower back, stage 3	Diagnosis	ICD-10-CM
L89.142	Pressure ulcer of left lower back, stage 2	Diagnosis	ICD-10-CM
L89.141	Pressure ulcer of left lower back, stage 1	Diagnosis	ICD-10-CM
L89.220	Pressure ulcer of left hip, unstageable	Diagnosis	ICD-10-CM
L89.229	Pressure ulcer of left hip, unspecified stage	Diagnosis	ICD-10-CM
L89.224	Pressure ulcer of left hip, stage 4	Diagnosis	ICD-10-CM
L89.223	Pressure ulcer of left hip, stage 3	Diagnosis	ICD-10-CM
L89.222	Pressure ulcer of left hip, stage 2	Diagnosis	ICD-10-CM
L89.221	Pressure ulcer of left hip, stage 1	Diagnosis	ICD-10-CM
L89.620	Pressure ulcer of left heel, unstageable	Diagnosis	ICD-10-CM
L89.629	Pressure ulcer of left heel, unspecified stage	Diagnosis	ICD-10-CM
L89.624	Pressure ulcer of left heel, stage 4	Diagnosis	ICD-10-CM
L89.623	Pressure ulcer of left heel, stage 3	Diagnosis	ICD-10-CM
L89.622	Pressure ulcer of left heel, stage 2	Diagnosis	ICD-10-CM
L89.621	Pressure ulcer of left heel, stage 1	Diagnosis	ICD-10-CM
L89.020	Pressure ulcer of left elbow, unstageable	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L89.029	Pressure ulcer of left elbow, unspecified stage	Diagnosis	ICD-10-CM
L89.024	Pressure ulcer of left elbow, stage 4	Diagnosis	ICD-10-CM
L89.023	Pressure ulcer of left elbow, stage 3	Diagnosis	ICD-10-CM
L89.022	Pressure ulcer of left elbow, stage 2	Diagnosis	ICD-10-CM
L89.021	Pressure ulcer of left elbow, stage 1	Diagnosis	ICD-10-CM
L89.320	Pressure ulcer of left buttock, unstageable	Diagnosis	ICD-10-CM
L89.329	Pressure ulcer of left buttock, unspecified stage	Diagnosis	ICD-10-CM
L89.324	Pressure ulcer of left buttock, stage 4	Diagnosis	ICD-10-CM
L89.323	Pressure ulcer of left buttock, stage 3	Diagnosis	ICD-10-CM
L89.322	Pressure ulcer of left buttock, stage 2	Diagnosis	ICD-10-CM
L89.321	Pressure ulcer of left buttock, stage 1	Diagnosis	ICD-10-CM
L89.520	Pressure ulcer of left ankle, unstageable	Diagnosis	ICD-10-CM
L89.529	Pressure ulcer of left ankle, unspecified stage	Diagnosis	ICD-10-CM
L89.524	Pressure ulcer of left ankle, stage 4	Diagnosis	ICD-10-CM
L89.523	Pressure ulcer of left ankle, stage 3	Diagnosis	ICD-10-CM
L89.522	Pressure ulcer of left ankle, stage 2	Diagnosis	ICD-10-CM
L89.521	Pressure ulcer of left ankle, stage 1	Diagnosis	ICD-10-CM
L89.810	Pressure ulcer of head, unstageable	Diagnosis	ICD-10-CM
L89.819	Pressure ulcer of head, unspecified stage	Diagnosis	ICD-10-CM
L89.814	Pressure ulcer of head, stage 4	Diagnosis	ICD-10-CM
L89.813	Pressure ulcer of head, stage 3	Diagnosis	ICD-10-CM
L89.812	Pressure ulcer of head, stage 2	Diagnosis	ICD-10-CM
L89.811	Pressure ulcer of head, stage 1	Diagnosis	ICD-10-CM
L89.45	Pressure ulcer of contiguous site of back, buttock and hip, unstageable	Diagnosis	ICD-10-CM
L89.40	Pressure ulcer of contiguous site of back, buttock and hip, unspecified stage	Diagnosis	ICD-10-CM
L89.44	Pressure ulcer of contiguous site of back, buttock and hip, stage 4	Diagnosis	ICD-10-CM
L89.43	Pressure ulcer of contiguous site of back, buttock and hip, stage 3	Diagnosis	ICD-10-CM
L89.42	Pressure ulcer of contiguous site of back, buttock and hip, stage 2	Diagnosis	ICD-10-CM
L89.41	Pressure ulcer of contiguous site of back, buttock and hip, stage 1	Diagnosis	ICD-10-CM
L89.96	Pressure-induced deep tissue damage of unspecified site	Diagnosis	ICD-10-CM
L89.106	Pressure-induced deep tissue damage of unspecified part of back	Diagnosis	ICD-10-CM
L89.206	Pressure-induced deep tissue damage of unspecified hip	Diagnosis	ICD-10-CM
L89.606	Pressure-induced deep tissue damage of unspecified heel	Diagnosis	ICD-10-CM
L89.006	Pressure-induced deep tissue damage of unspecified elbow	Diagnosis	ICD-10-CM
L89.306	Pressure-induced deep tissue damage of unspecified buttock	Diagnosis	ICD-10-CM
L89.506	Pressure-induced deep tissue damage of unspecified ankle	Diagnosis	ICD-10-CM
L89.156	Pressure-induced deep tissue damage of sacral region	Diagnosis	ICD-10-CM
L89.116	Pressure-induced deep tissue damage of right upper back	Diagnosis	ICD-10-CM
L89.136	Pressure-induced deep tissue damage of right lower back	Diagnosis	ICD-10-CM
L89.216	Pressure-induced deep tissue damage of right hip	Diagnosis	ICD-10-CM
L89.616	Pressure-induced deep tissue damage of right heel	Diagnosis	ICD-10-CM
L89.016	Pressure-induced deep tissue damage of right elbow	Diagnosis	ICD-10-CM
L89.316	Pressure-induced deep tissue damage of right buttock	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L89.516	Pressure-induced deep tissue damage of right ankle	Diagnosis	ICD-10-CM
L89.896	Pressure-induced deep tissue damage of other site	Diagnosis	ICD-10-CM
L89.126	Pressure-induced deep tissue damage of left upper back	Diagnosis	ICD-10-CM
L89.146	Pressure-induced deep tissue damage of left lower back	Diagnosis	ICD-10-CM
L89.226	Pressure-induced deep tissue damage of left hip	Diagnosis	ICD-10-CM
L89.626	Pressure-induced deep tissue damage of left heel	Diagnosis	ICD-10-CM
L89.026	Pressure-induced deep tissue damage of left elbow	Diagnosis	ICD-10-CM
L89.326	Pressure-induced deep tissue damage of left buttock	Diagnosis	ICD-10-CM
L89.526	Pressure-induced deep tissue damage of left ankle	Diagnosis	ICD-10-CM
L89.816	Pressure-induced deep tissue damage of head	Diagnosis	ICD-10-CM
L89.46	Pressure-induced deep tissue damage of contiguous site of back, buttock and hip	Diagnosis	ICD-10-CM
L97.109	Non-pressure chronic ulcer of unspecified thigh with unspecified severity	Diagnosis	ICD-10-CM
L97.108	Non-pressure chronic ulcer of unspecified thigh with other specified severity	Diagnosis	ICD-10-CM
L97.103	Non-pressure chronic ulcer of unspecified thigh with necrosis of muscle	Diagnosis	ICD-10-CM
L97.104	Non-pressure chronic ulcer of unspecified thigh with necrosis of bone	Diagnosis	ICD-10-CM
L97.105	Non-pressure chronic ulcer of unspecified thigh with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.102	Non-pressure chronic ulcer of unspecified thigh with fat layer exposed	Diagnosis	ICD-10-CM
L97.106	Non-pressure chronic ulcer of unspecified thigh with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.101	Non-pressure chronic ulcer of unspecified thigh limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.909	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with unspecified severity	Diagnosis	ICD-10-CM
L97.908	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with other specified severity	Diagnosis	ICD-10-CM
L97.903	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with necrosis of muscle	Diagnosis	ICD-10-CM
L97.904	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with necrosis of bone	Diagnosis	ICD-10-CM
L97.905	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.902	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with fat layer exposed	Diagnosis	ICD-10-CM
L97.906	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.901	Non-pressure chronic ulcer of unspecified part of unspecified lower leg limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.919	Non-pressure chronic ulcer of unspecified part of right lower leg with unspecified severity	Diagnosis	ICD-10-CM
L97.918	Non-pressure chronic ulcer of unspecified part of right lower leg with other specified severity	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L97.913	Non-pressure chronic ulcer of unspecified part of right lower leg with necrosis of muscle	Diagnosis	ICD-10-CM
L97.914	Non-pressure chronic ulcer of unspecified part of right lower leg with necrosis of bone	Diagnosis	ICD-10-CM
L97.915	Non-pressure chronic ulcer of unspecified part of right lower leg with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.912	Non-pressure chronic ulcer of unspecified part of right lower leg with fat layer exposed	Diagnosis	ICD-10-CM
L97.916	Non-pressure chronic ulcer of unspecified part of right lower leg with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.911	Non-pressure chronic ulcer of unspecified part of right lower leg limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.929	Non-pressure chronic ulcer of unspecified part of left lower leg with unspecified severity	Diagnosis	ICD-10-CM
L97.928	Non-pressure chronic ulcer of unspecified part of left lower leg with other specified severity	Diagnosis	ICD-10-CM
L97.923	Non-pressure chronic ulcer of unspecified part of left lower leg with necrosis of muscle	Diagnosis	ICD-10-CM
L97.924	Non-pressure chronic ulcer of unspecified part of left lower leg with necrosis of bone	Diagnosis	ICD-10-CM
L97.925	Non-pressure chronic ulcer of unspecified part of left lower leg with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.922	Non-pressure chronic ulcer of unspecified part of left lower leg with fat layer exposed	Diagnosis	ICD-10-CM
L97.926	Non-pressure chronic ulcer of unspecified part of left lower leg with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.921	Non-pressure chronic ulcer of unspecified part of left lower leg limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.409	Non-pressure chronic ulcer of unspecified heel and midfoot with unspecified severity	Diagnosis	ICD-10-CM
L97.408	Non-pressure chronic ulcer of unspecified heel and midfoot with other specified severity	Diagnosis	ICD-10-CM
L97.403	Non-pressure chronic ulcer of unspecified heel and midfoot with necrosis of muscle	Diagnosis	ICD-10-CM
L97.404	Non-pressure chronic ulcer of unspecified heel and midfoot with necrosis of bone	Diagnosis	ICD-10-CM
L97.405	Non-pressure chronic ulcer of unspecified heel and midfoot with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.402	Non-pressure chronic ulcer of unspecified heel and midfoot with fat layer exposed	Diagnosis	ICD-10-CM
L97.406	Non-pressure chronic ulcer of unspecified heel and midfoot with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.401	Non-pressure chronic ulcer of unspecified heel and midfoot limited to breakdown of skin	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L97.209	Non-pressure chronic ulcer of unspecified calf with unspecified severity	Diagnosis	ICD-10-CM
L97.208	Non-pressure chronic ulcer of unspecified calf with other specified	Diagnosis	ICD-10-CM
L97.203	Non-pressure chronic ulcer of unspecified calf with necrosis of muscle	Diagnosis	ICD-10-CM
L97.204	Non-pressure chronic ulcer of unspecified calf with necrosis of bone	Diagnosis	ICD-10-CM
L97.205	Non-pressure chronic ulcer of unspecified calf with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.202	Non-pressure chronic ulcer of unspecified calf with fat layer exposed	Diagnosis	ICD-10-CM
L97.206	Non-pressure chronic ulcer of unspecified calf with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.201	Non-pressure chronic ulcer of unspecified calf limited to breakdown of	Diagnosis	ICD-10-CM
L97.309	Non-pressure chronic ulcer of unspecified ankle with unspecified severity	Diagnosis	ICD-10-CM
L97.308	Non-pressure chronic ulcer of unspecified ankle with other specified severity	Diagnosis	ICD-10-CM
L97.303	Non-pressure chronic ulcer of unspecified ankle with necrosis of muscle	Diagnosis	ICD-10-CM
L97.304	Non-pressure chronic ulcer of unspecified ankle with necrosis of bone	Diagnosis	ICD-10-CM
L97.305	Non-pressure chronic ulcer of unspecified ankle with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.302	Non-pressure chronic ulcer of unspecified ankle with fat layer exposed	Diagnosis	ICD-10-CM
L97.306	Non-pressure chronic ulcer of unspecified ankle with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.301	Non-pressure chronic ulcer of unspecified ankle limited to breakdown of skin	Diagnosis	ICD-10-CM
L98.499	Non-pressure chronic ulcer of skin of other sites with unspecified severity	Diagnosis	ICD-10-CM
L98.498	Non-pressure chronic ulcer of skin of other sites with other specified severity	Diagnosis	ICD-10-CM
L98.493	Non-pressure chronic ulcer of skin of other sites with necrosis of muscle	Diagnosis	ICD-10-CM
L98.494	Non-pressure chronic ulcer of skin of other sites with necrosis of bone	Diagnosis	ICD-10-CM
L98.495	Non-pressure chronic ulcer of skin of other sites with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L98.492	Non-pressure chronic ulcer of skin of other sites with fat layer exposed	Diagnosis	ICD-10-CM
L98.496	Non-pressure chronic ulcer of skin of other sites with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L98.491	Non-pressure chronic ulcer of skin of other sites limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.119	Non-pressure chronic ulcer of right thigh with unspecified severity	Diagnosis	ICD-10-CM
L97.118	Non-pressure chronic ulcer of right thigh with other specified severity	Diagnosis	ICD-10-CM
L97.113	Non-pressure chronic ulcer of right thigh with necrosis of muscle	Diagnosis	ICD-10-CM
L97.114	Non-pressure chronic ulcer of right thigh with necrosis of bone	Diagnosis	ICD-10-CM
L97.115	Non-pressure chronic ulcer of right thigh with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.112	Non-pressure chronic ulcer of right thigh with fat layer exposed	Diagnosis	ICD-10-CM
L97.116	Non-pressure chronic ulcer of right thigh with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.111	Non-pressure chronic ulcer of right thigh limited to breakdown of skin	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L97.419	Non-pressure chronic ulcer of right heel and midfoot with unspecified severity	Diagnosis	ICD-10-CM
L97.418	Non-pressure chronic ulcer of right heel and midfoot with other specified severity	Diagnosis	ICD-10-CM
L97.413	Non-pressure chronic ulcer of right heel and midfoot with necrosis of muscle	Diagnosis	ICD-10-CM
L97.414	Non-pressure chronic ulcer of right heel and midfoot with necrosis of	Diagnosis	ICD-10-CM
L97.415	Non-pressure chronic ulcer of right heel and midfoot with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.412	Non-pressure chronic ulcer of right heel and midfoot with fat layer	Diagnosis	ICD-10-CM
L97.416	Non-pressure chronic ulcer of right heel and midfoot with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.411	Non-pressure chronic ulcer of right heel and midfoot limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.219	Non-pressure chronic ulcer of right calf with unspecified severity	Diagnosis	ICD-10-CM
L97.218	Non-pressure chronic ulcer of right calf with other specified severity	Diagnosis	ICD-10-CM
L97.213	Non-pressure chronic ulcer of right calf with necrosis of muscle	Diagnosis	ICD-10-CM
L97.214	Non-pressure chronic ulcer of right calf with necrosis of bone	Diagnosis	ICD-10-CM
L97.215	Non-pressure chronic ulcer of right calf with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.212	Non-pressure chronic ulcer of right calf with fat layer exposed	Diagnosis	ICD-10-CM
L97.216	Non-pressure chronic ulcer of right calf with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.211	Non-pressure chronic ulcer of right calf limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.319	Non-pressure chronic ulcer of right ankle with unspecified severity	Diagnosis	ICD-10-CM
L97.318	Non-pressure chronic ulcer of right ankle with other specified severity	Diagnosis	ICD-10-CM
L97.313	Non-pressure chronic ulcer of right ankle with necrosis of muscle	Diagnosis	ICD-10-CM
L97.314	Non-pressure chronic ulcer of right ankle with necrosis of bone	Diagnosis	ICD-10-CM
L97.315	Non-pressure chronic ulcer of right ankle with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.312	Non-pressure chronic ulcer of right ankle with fat layer exposed	Diagnosis	ICD-10-CM
L97.316	Non-pressure chronic ulcer of right ankle with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.311	Non-pressure chronic ulcer of right ankle limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.809	Non-pressure chronic ulcer of other part of unspecified lower leg with unspecified severity	Diagnosis	ICD-10-CM
L97.808	Non-pressure chronic ulcer of other part of unspecified lower leg with other specified severity	Diagnosis	ICD-10-CM
L97.803	Non-pressure chronic ulcer of other part of unspecified lower leg with necrosis of muscle	Diagnosis	ICD-10-CM
L97.804	Non-pressure chronic ulcer of other part of unspecified lower leg with necrosis of bone	Diagnosis	ICD-10-CM
L97.805	Non-pressure chronic ulcer of other part of unspecified lower leg with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L97.802	Non-pressure chronic ulcer of other part of unspecified lower leg with fat layer exposed	Diagnosis	ICD-10-CM
L97.806	Non-pressure chronic ulcer of other part of unspecified lower leg with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.801	Non-pressure chronic ulcer of other part of unspecified lower leg limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.509	Non-pressure chronic ulcer of other part of unspecified foot with unspecified severity	Diagnosis	ICD-10-CM
L97.508	Non-pressure chronic ulcer of other part of unspecified foot with other specified severity	Diagnosis	ICD-10-CM
L97.503	Non-pressure chronic ulcer of other part of unspecified foot with necrosis of muscle	Diagnosis	ICD-10-CM
L97.504	Non-pressure chronic ulcer of other part of unspecified foot with necrosis of bone	Diagnosis	ICD-10-CM
L97.505	Non-pressure chronic ulcer of other part of unspecified foot with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.502	Non-pressure chronic ulcer of other part of unspecified foot with fat layer exposed	Diagnosis	ICD-10-CM
L97.506	Non-pressure chronic ulcer of other part of unspecified foot with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.501	Non-pressure chronic ulcer of other part of unspecified foot limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.819	Non-pressure chronic ulcer of other part of right lower leg with unspecified severity	Diagnosis	ICD-10-CM
L97.818	Non-pressure chronic ulcer of other part of right lower leg with other specified severity	Diagnosis	ICD-10-CM
L97.813	Non-pressure chronic ulcer of other part of right lower leg with necrosis of muscle	Diagnosis	ICD-10-CM
L97.814	Non-pressure chronic ulcer of other part of right lower leg with necrosis of bone	Diagnosis	ICD-10-CM
L97.815	Non-pressure chronic ulcer of other part of right lower leg with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.812	Non-pressure chronic ulcer of other part of right lower leg with fat layer exposed	Diagnosis	ICD-10-CM
L97.816	Non-pressure chronic ulcer of other part of right lower leg with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.811	Non-pressure chronic ulcer of other part of right lower leg limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.519	Non-pressure chronic ulcer of other part of right foot with unspecified severity	Diagnosis	ICD-10-CM
L97.518	Non-pressure chronic ulcer of other part of right foot with other specified severity	Diagnosis	ICD-10-CM
L97.513	Non-pressure chronic ulcer of other part of right foot with necrosis of muscle	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L97.514	Non-pressure chronic ulcer of other part of right foot with necrosis of	Diagnosis	ICD-10-CM
L97.515	Non-pressure chronic ulcer of other part of right foot with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.512	Non-pressure chronic ulcer of other part of right foot with fat layer exposed	Diagnosis	ICD-10-CM
L97.516	Non-pressure chronic ulcer of other part of right foot with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.511	Non-pressure chronic ulcer of other part of right foot limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.829	Non-pressure chronic ulcer of other part of left lower leg with unspecified severity	Diagnosis	ICD-10-CM
L97.828	Non-pressure chronic ulcer of other part of left lower leg with other specified severity	Diagnosis	ICD-10-CM
L97.823	Non-pressure chronic ulcer of other part of left lower leg with necrosis of muscle	Diagnosis	ICD-10-CM
L97.824	Non-pressure chronic ulcer of other part of left lower leg with necrosis of bone	Diagnosis	ICD-10-CM
L97.825	Non-pressure chronic ulcer of other part of left lower leg with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.822	Non-pressure chronic ulcer of other part of left lower leg with fat layer exposed	Diagnosis	ICD-10-CM
L97.826	Non-pressure chronic ulcer of other part of left lower leg with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.821	Non-pressure chronic ulcer of other part of left lower leg limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.529	Non-pressure chronic ulcer of other part of left foot with unspecified severity	Diagnosis	ICD-10-CM
L97.528	Non-pressure chronic ulcer of other part of left foot with other specified severity	Diagnosis	ICD-10-CM
L97.523	Non-pressure chronic ulcer of other part of left foot with necrosis of muscle	Diagnosis	ICD-10-CM
L97.524	Non-pressure chronic ulcer of other part of left foot with necrosis of bone	Diagnosis	ICD-10-CM
L97.525	Non-pressure chronic ulcer of other part of left foot with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.522	Non-pressure chronic ulcer of other part of left foot with fat layer	Diagnosis	ICD-10-CM
L97.526	Non-pressure chronic ulcer of other part of left foot with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.521	Non-pressure chronic ulcer of other part of left foot limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.129	Non-pressure chronic ulcer of left thigh with unspecified severity	Diagnosis	ICD-10-CM
L97.128	Non-pressure chronic ulcer of left thigh with other specified severity	Diagnosis	ICD-10-CM
L97.123	Non-pressure chronic ulcer of left thigh with necrosis of muscle	Diagnosis	ICD-10-CM
L97.124	Non-pressure chronic ulcer of left thigh with necrosis of bone	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L97.125	Non-pressure chronic ulcer of left thigh with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.122	Non-pressure chronic ulcer of left thigh with fat layer exposed	Diagnosis	ICD-10-CM
L97.126	Non-pressure chronic ulcer of left thigh with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.121	Non-pressure chronic ulcer of left thigh limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.429	Non-pressure chronic ulcer of left heel and midfoot with unspecified severity	Diagnosis	ICD-10-CM
L97.428	Non-pressure chronic ulcer of left heel and midfoot with other specified severity	Diagnosis	ICD-10-CM
L97.423	Non-pressure chronic ulcer of left heel and midfoot with necrosis of	Diagnosis	ICD-10-CM
L97.424	Non-pressure chronic ulcer of left heel and midfoot with necrosis of bone	Diagnosis	ICD-10-CM
L97.425	Non-pressure chronic ulcer of left heel and midfoot with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.422	Non-pressure chronic ulcer of left heel and midfoot with fat layer exposed	Diagnosis	ICD-10-CM
L97.426	Non-pressure chronic ulcer of left heel and midfoot with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.421	Non-pressure chronic ulcer of left heel and midfoot limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.229	Non-pressure chronic ulcer of left calf with unspecified severity	Diagnosis	ICD-10-CM
L97.228	Non-pressure chronic ulcer of left calf with other specified severity	Diagnosis	ICD-10-CM
L97.223	Non-pressure chronic ulcer of left calf with necrosis of muscle	Diagnosis	ICD-10-CM
L97.224	Non-pressure chronic ulcer of left calf with necrosis of bone	Diagnosis	ICD-10-CM
L97.225	Non-pressure chronic ulcer of left calf with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.222	Non-pressure chronic ulcer of left calf with fat layer exposed	Diagnosis	ICD-10-CM
L97.226	Non-pressure chronic ulcer of left calf with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.221	Non-pressure chronic ulcer of left calf limited to breakdown of skin	Diagnosis	ICD-10-CM
L97.329	Non-pressure chronic ulcer of left ankle with unspecified severity	Diagnosis	ICD-10-CM
L97.328	Non-pressure chronic ulcer of left ankle with other specified severity	Diagnosis	ICD-10-CM
L97.323	Non-pressure chronic ulcer of left ankle with necrosis of muscle	Diagnosis	ICD-10-CM
L97.324	Non-pressure chronic ulcer of left ankle with necrosis of bone	Diagnosis	ICD-10-CM
L97.325	Non-pressure chronic ulcer of left ankle with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.322	Non-pressure chronic ulcer of left ankle with fat layer exposed	Diagnosis	ICD-10-CM
L97.326	Non-pressure chronic ulcer of left ankle with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L97.321	Non-pressure chronic ulcer of left ankle limited to breakdown of skin	Diagnosis	ICD-10-CM
L98.419	Non-pressure chronic ulcer of buttock with unspecified severity	Diagnosis	ICD-10-CM
L98.418	Non-pressure chronic ulcer of buttock with other specified severity	Diagnosis	ICD-10-CM
L98.413	Non-pressure chronic ulcer of buttock with necrosis of muscle	Diagnosis	ICD-10-CM
L98.414	Non-pressure chronic ulcer of buttock with necrosis of bone	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L98.415	Non-pressure chronic ulcer of buttock with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L98.412	Non-pressure chronic ulcer of buttock with fat layer exposed	Diagnosis	ICD-10-CM
L98.416	Non-pressure chronic ulcer of buttock with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L98.411	Non-pressure chronic ulcer of buttock limited to breakdown of skin	Diagnosis	ICD-10-CM
L98.429	Non-pressure chronic ulcer of back with unspecified severity	Diagnosis	ICD-10-CM
L98.428	Non-pressure chronic ulcer of back with other specified severity	Diagnosis	ICD-10-CM
L98.423	Non-pressure chronic ulcer of back with necrosis of muscle	Diagnosis	ICD-10-CM
L98.424	Non-pressure chronic ulcer of back with necrosis of bone	Diagnosis	ICD-10-CM
L98.425	Non-pressure chronic ulcer of back with muscle involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L98.422	Non-pressure chronic ulcer of back with fat layer exposed	Diagnosis	ICD-10-CM
L98.426	Non-pressure chronic ulcer of back with bone involvement without evidence of necrosis	Diagnosis	ICD-10-CM
L98.421	Non-pressure chronic ulcer of back limited to breakdown of skin	Diagnosis	ICD-10-CM
I70.339	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of unspecified site	Diagnosis	ICD-10-CM
I70.331	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of thigh	Diagnosis	ICD-10-CM
I70.338	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
I70.335	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
I70.334	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
I70.332	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of calf	Diagnosis	ICD-10-CM
I70.333	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of ankle	Diagnosis	ICD-10-CM
I70.349	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of unspecified site	Diagnosis	ICD-10-CM
I70.341	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of thigh	Diagnosis	ICD-10-CM
I70.348	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
I70.345	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
I70.344	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
I70.342	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of calf	Diagnosis	ICD-10-CM
I70.343	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of ankle	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I70.35	Atherosclerosis of unspecified type of bypass graft(s) of other extremity with ulceration	Diagnosis	ICD-10-CM
I70.739	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of unspecified site	Diagnosis	ICD-10-CM
I70.731	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of thigh	Diagnosis	ICD-10-CM
I70.738	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
I70.735	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
I70.734	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
I70.732	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of calf	Diagnosis	ICD-10-CM
I70.733	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of ankle	Diagnosis	ICD-10-CM
I70.749	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of unspecified site	Diagnosis	ICD-10-CM
I70.741	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of thigh	Diagnosis	ICD-10-CM
I70.748	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
I70.745	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
I70.744	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
I70.742	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of calf	Diagnosis	ICD-10-CM
I70.743	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of ankle	Diagnosis	ICD-10-CM
I70.75	Atherosclerosis of other type of bypass graft(s) of other extremity with ulceration	Diagnosis	ICD-10-CM
I70.639	Atherosclerosis of nonbiological bypass graft(s) of the right leg with ulceration of unspecified site	Diagnosis	ICD-10-CM
I70.631	Atherosclerosis of nonbiological bypass graft(s) of the right leg with ulceration of thigh	Diagnosis	ICD-10-CM
I70.638	Atherosclerosis of nonbiological bypass graft(s) of the right leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
I70.635	Atherosclerosis of nonbiological bypass graft(s) of the right leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
I70.634	Atherosclerosis of nonbiological bypass graft(s) of the right leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
I70.632	Atherosclerosis of nonbiological bypass graft(s) of the right leg with ulceration of calf	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
170.633	Atherosclerosis of nonbiological bypass graft(s) of the right leg with ulceration of ankle	Diagnosis	ICD-10-CM
170.649	Atherosclerosis of nonbiological bypass graft(s) of the left leg with ulceration of unspecified site	Diagnosis	ICD-10-CM
170.641	Atherosclerosis of nonbiological bypass graft(s) of the left leg with ulceration of thigh	Diagnosis	ICD-10-CM
170.648	Atherosclerosis of nonbiological bypass graft(s) of the left leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
170.645	Atherosclerosis of nonbiological bypass graft(s) of the left leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
170.644	Atherosclerosis of nonbiological bypass graft(s) of the left leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
170.642	Atherosclerosis of nonbiological bypass graft(s) of the left leg with ulceration of calf	Diagnosis	ICD-10-CM
170.643	Atherosclerosis of nonbiological bypass graft(s) of the left leg with ulceration of ankle	Diagnosis	ICD-10-CM
170.65	Atherosclerosis of nonbiological bypass graft(s) of other extremity with ulceration	Diagnosis	ICD-10-CM
170.539	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of unspecified site	Diagnosis	ICD-10-CM
170.531	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of thigh	Diagnosis	ICD-10-CM
170.538	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
170.535	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
170.534	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
170.532	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of calf	Diagnosis	ICD-10-CM
170.533	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of ankle	Diagnosis	ICD-10-CM
170.549	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of unspecified site	Diagnosis	ICD-10-CM
170.541	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of thigh	Diagnosis	ICD-10-CM
170.548	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
170.545	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
170.544	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
170.542	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of calf	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I70.543	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of ankle	Diagnosis	ICD-10-CM
I70.55	Atherosclerosis of nonautologous biological bypass graft(s) of other extremity with ulceration	Diagnosis	ICD-10-CM
I70.239	Atherosclerosis of native arteries of right leg with ulceration of unspecified site	Diagnosis	ICD-10-CM
I70.231	Atherosclerosis of native arteries of right leg with ulceration of thigh	Diagnosis	ICD-10-CM
I70.238	Atherosclerosis of native arteries of right leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
I70.235	Atherosclerosis of native arteries of right leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
I70.234	Atherosclerosis of native arteries of right leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
I70.232	Atherosclerosis of native arteries of right leg with ulceration of calf	Diagnosis	ICD-10-CM
I70.233	Atherosclerosis of native arteries of right leg with ulceration of ankle	Diagnosis	ICD-10-CM
I70.25	Atherosclerosis of native arteries of other extremities with ulceration	Diagnosis	ICD-10-CM
I70.249	Atherosclerosis of native arteries of left leg with ulceration of unspecified site	Diagnosis	ICD-10-CM
I70.241	Atherosclerosis of native arteries of left leg with ulceration of thigh	Diagnosis	ICD-10-CM
I70.248	Atherosclerosis of native arteries of left leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
I70.245	Atherosclerosis of native arteries of left leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
I70.244	Atherosclerosis of native arteries of left leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
I70.242	Atherosclerosis of native arteries of left leg with ulceration of calf	Diagnosis	ICD-10-CM
I70.243	Atherosclerosis of native arteries of left leg with ulceration of ankle	Diagnosis	ICD-10-CM
I70.439	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of unspecified site	Diagnosis	ICD-10-CM
I70.431	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of thigh	Diagnosis	ICD-10-CM
I70.438	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
I70.435	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
I70.434	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
I70.432	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of calf	Diagnosis	ICD-10-CM
I70.433	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of ankle	Diagnosis	ICD-10-CM
I70.449	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of unspecified site	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I70.441	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of thigh	Diagnosis	ICD-10-CM
I70.448	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of other part of lower leg	Diagnosis	ICD-10-CM
I70.445	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of other part of foot	Diagnosis	ICD-10-CM
I70.444	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of heel and midfoot	Diagnosis	ICD-10-CM
I70.442	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of calf	Diagnosis	ICD-10-CM
I70.443	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of ankle	Diagnosis	ICD-10-CM
I70.45	Atherosclerosis of autologous vein bypass graft(s) of other extremity with ulceration	Diagnosis	ICD-10-CM
PSA Test			
84152	Prostate specific antigen (PSA); complexed (direct measurement)	Procedure	CPT-4
84153	Prostate specific antigen (PSA); total	Procedure	CPT-4
84154	Prostate specific antigen (PSA); free	Procedure	CPT-4
86316	Immunoassay for tumor antigen, other antigen, quantitative (eg, CA 50, 72-4, 549), each	Procedure	CPT-4
G0103	Prostate cancer screening; prostate specific antigen test (PSA)	Procedure	HCPCS
Psychosis			
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
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
F30.10	Manic episode without psychotic symptoms, unspecified	Diagnosis	ICD-10-CM
F30.11	Manic episode without psychotic symptoms, mild	Diagnosis	ICD-10-CM
F30.12	Manic episode without psychotic symptoms, moderate	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F30.13	Manic episode, severe, without psychotic symptoms	Diagnosis	ICD-10-CM
F30.2	Manic episode, severe with psychotic symptoms	Diagnosis	ICD-10-CM
F30.3	Manic episode in partial remission	Diagnosis	ICD-10-CM
F30.4	Manic episode in full remission	Diagnosis	ICD-10-CM
F30.8	Other manic episodes	Diagnosis	ICD-10-CM
F30.9	Manic episode, unspecified	Diagnosis	ICD-10-CM
F31.0	Bipolar disorder, current episode hypomanic	Diagnosis	ICD-10-CM
F31.10	Bipolar disorder, current episode manic without psychotic features, unspecified	Diagnosis	ICD-10-CM
F31.11	Bipolar disorder, current episode manic without psychotic features, mild	Diagnosis	ICD-10-CM
F31.12	Bipolar disorder, current episode manic without psychotic features, moderate	Diagnosis	ICD-10-CM
F31.13	Bipolar disorder, current episode manic without psychotic features,	Diagnosis	ICD-10-CM
F31.2	Bipolar disorder, current episode manic severe with psychotic features	Diagnosis	ICD-10-CM
F31.30	Bipolar disorder, current episode depressed, mild or moderate severity, unspecified	Diagnosis	ICD-10-CM
F31.31	Bipolar disorder, current episode depressed, mild	Diagnosis	ICD-10-CM
F31.32	Bipolar disorder, current episode depressed, moderate	Diagnosis	ICD-10-CM
F31.4	Bipolar disorder, current episode depressed, severe, without psychotic features	Diagnosis	ICD-10-CM
F31.5	Bipolar disorder, current episode depressed, severe, with psychotic features	Diagnosis	ICD-10-CM
F31.60	Bipolar disorder, current episode mixed, unspecified	Diagnosis	ICD-10-CM
F31.61	Bipolar disorder, current episode mixed, mild	Diagnosis	ICD-10-CM
F31.62	Bipolar disorder, current episode mixed, moderate	Diagnosis	ICD-10-CM
F31.63	Bipolar disorder, current episode mixed, severe, without psychotic	Diagnosis	ICD-10-CM
F31.64	Bipolar disorder, current episode mixed, severe, with psychotic features	Diagnosis	ICD-10-CM
F31.70	Bipolar disorder, currently in remission, most recent episode unspecified	Diagnosis	ICD-10-CM
F31.71	Bipolar disorder, in partial remission, most recent episode hypomanic	Diagnosis	ICD-10-CM
F31.72	Bipolar disorder, in full remission, most recent episode hypomanic	Diagnosis	ICD-10-CM
F31.73	Bipolar disorder, in partial remission, most recent episode manic	Diagnosis	ICD-10-CM
F31.74	Bipolar disorder, in full remission, most recent episode manic	Diagnosis	ICD-10-CM
F31.75	Bipolar disorder, in partial remission, most recent episode depressed	Diagnosis	ICD-10-CM
F31.76	Bipolar disorder, in full remission, most recent episode depressed	Diagnosis	ICD-10-CM
F31.77	Bipolar disorder, in partial remission, most recent episode mixed	Diagnosis	ICD-10-CM
F31.78	Bipolar disorder, in full remission, most recent episode mixed	Diagnosis	ICD-10-CM
F31.81	Bipolar II disorder	Diagnosis	ICD-10-CM
F31.89	Other bipolar disorder	Diagnosis	ICD-10-CM
F31.9	Bipolar disorder, unspecified	Diagnosis	ICD-10-CM
F32.0	Major depressive disorder, single episode, mild	Diagnosis	ICD-10-CM
F32.1	Major depressive disorder, single episode, moderate	Diagnosis	ICD-10-CM
F32.2	Major depressive disorder, single episode, severe without psychotic features	Diagnosis	ICD-10-CM
F32.3	Major depressive disorder, single episode, severe with psychotic features	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F32.4	Major depressive disorder, single episode, in partial remission	Diagnosis	ICD-10-CM
F32.5	Major depressive disorder, single episode, in full remission	Diagnosis	ICD-10-CM
F32.89	Other specified depressive episodes	Diagnosis	ICD-10-CM
F32.9	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-10-CM
F33.0	Major depressive disorder, recurrent, mild	Diagnosis	ICD-10-CM
F33.1	Major depressive disorder, recurrent, moderate	Diagnosis	ICD-10-CM
F33.2	Major depressive disorder, recurrent severe without psychotic features	Diagnosis	ICD-10-CM
F33.3	Major depressive disorder, recurrent, severe with psychotic symptoms	Diagnosis	ICD-10-CM
F33.40	Major depressive disorder, recurrent, in remission, unspecified	Diagnosis	ICD-10-CM
F33.41	Major depressive disorder, recurrent, in partial remission	Diagnosis	ICD-10-CM
F33.42	Major depressive disorder, recurrent, in full remission	Diagnosis	ICD-10-CM
F33.8	Other recurrent depressive disorders	Diagnosis	ICD-10-CM
F33.9	Major depressive disorder, recurrent, unspecified	Diagnosis	ICD-10-CM
F34.81	Disruptive mood dysregulation disorder	Diagnosis	ICD-10-CM
F34.89	Other specified persistent mood disorders	Diagnosis	ICD-10-CM
F34.9	Persistent mood [affective] disorder, unspecified	Diagnosis	ICD-10-CM
F39	Unspecified mood [affective] disorder	Diagnosis	ICD-10-CM
F44.89	Other dissociative and conversion disorders	Diagnosis	ICD-10-CM
F84.3	Other childhood disintegrative disorder	Diagnosis	ICD-10-CM
Post Traumatic Stress Disorder			
F43.10	Post-traumatic stress disorder, unspecified	Diagnosis	ICD-10-CM
F43.12	Post-traumatic stress disorder, chronic	Diagnosis	ICD-10-CM
F43.11	Post-traumatic stress disorder, acute	Diagnosis	ICD-10-CM
Pulmonary Circulation Disorders			
I27.0	Primary pulmonary hypertension	Diagnosis	ICD-10-CM
I27.1	Kyphoscoliotic heart disease	Diagnosis	ICD-10-CM
I27.20	Pulmonary hypertension, unspecified	Diagnosis	ICD-10-CM
I27.21	Secondary pulmonary arterial hypertension	Diagnosis	ICD-10-CM
I27.22	Pulmonary hypertension due to left heart disease	Diagnosis	ICD-10-CM
I27.23	Pulmonary hypertension due to lung diseases and hypoxia	Diagnosis	ICD-10-CM
I27.24	Chronic thromboembolic pulmonary hypertension	Diagnosis	ICD-10-CM
I27.29	Other secondary pulmonary hypertension	Diagnosis	ICD-10-CM
I27.81	Cor pulmonale (chronic)	Diagnosis	ICD-10-CM
I27.82	Chronic pulmonary embolism	Diagnosis	ICD-10-CM
I27.89	Other specified pulmonary heart diseases	Diagnosis	ICD-10-CM
I27.9	Pulmonary heart disease, unspecified	Diagnosis	ICD-10-CM
I28.9	Disease of pulmonary vessels, unspecified	Diagnosis	ICD-10-CM
Pulmonary Disease			
I26.01	Septic pulmonary embolism with acute cor pulmonale	Diagnosis	ICD-10-CM
I26.02	Saddle embolus of pulmonary artery with acute cor pulmonale	Diagnosis	ICD-10-CM
I26.09	Other pulmonary embolism with acute cor pulmonale	Diagnosis	ICD-10-CM
I27.20	Pulmonary hypertension, unspecified	Diagnosis	ICD-10-CM
I27.21	Secondary pulmonary arterial hypertension	Diagnosis	ICD-10-CM
I27.22	Pulmonary hypertension due to left heart disease	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I27.23	Pulmonary hypertension due to lung diseases and hypoxia	Diagnosis	ICD-10-CM
I27.24	Chronic thromboembolic pulmonary hypertension	Diagnosis	ICD-10-CM
I27.29	Other secondary pulmonary hypertension	Diagnosis	ICD-10-CM
I27.81	Cor pulmonale (chronic)	Diagnosis	ICD-10-CM
I27.89	Other specified pulmonary heart diseases	Diagnosis	ICD-10-CM
I27.9	Pulmonary heart disease, unspecified	Diagnosis	ICD-10-CM
J41.0	Simple chronic bronchitis	Diagnosis	ICD-10-CM
J41.1	Mucopurulent chronic bronchitis	Diagnosis	ICD-10-CM
J41.8	Mixed simple and mucopurulent chronic bronchitis	Diagnosis	ICD-10-CM
J42	Unspecified chronic bronchitis	Diagnosis	ICD-10-CM
J43.0	Unilateral pulmonary emphysema [MacLeod's syndrome]	Diagnosis	ICD-10-CM
J43.1	Panlobular emphysema	Diagnosis	ICD-10-CM
J43.2	Centrilobular emphysema	Diagnosis	ICD-10-CM
J43.8	Other emphysema	Diagnosis	ICD-10-CM
J43.9	Emphysema, unspecified	Diagnosis	ICD-10-CM
J44.0	Chronic obstructive pulmonary disease with (acute) lower respiratory infection	Diagnosis	ICD-10-CM
J44.1	Chronic obstructive pulmonary disease with (acute) exacerbation	Diagnosis	ICD-10-CM
J44.9	Chronic obstructive pulmonary disease, unspecified	Diagnosis	ICD-10-CM
J45.20	Mild intermittent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.21	Mild intermittent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.22	Mild intermittent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.30	Mild persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.31	Mild persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.32	Mild persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.40	Moderate persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.41	Moderate persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.42	Moderate persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.50	Severe persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.51	Severe persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.52	Severe persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.901	Unspecified asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.902	Unspecified asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.909	Unspecified asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.990	Exercise induced bronchospasm	Diagnosis	ICD-10-CM
J45.991	Cough variant asthma	Diagnosis	ICD-10-CM
J45.998	Other asthma	Diagnosis	ICD-10-CM
J47.0	Bronchiectasis with acute lower respiratory infection	Diagnosis	ICD-10-CM
J47.1	Bronchiectasis with (acute) exacerbation	Diagnosis	ICD-10-CM
J47.9	Bronchiectasis, uncomplicated	Diagnosis	ICD-10-CM
Renal Failure			
I12.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
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
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
Z48.22	Encounter for aftercare following kidney transplant	Diagnosis	ICD-10-CM
Z49.31	Encounter for adequacy testing for hemodialysis	Diagnosis	ICD-10-CM
Z49.32	Encounter for adequacy testing for peritoneal dialysis	Diagnosis	ICD-10-CM
Z91.15	Patient's noncompliance with renal dialysis	Diagnosis	ICD-10-CM
Z94.0	Kidney transplant status	Diagnosis	ICD-10-CM
Z99.2	Dependence on renal dialysis	Diagnosis	ICD-10-CM
Reye's Syndrome			
G93.7	Reye's syndrome	Diagnosis	ICD-10-CM
Rheumatoid Arthritis			
M47.029	Vertebral artery compression syndromes, site unspecified	Diagnosis	ICD-10-CM
M47.021	Vertebral artery compression syndromes, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.022	Vertebral artery compression syndromes, cervical region	Diagnosis	ICD-10-CM
M19.90	Unspecified osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M08.08	Unspecified juvenile rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M08.039	Unspecified juvenile rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M08.019	Unspecified juvenile rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M08.069	Unspecified juvenile rheumatoid arthritis, unspecified knee	Diagnosis	ICD-10-CM
M08.059	Unspecified juvenile rheumatoid arthritis, unspecified hip	Diagnosis	ICD-10-CM
M08.049	Unspecified juvenile rheumatoid arthritis, unspecified hand	Diagnosis	ICD-10-CM
M08.029	Unspecified juvenile rheumatoid arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M08.079	Unspecified juvenile rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.031	Unspecified juvenile rheumatoid arthritis, right wrist	Diagnosis	ICD-10-CM
M08.011	Unspecified juvenile rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M08.061	Unspecified juvenile rheumatoid arthritis, right knee	Diagnosis	ICD-10-CM
M08.051	Unspecified juvenile rheumatoid arthritis, right hip	Diagnosis	ICD-10-CM
M08.041	Unspecified juvenile rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM
M08.021	Unspecified juvenile rheumatoid arthritis, right elbow	Diagnosis	ICD-10-CM
M08.071	Unspecified juvenile rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M08.0A	Unspecified juvenile rheumatoid arthritis, other specified site	Diagnosis	ICD-10-CM
M08.09	Unspecified juvenile rheumatoid arthritis, multiple sites	Diagnosis	ICD-10-CM
M08.032	Unspecified juvenile rheumatoid arthritis, left wrist	Diagnosis	ICD-10-CM
M08.012	Unspecified juvenile rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M08.062	Unspecified juvenile rheumatoid arthritis, left knee	Diagnosis	ICD-10-CM
M08.052	Unspecified juvenile rheumatoid arthritis, left hip	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M08.042	Unspecified juvenile rheumatoid arthritis, left hand	Diagnosis	ICD-10-CM
M08.022	Unspecified juvenile rheumatoid arthritis, left elbow	Diagnosis	ICD-10-CM
M08.072	Unspecified juvenile rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M08.00	Unspecified juvenile rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M46.95	Unspecified inflammatory spondylopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M46.94	Unspecified inflammatory spondylopathy, thoracic region	Diagnosis	ICD-10-CM
M46.90	Unspecified inflammatory spondylopathy, site unspecified	Diagnosis	ICD-10-CM
M46.98	Unspecified inflammatory spondylopathy, sacral and sacrococcygeal	Diagnosis	ICD-10-CM
M46.91	Unspecified inflammatory spondylopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M46.99	Unspecified inflammatory spondylopathy, multiple sites in spine	Diagnosis	ICD-10-CM
M46.97	Unspecified inflammatory spondylopathy, lumbosacral region	Diagnosis	ICD-10-CM
M46.96	Unspecified inflammatory spondylopathy, lumbar region	Diagnosis	ICD-10-CM
M46.93	Unspecified inflammatory spondylopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M46.92	Unspecified inflammatory spondylopathy, cervical region	Diagnosis	ICD-10-CM
M17.10	Unilateral primary osteoarthritis, unspecified knee	Diagnosis	ICD-10-CM
M16.10	Unilateral primary osteoarthritis, unspecified hip	Diagnosis	ICD-10-CM
M17.11	Unilateral primary osteoarthritis, right knee	Diagnosis	ICD-10-CM
M16.11	Unilateral primary osteoarthritis, right hip	Diagnosis	ICD-10-CM
M17.12	Unilateral primary osteoarthritis, left knee	Diagnosis	ICD-10-CM
M16.12	Unilateral primary osteoarthritis, left hip	Diagnosis	ICD-10-CM
M18.10	Unilateral primary osteoarthritis of first carpometacarpal joint, unspecified hand	Diagnosis	ICD-10-CM
M18.11	Unilateral primary osteoarthritis of first carpometacarpal joint, right hand	Diagnosis	ICD-10-CM
M18.12	Unilateral primary osteoarthritis of first carpometacarpal joint, left hand	Diagnosis	ICD-10-CM
M17.30	Unilateral post-traumatic osteoarthritis, unspecified knee	Diagnosis	ICD-10-CM
M16.50	Unilateral post-traumatic osteoarthritis, unspecified hip	Diagnosis	ICD-10-CM
M17.31	Unilateral post-traumatic osteoarthritis, right knee	Diagnosis	ICD-10-CM
M16.51	Unilateral post-traumatic osteoarthritis, right hip	Diagnosis	ICD-10-CM
M17.32	Unilateral post-traumatic osteoarthritis, left knee	Diagnosis	ICD-10-CM
M16.52	Unilateral post-traumatic osteoarthritis, left hip	Diagnosis	ICD-10-CM
M18.30	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, unspecified hand	Diagnosis	ICD-10-CM
M18.31	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, right hand	Diagnosis	ICD-10-CM
M18.32	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, left hand	Diagnosis	ICD-10-CM
M16.30	Unilateral osteoarthritis resulting from hip dysplasia, unspecified hip	Diagnosis	ICD-10-CM
M16.31	Unilateral osteoarthritis resulting from hip dysplasia, right hip	Diagnosis	ICD-10-CM
M16.32	Unilateral osteoarthritis resulting from hip dysplasia, left hip	Diagnosis	ICD-10-CM
M47.9	Spondylosis, unspecified	Diagnosis	ICD-10-CM
M47.815	Spondylosis without myelopathy or radiculopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M47.814	Spondylosis without myelopathy or radiculopathy, thoracic region	Diagnosis	ICD-10-CM
M47.819	Spondylosis without myelopathy or radiculopathy, site unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M47.818	Spondylosis without myelopathy or radiculopathy, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M47.811	Spondylosis without myelopathy or radiculopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.817	Spondylosis without myelopathy or radiculopathy, lumbosacral region	Diagnosis	ICD-10-CM
M47.816	Spondylosis without myelopathy or radiculopathy, lumbar region	Diagnosis	ICD-10-CM
M47.813	Spondylosis without myelopathy or radiculopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M47.812	Spondylosis without myelopathy or radiculopathy, cervical region	Diagnosis	ICD-10-CM
M19.239	Secondary osteoarthritis, unspecified wrist	Diagnosis	ICD-10-CM
M19.93	Secondary osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M19.219	Secondary osteoarthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M19.249	Secondary osteoarthritis, unspecified hand	Diagnosis	ICD-10-CM
M19.229	Secondary osteoarthritis, unspecified elbow	Diagnosis	ICD-10-CM
M19.279	Secondary osteoarthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M19.231	Secondary osteoarthritis, right wrist	Diagnosis	ICD-10-CM
M19.211	Secondary osteoarthritis, right shoulder	Diagnosis	ICD-10-CM
M19.241	Secondary osteoarthritis, right hand	Diagnosis	ICD-10-CM
M19.221	Secondary osteoarthritis, right elbow	Diagnosis	ICD-10-CM
M19.271	Secondary osteoarthritis, right ankle and foot	Diagnosis	ICD-10-CM
M19.29	Secondary osteoarthritis, other specified site	Diagnosis	ICD-10-CM
M19.232	Secondary osteoarthritis, left wrist	Diagnosis	ICD-10-CM
M19.212	Secondary osteoarthritis, left shoulder	Diagnosis	ICD-10-CM
M19.242	Secondary osteoarthritis, left hand	Diagnosis	ICD-10-CM
M19.222	Secondary osteoarthritis, left elbow	Diagnosis	ICD-10-CM
M19.272	Secondary osteoarthritis, left ankle and foot	Diagnosis	ICD-10-CM
M15.3	Secondary multiple arthritis	Diagnosis	ICD-10-CM
M05.239	Rheumatoid vasculitis with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.20	Rheumatoid vasculitis with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.219	Rheumatoid vasculitis with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.269	Rheumatoid vasculitis with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.259	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.249	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.229	Rheumatoid vasculitis with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.279	Rheumatoid vasculitis with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.231	Rheumatoid vasculitis with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.211	Rheumatoid vasculitis with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.261	Rheumatoid vasculitis with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.251	Rheumatoid vasculitis with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.241	Rheumatoid vasculitis with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.221	Rheumatoid vasculitis with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.271	Rheumatoid vasculitis with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.29	Rheumatoid vasculitis with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.232	Rheumatoid vasculitis with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M05.212	Rheumatoid vasculitis with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.262	Rheumatoid vasculitis with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.252	Rheumatoid vasculitis with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.242	Rheumatoid vasculitis with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.222	Rheumatoid vasculitis with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.272	Rheumatoid vasculitis with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.539	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified	Diagnosis	ICD-10-CM
M05.50	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.519	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.569	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified	Diagnosis	ICD-10-CM
M05.559	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.549	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified	Diagnosis	ICD-10-CM
M05.529	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.579	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.531	Rheumatoid polyneuropathy with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.511	Rheumatoid polyneuropathy with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.561	Rheumatoid polyneuropathy with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.551	Rheumatoid polyneuropathy with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.541	Rheumatoid polyneuropathy with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.521	Rheumatoid polyneuropathy with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.571	Rheumatoid polyneuropathy with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.59	Rheumatoid polyneuropathy with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.532	Rheumatoid polyneuropathy with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.512	Rheumatoid polyneuropathy with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.562	Rheumatoid polyneuropathy with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.552	Rheumatoid polyneuropathy with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.542	Rheumatoid polyneuropathy with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.522	Rheumatoid polyneuropathy with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.572	Rheumatoid polyneuropathy with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M06.38	Rheumatoid nodule, vertebrae	Diagnosis	ICD-10-CM
M06.339	Rheumatoid nodule, unspecified wrist	Diagnosis	ICD-10-CM
M06.30	Rheumatoid nodule, unspecified site	Diagnosis	ICD-10-CM
M06.319	Rheumatoid nodule, unspecified shoulder	Diagnosis	ICD-10-CM
M06.369	Rheumatoid nodule, unspecified knee	Diagnosis	ICD-10-CM
M06.359	Rheumatoid nodule, unspecified hip	Diagnosis	ICD-10-CM
M06.349	Rheumatoid nodule, unspecified hand	Diagnosis	ICD-10-CM
M06.329	Rheumatoid nodule, unspecified elbow	Diagnosis	ICD-10-CM
M06.379	Rheumatoid nodule, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.331	Rheumatoid nodule, right wrist	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M06.311	Rheumatoid nodule, right shoulder	Diagnosis	ICD-10-CM
M06.361	Rheumatoid nodule, right knee	Diagnosis	ICD-10-CM
M06.351	Rheumatoid nodule, right hip	Diagnosis	ICD-10-CM
M06.341	Rheumatoid nodule, right hand	Diagnosis	ICD-10-CM
M06.321	Rheumatoid nodule, right elbow	Diagnosis	ICD-10-CM
M06.371	Rheumatoid nodule, right ankle and foot	Diagnosis	ICD-10-CM
M06.39	Rheumatoid nodule, multiple sites	Diagnosis	ICD-10-CM
M06.332	Rheumatoid nodule, left wrist	Diagnosis	ICD-10-CM
M06.312	Rheumatoid nodule, left shoulder	Diagnosis	ICD-10-CM
M06.362	Rheumatoid nodule, left knee	Diagnosis	ICD-10-CM
M06.352	Rheumatoid nodule, left hip	Diagnosis	ICD-10-CM
M06.342	Rheumatoid nodule, left hand	Diagnosis	ICD-10-CM
M06.322	Rheumatoid nodule, left elbow	Diagnosis	ICD-10-CM
M06.372	Rheumatoid nodule, left ankle and foot	Diagnosis	ICD-10-CM
M05.439	Rheumatoid myopathy with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.40	Rheumatoid myopathy with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.419	Rheumatoid myopathy with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.469	Rheumatoid myopathy with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.459	Rheumatoid myopathy with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.449	Rheumatoid myopathy with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.429	Rheumatoid myopathy with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.479	Rheumatoid myopathy with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.431	Rheumatoid myopathy with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.411	Rheumatoid myopathy with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.461	Rheumatoid myopathy with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.451	Rheumatoid myopathy with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.441	Rheumatoid myopathy with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.421	Rheumatoid myopathy with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.471	Rheumatoid myopathy with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.49	Rheumatoid myopathy with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.432	Rheumatoid myopathy with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.412	Rheumatoid myopathy with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.462	Rheumatoid myopathy with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.452	Rheumatoid myopathy with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.442	Rheumatoid myopathy with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.422	Rheumatoid myopathy with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.472	Rheumatoid myopathy with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.139	Rheumatoid lung disease with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.10	Rheumatoid lung disease with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.119	Rheumatoid lung disease with rheumatoid arthritis of unspecified	Diagnosis	ICD-10-CM
M05.169	Rheumatoid lung disease with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.159	Rheumatoid lung disease with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.149	Rheumatoid lung disease with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M05.129	Rheumatoid lung disease with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.179	Rheumatoid lung disease with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.131	Rheumatoid lung disease with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.111	Rheumatoid lung disease with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.161	Rheumatoid lung disease with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.151	Rheumatoid lung disease with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.141	Rheumatoid lung disease with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.121	Rheumatoid lung disease with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.171	Rheumatoid lung disease with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.19	Rheumatoid lung disease with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.132	Rheumatoid lung disease with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.112	Rheumatoid lung disease with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.162	Rheumatoid lung disease with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.152	Rheumatoid lung disease with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.142	Rheumatoid lung disease with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.122	Rheumatoid lung disease with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.172	Rheumatoid lung disease with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.339	Rheumatoid heart disease with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.30	Rheumatoid heart disease with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.319	Rheumatoid heart disease with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.369	Rheumatoid heart disease with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.359	Rheumatoid heart disease with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.349	Rheumatoid heart disease with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.329	Rheumatoid heart disease with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.379	Rheumatoid heart disease with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.331	Rheumatoid heart disease with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.311	Rheumatoid heart disease with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.361	Rheumatoid heart disease with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.351	Rheumatoid heart disease with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.341	Rheumatoid heart disease with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.321	Rheumatoid heart disease with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.371	Rheumatoid heart disease with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.39	Rheumatoid heart disease with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.332	Rheumatoid heart disease with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.312	Rheumatoid heart disease with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.362	Rheumatoid heart disease with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.352	Rheumatoid heart disease with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.342	Rheumatoid heart disease with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.322	Rheumatoid heart disease with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.372	Rheumatoid heart disease with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M06.28	Rheumatoid bursitis, vertebrae	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M06.239	Rheumatoid bursitis, unspecified wrist	Diagnosis	ICD-10-CM
M06.20	Rheumatoid bursitis, unspecified site	Diagnosis	ICD-10-CM
M06.219	Rheumatoid bursitis, unspecified shoulder	Diagnosis	ICD-10-CM
M06.269	Rheumatoid bursitis, unspecified knee	Diagnosis	ICD-10-CM
M06.259	Rheumatoid bursitis, unspecified hip	Diagnosis	ICD-10-CM
M06.249	Rheumatoid bursitis, unspecified hand	Diagnosis	ICD-10-CM
M06.229	Rheumatoid bursitis, unspecified elbow	Diagnosis	ICD-10-CM
M06.279	Rheumatoid bursitis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.231	Rheumatoid bursitis, right wrist	Diagnosis	ICD-10-CM
M06.211	Rheumatoid bursitis, right shoulder	Diagnosis	ICD-10-CM
M06.261	Rheumatoid bursitis, right knee	Diagnosis	ICD-10-CM
M06.251	Rheumatoid bursitis, right hip	Diagnosis	ICD-10-CM
M06.241	Rheumatoid bursitis, right hand	Diagnosis	ICD-10-CM
M06.221	Rheumatoid bursitis, right elbow	Diagnosis	ICD-10-CM
M06.271	Rheumatoid bursitis, right ankle and foot	Diagnosis	ICD-10-CM
M06.29	Rheumatoid bursitis, multiple sites	Diagnosis	ICD-10-CM
M06.232	Rheumatoid bursitis, left wrist	Diagnosis	ICD-10-CM
M06.212	Rheumatoid bursitis, left shoulder	Diagnosis	ICD-10-CM
M06.262	Rheumatoid bursitis, left knee	Diagnosis	ICD-10-CM
M06.252	Rheumatoid bursitis, left hip	Diagnosis	ICD-10-CM
M06.242	Rheumatoid bursitis, left hand	Diagnosis	ICD-10-CM
M06.222	Rheumatoid bursitis, left elbow	Diagnosis	ICD-10-CM
M06.272	Rheumatoid bursitis, left ankle and foot	Diagnosis	ICD-10-CM
M06.9	Rheumatoid arthritis, unspecified	Diagnosis	ICD-10-CM
M06.08	Rheumatoid arthritis without rheumatoid factor, vertebrae	Diagnosis	ICD-10-CM
M06.039	Rheumatoid arthritis without rheumatoid factor, unspecified wrist	Diagnosis	ICD-10-CM
M06.00	Rheumatoid arthritis without rheumatoid factor, unspecified site	Diagnosis	ICD-10-CM
M06.019	Rheumatoid arthritis without rheumatoid factor, unspecified shoulder	Diagnosis	ICD-10-CM
M06.069	Rheumatoid arthritis without rheumatoid factor, unspecified knee	Diagnosis	ICD-10-CM
M06.059	Rheumatoid arthritis without rheumatoid factor, unspecified hip	Diagnosis	ICD-10-CM
M06.049	Rheumatoid arthritis without rheumatoid factor, unspecified hand	Diagnosis	ICD-10-CM
M06.029	Rheumatoid arthritis without rheumatoid factor, unspecified elbow	Diagnosis	ICD-10-CM
M06.079	Rheumatoid arthritis without rheumatoid factor, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.031	Rheumatoid arthritis without rheumatoid factor, right wrist	Diagnosis	ICD-10-CM
M06.011	Rheumatoid arthritis without rheumatoid factor, right shoulder	Diagnosis	ICD-10-CM
M06.061	Rheumatoid arthritis without rheumatoid factor, right knee	Diagnosis	ICD-10-CM
M06.051	Rheumatoid arthritis without rheumatoid factor, right hip	Diagnosis	ICD-10-CM
M06.041	Rheumatoid arthritis without rheumatoid factor, right hand	Diagnosis	ICD-10-CM
M06.021	Rheumatoid arthritis without rheumatoid factor, right elbow	Diagnosis	ICD-10-CM
M06.071	Rheumatoid arthritis without rheumatoid factor, right ankle and foot	Diagnosis	ICD-10-CM
M06.0A	Rheumatoid arthritis without rheumatoid factor, other specified site	Diagnosis	ICD-10-CM
M06.09	Rheumatoid arthritis without rheumatoid factor, multiple sites	Diagnosis	ICD-10-CM
M06.032	Rheumatoid arthritis without rheumatoid factor, left wrist	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M06.012	Rheumatoid arthritis without rheumatoid factor, left shoulder	Diagnosis	ICD-10-CM
M06.062	Rheumatoid arthritis without rheumatoid factor, left knee	Diagnosis	ICD-10-CM
M06.052	Rheumatoid arthritis without rheumatoid factor, left hip	Diagnosis	ICD-10-CM
M06.042	Rheumatoid arthritis without rheumatoid factor, left hand	Diagnosis	ICD-10-CM
M06.022	Rheumatoid arthritis without rheumatoid factor, left elbow	Diagnosis	ICD-10-CM
M06.072	Rheumatoid arthritis without rheumatoid factor, left ankle and foot	Diagnosis	ICD-10-CM
M05.9	Rheumatoid arthritis with rheumatoid factor, unspecified	Diagnosis	ICD-10-CM
M05.739	Rheumatoid arthritis with rheumatoid factor of unspecified wrist without organ or systems involvement	Diagnosis	ICD-10-CM
M05.70	Rheumatoid arthritis with rheumatoid factor of unspecified site without organ or systems involvement	Diagnosis	ICD-10-CM
M05.719	Rheumatoid arthritis with rheumatoid factor of unspecified shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05.769	Rheumatoid arthritis with rheumatoid factor of unspecified knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05.759	Rheumatoid arthritis with rheumatoid factor of unspecified hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.749	Rheumatoid arthritis with rheumatoid factor of unspecified hand without organ or systems involvement	Diagnosis	ICD-10-CM
M05.729	Rheumatoid arthritis with rheumatoid factor of unspecified elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M05.779	Rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05.731	Rheumatoid arthritis with rheumatoid factor of right wrist without organ or systems involvement	Diagnosis	ICD-10-CM
M05.711	Rheumatoid arthritis with rheumatoid factor of right shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05.761	Rheumatoid arthritis with rheumatoid factor of right knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05.751	Rheumatoid arthritis with rheumatoid factor of right hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.741	Rheumatoid arthritis with rheumatoid factor of right hand without organ or systems involvement	Diagnosis	ICD-10-CM
M05.721	Rheumatoid arthritis with rheumatoid factor of right elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M05.771	Rheumatoid arthritis with rheumatoid factor of right ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05.7A	Rheumatoid arthritis with rheumatoid factor of other specified site without organ or systems involvement	Diagnosis	ICD-10-CM
M05.79	Rheumatoid arthritis with rheumatoid factor of multiple sites without organ or systems involvement	Diagnosis	ICD-10-CM
M05.732	Rheumatoid arthritis with rheumatoid factor of left wrist without organ or systems involvement	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M05.712	Rheumatoid arthritis with rheumatoid factor of left shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05.762	Rheumatoid arthritis with rheumatoid factor of left knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05.752	Rheumatoid arthritis with rheumatoid factor of left hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.742	Rheumatoid arthritis with rheumatoid factor of left hand without organ or systems involvement	Diagnosis	ICD-10-CM
M05.722	Rheumatoid arthritis with rheumatoid factor of left elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M05.772	Rheumatoid arthritis with rheumatoid factor of left ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05.639	Rheumatoid arthritis of unspecified wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.60	Rheumatoid arthritis of unspecified site with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.619	Rheumatoid arthritis of unspecified shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.669	Rheumatoid arthritis of unspecified knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.659	Rheumatoid arthritis of unspecified hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.649	Rheumatoid arthritis of unspecified hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.629	Rheumatoid arthritis of unspecified elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.679	Rheumatoid arthritis of unspecified ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.631	Rheumatoid arthritis of right wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.611	Rheumatoid arthritis of right shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.661	Rheumatoid arthritis of right knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.651	Rheumatoid arthritis of right hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.641	Rheumatoid arthritis of right hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.621	Rheumatoid arthritis of right elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.671	Rheumatoid arthritis of right ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.69	Rheumatoid arthritis of multiple sites with involvement of other organs and systems	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M05.632	Rheumatoid arthritis of left wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.612	Rheumatoid arthritis of left shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.662	Rheumatoid arthritis of left knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.652	Rheumatoid arthritis of left hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.642	Rheumatoid arthritis of left hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.622	Rheumatoid arthritis of left elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.672	Rheumatoid arthritis of left ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
L40.54	Psoriatic juvenile arthropathy	Diagnosis	ICD-10-CM
M19.039	Primary osteoarthritis, unspecified wrist	Diagnosis	ICD-10-CM
M19.91	Primary osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M19.019	Primary osteoarthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M19.049	Primary osteoarthritis, unspecified hand	Diagnosis	ICD-10-CM
M19.029	Primary osteoarthritis, unspecified elbow	Diagnosis	ICD-10-CM
M19.079	Primary osteoarthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M19.031	Primary osteoarthritis, right wrist	Diagnosis	ICD-10-CM
M19.011	Primary osteoarthritis, right shoulder	Diagnosis	ICD-10-CM
M19.041	Primary osteoarthritis, right hand	Diagnosis	ICD-10-CM
M19.021	Primary osteoarthritis, right elbow	Diagnosis	ICD-10-CM
M19.071	Primary osteoarthritis, right ankle and foot	Diagnosis	ICD-10-CM
M19.09	Primary osteoarthritis, other specified site	Diagnosis	ICD-10-CM
M19.032	Primary osteoarthritis, left wrist	Diagnosis	ICD-10-CM
M19.012	Primary osteoarthritis, left shoulder	Diagnosis	ICD-10-CM
M19.042	Primary osteoarthritis, left hand	Diagnosis	ICD-10-CM
M19.022	Primary osteoarthritis, left elbow	Diagnosis	ICD-10-CM
M19.072	Primary osteoarthritis, left ankle and foot	Diagnosis	ICD-10-CM
M15.0	Primary generalized (osteo)arthritis	Diagnosis	ICD-10-CM
M19.139	Post-traumatic osteoarthritis, unspecified wrist	Diagnosis	ICD-10-CM
M19.92	Post-traumatic osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M19.119	Post-traumatic osteoarthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M19.149	Post-traumatic osteoarthritis, unspecified hand	Diagnosis	ICD-10-CM
M19.129	Post-traumatic osteoarthritis, unspecified elbow	Diagnosis	ICD-10-CM
M19.179	Post-traumatic osteoarthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M19.131	Post-traumatic osteoarthritis, right wrist	Diagnosis	ICD-10-CM
M19.111	Post-traumatic osteoarthritis, right shoulder	Diagnosis	ICD-10-CM
M19.141	Post-traumatic osteoarthritis, right hand	Diagnosis	ICD-10-CM
M19.121	Post-traumatic osteoarthritis, right elbow	Diagnosis	ICD-10-CM
M19.171	Post-traumatic osteoarthritis, right ankle and foot	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M19.132	Post-traumatic osteoarthritis, left wrist	Diagnosis	ICD-10-CM
M19.112	Post-traumatic osteoarthritis, left shoulder	Diagnosis	ICD-10-CM
M19.142	Post-traumatic osteoarthritis, left hand	Diagnosis	ICD-10-CM
M19.122	Post-traumatic osteoarthritis, left elbow	Diagnosis	ICD-10-CM
M19.172	Post-traumatic osteoarthritis, left ankle and foot	Diagnosis	ICD-10-CM
M15.9	Polyosteoarthritis, unspecified	Diagnosis	ICD-10-CM
M08.48	Pauciarticular juvenile rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M08.439	Pauciarticular juvenile rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M08.40	Pauciarticular juvenile rheumatoid arthritis, unspecified site	Diagnosis	ICD-10-CM
M08.419	Pauciarticular juvenile rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M08.469	Pauciarticular juvenile rheumatoid arthritis, unspecified knee	Diagnosis	ICD-10-CM
M08.459	Pauciarticular juvenile rheumatoid arthritis, unspecified hip	Diagnosis	ICD-10-CM
M08.449	Pauciarticular juvenile rheumatoid arthritis, unspecified hand	Diagnosis	ICD-10-CM
M08.429	Pauciarticular juvenile rheumatoid arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M08.479	Pauciarticular juvenile rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.431	Pauciarticular juvenile rheumatoid arthritis, right wrist	Diagnosis	ICD-10-CM
M08.411	Pauciarticular juvenile rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M08.461	Pauciarticular juvenile rheumatoid arthritis, right knee	Diagnosis	ICD-10-CM
M08.451	Pauciarticular juvenile rheumatoid arthritis, right hip	Diagnosis	ICD-10-CM
M08.441	Pauciarticular juvenile rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM
M08.421	Pauciarticular juvenile rheumatoid arthritis, right elbow	Diagnosis	ICD-10-CM
M08.471	Pauciarticular juvenile rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M08.4A	Pauciarticular juvenile rheumatoid arthritis, other specified site	Diagnosis	ICD-10-CM
M08.432	Pauciarticular juvenile rheumatoid arthritis, left wrist	Diagnosis	ICD-10-CM
M08.412	Pauciarticular juvenile rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M08.462	Pauciarticular juvenile rheumatoid arthritis, left knee	Diagnosis	ICD-10-CM
M08.452	Pauciarticular juvenile rheumatoid arthritis, left hip	Diagnosis	ICD-10-CM
M08.442	Pauciarticular juvenile rheumatoid arthritis, left hand	Diagnosis	ICD-10-CM
M08.422	Pauciarticular juvenile rheumatoid arthritis, left elbow	Diagnosis	ICD-10-CM
M08.472	Pauciarticular juvenile rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M17.5	Other unilateral secondary osteoarthritis of knee	Diagnosis	ICD-10-CM
M16.7	Other unilateral secondary osteoarthritis of hip	Diagnosis	ICD-10-CM
M18.50	Other unilateral secondary osteoarthritis of first carpometacarpal joint, unspecified hand	Diagnosis	ICD-10-CM
M18.51	Other unilateral secondary osteoarthritis of first carpometacarpal joint, right hand	Diagnosis	ICD-10-CM
M18.52	Other unilateral secondary osteoarthritis of first carpometacarpal joint, left hand	Diagnosis	ICD-10-CM
M47.895	Other spondylosis, thoracolumbar region	Diagnosis	ICD-10-CM
M47.894	Other spondylosis, thoracic region	Diagnosis	ICD-10-CM
M47.899	Other spondylosis, site unspecified	Diagnosis	ICD-10-CM
M47.898	Other spondylosis, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M47.891	Other spondylosis, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.897	Other spondylosis, lumbosacral region	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M47.896	Other spondylosis, lumbar region	Diagnosis	ICD-10-CM
M47.893	Other spondylosis, cervicothoracic region	Diagnosis	ICD-10-CM
M47.892	Other spondylosis, cervical region	Diagnosis	ICD-10-CM
M47.25	Other spondylosis with radiculopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M47.24	Other spondylosis with radiculopathy, thoracic region	Diagnosis	ICD-10-CM
M47.20	Other spondylosis with radiculopathy, site unspecified	Diagnosis	ICD-10-CM
M47.28	Other spondylosis with radiculopathy, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M47.21	Other spondylosis with radiculopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.27	Other spondylosis with radiculopathy, lumbosacral region	Diagnosis	ICD-10-CM
M47.26	Other spondylosis with radiculopathy, lumbar region	Diagnosis	ICD-10-CM
M47.23	Other spondylosis with radiculopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M47.22	Other spondylosis with radiculopathy, cervical region	Diagnosis	ICD-10-CM
M47.15	Other spondylosis with myelopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M47.14	Other spondylosis with myelopathy, thoracic region	Diagnosis	ICD-10-CM
M47.10	Other spondylosis with myelopathy, site unspecified	Diagnosis	ICD-10-CM
M47.11	Other spondylosis with myelopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.16	Other spondylosis with myelopathy, lumbar region	Diagnosis	ICD-10-CM
M47.13	Other spondylosis with myelopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M47.12	Other spondylosis with myelopathy, cervical region	Diagnosis	ICD-10-CM
M48.8X5	Other specified spondylopathies, thoracolumbar region	Diagnosis	ICD-10-CM
M48.8X4	Other specified spondylopathies, thoracic region	Diagnosis	ICD-10-CM
M48.8X9	Other specified spondylopathies, site unspecified	Diagnosis	ICD-10-CM
M48.8X8	Other specified spondylopathies, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M48.8X1	Other specified spondylopathies, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M48.8X7	Other specified spondylopathies, lumbosacral region	Diagnosis	ICD-10-CM
M48.8X6	Other specified spondylopathies, lumbar region	Diagnosis	ICD-10-CM
M48.8X3	Other specified spondylopathies, cervicothoracic region	Diagnosis	ICD-10-CM
M48.8X2	Other specified spondylopathies, cervical region	Diagnosis	ICD-10-CM
M06.88	Other specified rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M06.839	Other specified rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M06.80	Other specified rheumatoid arthritis, unspecified site	Diagnosis	ICD-10-CM
M06.819	Other specified rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M06.869	Other specified rheumatoid arthritis, unspecified knee	Diagnosis	ICD-10-CM
M06.859	Other specified rheumatoid arthritis, unspecified hip	Diagnosis	ICD-10-CM
M06.849	Other specified rheumatoid arthritis, unspecified hand	Diagnosis	ICD-10-CM
M06.829	Other specified rheumatoid arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M06.879	Other specified rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.831	Other specified rheumatoid arthritis, right wrist	Diagnosis	ICD-10-CM
M06.811	Other specified rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M06.861	Other specified rheumatoid arthritis, right knee	Diagnosis	ICD-10-CM
M06.851	Other specified rheumatoid arthritis, right hip	Diagnosis	ICD-10-CM
M06.841	Other specified rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM
M06.821	Other specified rheumatoid arthritis, right elbow	Diagnosis	ICD-10-CM
M06.871	Other specified rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M06.8A	Other specified rheumatoid arthritis, other specified site	Diagnosis	ICD-10-CM
M06.89	Other specified rheumatoid arthritis, multiple sites	Diagnosis	ICD-10-CM
M06.832	Other specified rheumatoid arthritis, left wrist	Diagnosis	ICD-10-CM
M06.812	Other specified rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M06.862	Other specified rheumatoid arthritis, left knee	Diagnosis	ICD-10-CM
M06.852	Other specified rheumatoid arthritis, left hip	Diagnosis	ICD-10-CM
M06.842	Other specified rheumatoid arthritis, left hand	Diagnosis	ICD-10-CM
M06.822	Other specified rheumatoid arthritis, left elbow	Diagnosis	ICD-10-CM
M06.872	Other specified rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M46.85	Other specified inflammatory spondylopathies, thoracolumbar region	Diagnosis	ICD-10-CM
M46.84	Other specified inflammatory spondylopathies, thoracic region	Diagnosis	ICD-10-CM
M46.80	Other specified inflammatory spondylopathies, site unspecified	Diagnosis	ICD-10-CM
M46.88	Other specified inflammatory spondylopathies, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M46.81	Other specified inflammatory spondylopathies, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M46.89	Other specified inflammatory spondylopathies, multiple sites in spine	Diagnosis	ICD-10-CM
M46.87	Other specified inflammatory spondylopathies, lumbosacral region	Diagnosis	ICD-10-CM
M46.86	Other specified inflammatory spondylopathies, lumbar region	Diagnosis	ICD-10-CM
M46.83	Other specified inflammatory spondylopathies, cervicothoracic region	Diagnosis	ICD-10-CM
M46.82	Other specified inflammatory spondylopathies, cervical region	Diagnosis	ICD-10-CM
M05.839	Other rheumatoid arthritis with rheumatoid factor of unspecified wrist	Diagnosis	ICD-10-CM
M05.80	Other rheumatoid arthritis with rheumatoid factor of unspecified site	Diagnosis	ICD-10-CM
M05.819	Other rheumatoid arthritis with rheumatoid factor of unspecified	Diagnosis	ICD-10-CM
M05.869	Other rheumatoid arthritis with rheumatoid factor of unspecified knee	Diagnosis	ICD-10-CM
M05.859	Other rheumatoid arthritis with rheumatoid factor of unspecified hip	Diagnosis	ICD-10-CM
M05.849	Other rheumatoid arthritis with rheumatoid factor of unspecified hand	Diagnosis	ICD-10-CM
M05.829	Other rheumatoid arthritis with rheumatoid factor of unspecified elbow	Diagnosis	ICD-10-CM
M05.879	Other rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.831	Other rheumatoid arthritis with rheumatoid factor of right wrist	Diagnosis	ICD-10-CM
M05.811	Other rheumatoid arthritis with rheumatoid factor of right shoulder	Diagnosis	ICD-10-CM
M05.861	Other rheumatoid arthritis with rheumatoid factor of right knee	Diagnosis	ICD-10-CM
M05.851	Other rheumatoid arthritis with rheumatoid factor of right hip	Diagnosis	ICD-10-CM
M05.841	Other rheumatoid arthritis with rheumatoid factor of right hand	Diagnosis	ICD-10-CM
M05.821	Other rheumatoid arthritis with rheumatoid factor of right elbow	Diagnosis	ICD-10-CM
M05.871	Other rheumatoid arthritis with rheumatoid factor of right ankle and foot	Diagnosis	ICD-10-CM
M05.8A	Other rheumatoid arthritis with rheumatoid factor of other specified site	Diagnosis	ICD-10-CM
M05.89	Other rheumatoid arthritis with rheumatoid factor of multiple sites	Diagnosis	ICD-10-CM
M05.832	Other rheumatoid arthritis with rheumatoid factor of left wrist	Diagnosis	ICD-10-CM
M05.812	Other rheumatoid arthritis with rheumatoid factor of left shoulder	Diagnosis	ICD-10-CM
M05.862	Other rheumatoid arthritis with rheumatoid factor of left knee	Diagnosis	ICD-10-CM
M05.852	Other rheumatoid arthritis with rheumatoid factor of left hip	Diagnosis	ICD-10-CM
M05.842	Other rheumatoid arthritis with rheumatoid factor of left hand	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M05.822	Other rheumatoid arthritis with rheumatoid factor of left elbow	Diagnosis	ICD-10-CM
M05.872	Other rheumatoid arthritis with rheumatoid factor of left ankle and foot	Diagnosis	ICD-10-CM
L40.59	Other psoriatic arthropathy	Diagnosis	ICD-10-CM
M15.8	Other polyosteoarthritis	Diagnosis	ICD-10-CM
M08.839	Other juvenile arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M08.80	Other juvenile arthritis, unspecified site	Diagnosis	ICD-10-CM
M08.819	Other juvenile arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M08.869	Other juvenile arthritis, unspecified knee	Diagnosis	ICD-10-CM
M08.859	Other juvenile arthritis, unspecified hip	Diagnosis	ICD-10-CM
M08.849	Other juvenile arthritis, unspecified hand	Diagnosis	ICD-10-CM
M08.829	Other juvenile arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M08.879	Other juvenile arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.831	Other juvenile arthritis, right wrist	Diagnosis	ICD-10-CM
M08.811	Other juvenile arthritis, right shoulder	Diagnosis	ICD-10-CM
M08.861	Other juvenile arthritis, right knee	Diagnosis	ICD-10-CM
M08.851	Other juvenile arthritis, right hip	Diagnosis	ICD-10-CM
M08.841	Other juvenile arthritis, right hand	Diagnosis	ICD-10-CM
M08.821	Other juvenile arthritis, right elbow	Diagnosis	ICD-10-CM
M08.871	Other juvenile arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M08.88	Other juvenile arthritis, other specified site	Diagnosis	ICD-10-CM
M08.89	Other juvenile arthritis, multiple sites	Diagnosis	ICD-10-CM
M08.832	Other juvenile arthritis, left wrist	Diagnosis	ICD-10-CM
M08.812	Other juvenile arthritis, left shoulder	Diagnosis	ICD-10-CM
M08.862	Other juvenile arthritis, left knee	Diagnosis	ICD-10-CM
M08.852	Other juvenile arthritis, left hip	Diagnosis	ICD-10-CM
M08.842	Other juvenile arthritis, left hand	Diagnosis	ICD-10-CM
M08.822	Other juvenile arthritis, left elbow	Diagnosis	ICD-10-CM
M08.872	Other juvenile arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M17.4	Other bilateral secondary osteoarthritis of knee	Diagnosis	ICD-10-CM
M16.6	Other bilateral secondary osteoarthritis of hip	Diagnosis	ICD-10-CM
M18.4	Other bilateral secondary osteoarthritis of first carpometacarpal joints	Diagnosis	ICD-10-CM
M17.9	Osteoarthritis of knee, unspecified	Diagnosis	ICD-10-CM
M16.9	Osteoarthritis of hip, unspecified	Diagnosis	ICD-10-CM
M18.9	Osteoarthritis of first carpometacarpal joint, unspecified	Diagnosis	ICD-10-CM
M45.A0	Non-radiographic axial spondyloarthritis of unspecified sites in spine	Diagnosis	ICD-10-CM
M45.A5	Non-radiographic axial spondyloarthritis of thoracolumbar region	Diagnosis	ICD-10-CM
M45.A4	Non-radiographic axial spondyloarthritis of thoracic region	Diagnosis	ICD-10-CM
M45.A8	Non-radiographic axial spondyloarthritis of sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M45.A1	Non-radiographic axial spondyloarthritis of occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M45.AB	Non-radiographic axial spondyloarthritis of multiple sites in spine	Diagnosis	ICD-10-CM
M45.A7	Non-radiographic axial spondyloarthritis of lumbosacral region	Diagnosis	ICD-10-CM
M45.A6	Non-radiographic axial spondyloarthritis of lumbar region	Diagnosis	ICD-10-CM
M45.A3	Non-radiographic axial spondyloarthritis of cervicothoracic region	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M45.A2	Non-radiographic axial spondyloarthritis of cervical region	Diagnosis	ICD-10-CM
M08.3	Juvenile rheumatoid polyarthritis (seronegative)	Diagnosis	ICD-10-CM
M08.28	Juvenile rheumatoid arthritis with systemic onset, vertebrae	Diagnosis	ICD-10-CM
M08.239	Juvenile rheumatoid arthritis with systemic onset, unspecified wrist	Diagnosis	ICD-10-CM
M08.20	Juvenile rheumatoid arthritis with systemic onset, unspecified site	Diagnosis	ICD-10-CM
M08.219	Juvenile rheumatoid arthritis with systemic onset, unspecified shoulder	Diagnosis	ICD-10-CM
M08.269	Juvenile rheumatoid arthritis with systemic onset, unspecified knee	Diagnosis	ICD-10-CM
M08.259	Juvenile rheumatoid arthritis with systemic onset, unspecified hip	Diagnosis	ICD-10-CM
M08.249	Juvenile rheumatoid arthritis with systemic onset, unspecified hand	Diagnosis	ICD-10-CM
M08.229	Juvenile rheumatoid arthritis with systemic onset, unspecified elbow	Diagnosis	ICD-10-CM
M08.279	Juvenile rheumatoid arthritis with systemic onset, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.231	Juvenile rheumatoid arthritis with systemic onset, right wrist	Diagnosis	ICD-10-CM
M08.211	Juvenile rheumatoid arthritis with systemic onset, right shoulder	Diagnosis	ICD-10-CM
M08.261	Juvenile rheumatoid arthritis with systemic onset, right knee	Diagnosis	ICD-10-CM
M08.251	Juvenile rheumatoid arthritis with systemic onset, right hip	Diagnosis	ICD-10-CM
M08.241	Juvenile rheumatoid arthritis with systemic onset, right hand	Diagnosis	ICD-10-CM
M08.221	Juvenile rheumatoid arthritis with systemic onset, right elbow	Diagnosis	ICD-10-CM
M08.271	Juvenile rheumatoid arthritis with systemic onset, right ankle and foot	Diagnosis	ICD-10-CM
M08.2A	Juvenile rheumatoid arthritis with systemic onset, other specified site	Diagnosis	ICD-10-CM
M08.29	Juvenile rheumatoid arthritis with systemic onset, multiple sites	Diagnosis	ICD-10-CM
M08.232	Juvenile rheumatoid arthritis with systemic onset, left wrist	Diagnosis	ICD-10-CM
M08.212	Juvenile rheumatoid arthritis with systemic onset, left shoulder	Diagnosis	ICD-10-CM
M08.262	Juvenile rheumatoid arthritis with systemic onset, left knee	Diagnosis	ICD-10-CM
M08.252	Juvenile rheumatoid arthritis with systemic onset, left hip	Diagnosis	ICD-10-CM
M08.242	Juvenile rheumatoid arthritis with systemic onset, left hand	Diagnosis	ICD-10-CM
M08.222	Juvenile rheumatoid arthritis with systemic onset, left elbow	Diagnosis	ICD-10-CM
M08.272	Juvenile rheumatoid arthritis with systemic onset, left ankle and foot	Diagnosis	ICD-10-CM
M08.98	Juvenile arthritis, unspecified, vertebrae	Diagnosis	ICD-10-CM
M08.939	Juvenile arthritis, unspecified, unspecified wrist	Diagnosis	ICD-10-CM
M08.90	Juvenile arthritis, unspecified, unspecified site	Diagnosis	ICD-10-CM
M08.919	Juvenile arthritis, unspecified, unspecified shoulder	Diagnosis	ICD-10-CM
M08.969	Juvenile arthritis, unspecified, unspecified knee	Diagnosis	ICD-10-CM
M08.959	Juvenile arthritis, unspecified, unspecified hip	Diagnosis	ICD-10-CM
M08.949	Juvenile arthritis, unspecified, unspecified hand	Diagnosis	ICD-10-CM
M08.929	Juvenile arthritis, unspecified, unspecified elbow	Diagnosis	ICD-10-CM
M08.979	Juvenile arthritis, unspecified, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.931	Juvenile arthritis, unspecified, right wrist	Diagnosis	ICD-10-CM
M08.911	Juvenile arthritis, unspecified, right shoulder	Diagnosis	ICD-10-CM
M08.961	Juvenile arthritis, unspecified, right knee	Diagnosis	ICD-10-CM
M08.951	Juvenile arthritis, unspecified, right hip	Diagnosis	ICD-10-CM
M08.941	Juvenile arthritis, unspecified, right hand	Diagnosis	ICD-10-CM
M08.921	Juvenile arthritis, unspecified, right elbow	Diagnosis	ICD-10-CM
M08.971	Juvenile arthritis, unspecified, right ankle and foot	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M08.9A	Juvenile arthritis, unspecified, other specified site	Diagnosis	ICD-10-CM
M08.99	Juvenile arthritis, unspecified, multiple sites	Diagnosis	ICD-10-CM
M08.932	Juvenile arthritis, unspecified, left wrist	Diagnosis	ICD-10-CM
M08.912	Juvenile arthritis, unspecified, left shoulder	Diagnosis	ICD-10-CM
M08.962	Juvenile arthritis, unspecified, left knee	Diagnosis	ICD-10-CM
M08.952	Juvenile arthritis, unspecified, left hip	Diagnosis	ICD-10-CM
M08.942	Juvenile arthritis, unspecified, left hand	Diagnosis	ICD-10-CM
M08.922	Juvenile arthritis, unspecified, left elbow	Diagnosis	ICD-10-CM
M08.972	Juvenile arthritis, unspecified, left ankle and foot	Diagnosis	ICD-10-CM
M08.1	Juvenile ankylosing spondylitis	Diagnosis	ICD-10-CM
M15.1	Heberden's nodes (with arthropathy)	Diagnosis	ICD-10-CM
M05.039	Felty's syndrome, unspecified wrist	Diagnosis	ICD-10-CM
M05.00	Felty's syndrome, unspecified site	Diagnosis	ICD-10-CM
M05.019	Felty's syndrome, unspecified shoulder	Diagnosis	ICD-10-CM
M05.069	Felty's syndrome, unspecified knee	Diagnosis	ICD-10-CM
M05.059	Felty's syndrome, unspecified hip	Diagnosis	ICD-10-CM
M05.049	Felty's syndrome, unspecified hand	Diagnosis	ICD-10-CM
M05.029	Felty's syndrome, unspecified elbow	Diagnosis	ICD-10-CM
M05.079	Felty's syndrome, unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.031	Felty's syndrome, right wrist	Diagnosis	ICD-10-CM
M05.011	Felty's syndrome, right shoulder	Diagnosis	ICD-10-CM
M05.061	Felty's syndrome, right knee	Diagnosis	ICD-10-CM
M05.051	Felty's syndrome, right hip	Diagnosis	ICD-10-CM
M05.041	Felty's syndrome, right hand	Diagnosis	ICD-10-CM
M05.021	Felty's syndrome, right elbow	Diagnosis	ICD-10-CM
M05.071	Felty's syndrome, right ankle and foot	Diagnosis	ICD-10-CM
M05.09	Felty's syndrome, multiple sites	Diagnosis	ICD-10-CM
M05.032	Felty's syndrome, left wrist	Diagnosis	ICD-10-CM
M05.012	Felty's syndrome, left shoulder	Diagnosis	ICD-10-CM
M05.062	Felty's syndrome, left knee	Diagnosis	ICD-10-CM
M05.052	Felty's syndrome, left hip	Diagnosis	ICD-10-CM
M05.042	Felty's syndrome, left hand	Diagnosis	ICD-10-CM
M05.022	Felty's syndrome, left elbow	Diagnosis	ICD-10-CM
M05.072	Felty's syndrome, left ankle and foot	Diagnosis	ICD-10-CM
M15.4	Erosive (osteo)arthritis	Diagnosis	ICD-10-CM
L40.51	Distal interphalangeal psoriatic arthropathy	Diagnosis	ICD-10-CM
M15.2	Bouchard's nodes (with arthropathy)	Diagnosis	ICD-10-CM
M17.0	Bilateral primary osteoarthritis of knee	Diagnosis	ICD-10-CM
M16.0	Bilateral primary osteoarthritis of hip	Diagnosis	ICD-10-CM
M18.0	Bilateral primary osteoarthritis of first carpometacarpal joints	Diagnosis	ICD-10-CM
M17.2	Bilateral post-traumatic osteoarthritis of knee	Diagnosis	ICD-10-CM
M16.4	Bilateral post-traumatic osteoarthritis of hip	Diagnosis	ICD-10-CM
M18.2	Bilateral post-traumatic osteoarthritis of first carpometacarpal joints	Diagnosis	ICD-10-CM
M16.2	Bilateral osteoarthritis resulting from hip dysplasia	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
L40.50	Arthropathic psoriasis, unspecified	Diagnosis	ICD-10-CM
M47.015	Anterior spinal artery compression syndromes, thoracolumbar region	Diagnosis	ICD-10-CM
M47.014	Anterior spinal artery compression syndromes, thoracic region	Diagnosis	ICD-10-CM
M47.019	Anterior spinal artery compression syndromes, site unspecified	Diagnosis	ICD-10-CM
M47.011	Anterior spinal artery compression syndromes, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.016	Anterior spinal artery compression syndromes, lumbar region	Diagnosis	ICD-10-CM
M47.013	Anterior spinal artery compression syndromes, cervicothoracic region	Diagnosis	ICD-10-CM
M47.012	Anterior spinal artery compression syndromes, cervical region	Diagnosis	ICD-10-CM
M45.8	Ankylosing spondylitis sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M45.9	Ankylosing spondylitis of unspecified sites in spine	Diagnosis	ICD-10-CM
M45.5	Ankylosing spondylitis of thoracolumbar region	Diagnosis	ICD-10-CM
M45.4	Ankylosing spondylitis of thoracic region	Diagnosis	ICD-10-CM
M45.1	Ankylosing spondylitis of occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M45.0	Ankylosing spondylitis of multiple sites in spine	Diagnosis	ICD-10-CM
M45.7	Ankylosing spondylitis of lumbosacral region	Diagnosis	ICD-10-CM
M45.3	Ankylosing spondylitis of cervicothoracic region	Diagnosis	ICD-10-CM
M45.2	Ankylosing spondylitis of cervical region	Diagnosis	ICD-10-CM
M45.6	Ankylosing spondylitis lumbar region	Diagnosis	ICD-10-CM
M06.1	Adult-onset Still's disease	Diagnosis	ICD-10-CM
Schizophrenia and Other Psychotic Disorders			
F29	Unspecified psychosis not due to a substance or known physiological condition	Diagnosis	ICD-10-CM
F20.3	Undifferentiated schizophrenia	Diagnosis	ICD-10-CM
F24	Shared psychotic disorder	Diagnosis	ICD-10-CM
F21	Schizotypal disorder	Diagnosis	ICD-10-CM
F20.81	Schizophreniform disorder	Diagnosis	ICD-10-CM
F20.9	Schizophrenia, unspecified	Diagnosis	ICD-10-CM
F25.9	Schizoaffective disorder, unspecified	Diagnosis	ICD-10-CM
F25.1	Schizoaffective disorder, depressive type	Diagnosis	ICD-10-CM
F25.0	Schizoaffective disorder, bipolar type	Diagnosis	ICD-10-CM
F20.5	Residual schizophrenia	Diagnosis	ICD-10-CM
F06.0	Psychotic disorder with hallucinations due to known physiological condition	Diagnosis	ICD-10-CM
F06.2	Psychotic disorder with delusions due to known physiological condition	Diagnosis	ICD-10-CM
F20.0	Paranoid schizophrenia	Diagnosis	ICD-10-CM
F20.89	Other schizophrenia	Diagnosis	ICD-10-CM
F25.8	Other schizoaffective disorders	Diagnosis	ICD-10-CM
F28	Other psychotic disorder not due to a substance or known physiological condition	Diagnosis	ICD-10-CM
F44.89	Other dissociative and conversion disorders	Diagnosis	ICD-10-CM
F32.3	Major depressive disorder, single episode, severe with psychotic features	Diagnosis	ICD-10-CM
F33.3	Major depressive disorder, recurrent, severe with psychotic symptoms	Diagnosis	ICD-10-CM
F20.1	Disorganized schizophrenia	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F22	Delusional disorders	Diagnosis	ICD-10-CM
F20.2	Catatonic schizophrenia	Diagnosis	ICD-10-CM
F23	Brief psychotic disorder	Diagnosis	ICD-10-CM
Schizophrenia			
F20.3	Undifferentiated schizophrenia	Diagnosis	ICD-10-CM
F20.81	Schizophreniform disorder	Diagnosis	ICD-10-CM
F20.9	Schizophrenia, unspecified	Diagnosis	ICD-10-CM
F25.9	Schizoaffective disorder, unspecified	Diagnosis	ICD-10-CM
F25.1	Schizoaffective disorder, depressive type	Diagnosis	ICD-10-CM
F25.0	Schizoaffective disorder, bipolar type	Diagnosis	ICD-10-CM
F20.5	Residual schizophrenia	Diagnosis	ICD-10-CM
F20.0	Paranoid schizophrenia	Diagnosis	ICD-10-CM
F20.89	Other schizophrenia	Diagnosis	ICD-10-CM
F25.8	Other schizoaffective disorders	Diagnosis	ICD-10-CM
F20.1	Disorganized schizophrenia	Diagnosis	ICD-10-CM
F20.2	Catatonic schizophrenia	Diagnosis	ICD-10-CM
Screenings, Examinations, and Disease Management			
G0101	Cervical or vaginal cancer screening; pelvic and clinical breast examination	Procedure	HCPCS
G0102	Prostate cancer screening; digital rectal examination	Procedure	HCPCS
G0103	Prostate cancer screening; prostate specific antigen test (PSA)	Procedure	HCPCS
G0104	Colorectal cancer screening; flexible sigmoidoscopy	Procedure	HCPCS
G0105	Colorectal cancer screening; colonoscopy on individual at high risk	Procedure	HCPCS
G0106	Colorectal cancer screening; alternative to G0104, screening sigmoidoscopy, barium enema	Procedure	HCPCS
G0107	Colorectal cancer screening; fecal-occult blood test, 1-3 simultaneous determinations	Procedure	HCPCS
G0108	Diabetes outpatient self-management training services, individual, per 30 minutes	Procedure	HCPCS
G0109	Diabetes outpatient self-management training services, group session (two or more), per 30 minutes	Procedure	HCPCS
G0110	NETT pulmonary rehabilitation; education/skills training, individual	Procedure	HCPCS
G0111	NETT pulmonary rehabilitation; education/skills, group	Procedure	HCPCS
G0112	NETT pulmonary rehabilitation; nutritional guidance, initial	Procedure	HCPCS
G0113	NETT pulmonary rehabilitation; nutritional guidance, subsequent	Procedure	HCPCS
G0114	NETT pulmonary rehabilitation; psychosocial consultation	Procedure	HCPCS
G0115	NETT pulmonary rehabilitation; psychological testing	Procedure	HCPCS
G0116	NETT pulmonary rehabilitation; psychosocial counselling	Procedure	HCPCS
G0117	Glaucoma screening for high risk patients furnished by an optometrist or ophthalmologist	Procedure	HCPCS
G0118	Glaucoma screening for high risk patient furnished under the direct supervision of an optometrist or ophthalmologist	Procedure	HCPCS
G0120	Colorectal cancer screening; alternative to G0105, screening colonoscopy, barium enema	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
G0121	Colorectal cancer screening; colonoscopy on individual not meeting criteria for high risk	Procedure	HCPCS
G0122	Colorectal cancer screening; barium enema	Procedure	HCPCS
G0123	Screening cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation, screening by cytotechnologist under physician supervision	Procedure	HCPCS
G0124	Screening cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation, requiring interpretation by physician	Procedure	HCPCS
Spina Bifida			
Q05.4	Unspecified spina bifida with hydrocephalus	Diagnosis	ICD-10-CM
Q05.6	Thoracic spina bifida without hydrocephalus	Diagnosis	ICD-10-CM
Q05.1	Thoracic spina bifida with hydrocephalus	Diagnosis	ICD-10-CM
Q05.9	Spina bifida, unspecified	Diagnosis	ICD-10-CM
Q04.4	Septo-optic dysplasia of brain	Diagnosis	ICD-10-CM
Q05.8	Sacral spina bifida without hydrocephalus	Diagnosis	ICD-10-CM
Q05.3	Sacral spina bifida with hydrocephalus	Diagnosis	ICD-10-CM
Q06.8	Other specified congenital malformations of spinal cord	Diagnosis	ICD-10-CM
Q07.8	Other specified congenital malformations of nervous system	Diagnosis	ICD-10-CM
Q04.8	Other specified congenital malformations of brain	Diagnosis	ICD-10-CM
Q04.3	Other reduction deformities of brain	Diagnosis	ICD-10-CM
Q03.8	Other congenital hydrocephalus	Diagnosis	ICD-10-CM
Q06.3	Other congenital cauda equina malformations	Diagnosis	ICD-10-CM
Q01.2	Occipital encephalocele	Diagnosis	ICD-10-CM
Q01.1	Nasofrontal encephalocele	Diagnosis	ICD-10-CM
Q02	Microcephaly	Diagnosis	ICD-10-CM
Q04.5	Megalencephaly	Diagnosis	ICD-10-CM
Q03.0	Malformations of aqueduct of Sylvius	Diagnosis	ICD-10-CM
Q05.7	Lumbar spina bifida without hydrocephalus	Diagnosis	ICD-10-CM
Q05.2	Lumbar spina bifida with hydrocephalus	Diagnosis	ICD-10-CM
Q00.2	Iniencephaly	Diagnosis	ICD-10-CM
Q06.1	Hypoplasia and dysplasia of spinal cord	Diagnosis	ICD-10-CM
Q06.4	Hydromyelia	Diagnosis	ICD-10-CM
Q04.2	Holoprosencephaly	Diagnosis	ICD-10-CM
Q01.0	Frontal encephalocele	Diagnosis	ICD-10-CM
G90.1	Familial dysautonomia [Riley-Day]	Diagnosis	ICD-10-CM
Q01.9	Encephalocele, unspecified	Diagnosis	ICD-10-CM
Q01.8	Encephalocele of other sites	Diagnosis	ICD-10-CM
Q06.2	Diastematomyelia	Diagnosis	ICD-10-CM
Q00.1	Craniorachischisis	Diagnosis	ICD-10-CM
Q04.0	Congenital malformations of corpus callosum	Diagnosis	ICD-10-CM
Q06.9	Congenital malformation of spinal cord, unspecified	Diagnosis	ICD-10-CM
Q07.9	Congenital malformation of nervous system, unspecified	Diagnosis	ICD-10-CM
Q04.9	Congenital malformation of brain, unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
Q03.9	Congenital hydrocephalus, unspecified	Diagnosis	ICD-10-CM
Q04.6	Congenital cerebral cysts	Diagnosis	ICD-10-CM
Q05.5	Cervical spina bifida without hydrocephalus	Diagnosis	ICD-10-CM
Q05.0	Cervical spina bifida with hydrocephalus	Diagnosis	ICD-10-CM
Q03.1	Atresia of foramina of Magendie and Luschka	Diagnosis	ICD-10-CM
Q07.00	Arnold-Chiari syndrome without spina bifida or hydrocephalus	Diagnosis	ICD-10-CM
Q07.03	Arnold-Chiari syndrome with spina bifida and hydrocephalus	Diagnosis	ICD-10-CM
Q07.01	Arnold-Chiari syndrome with spina bifida	Diagnosis	ICD-10-CM
Q07.02	Arnold-Chiari syndrome with hydrocephalus	Diagnosis	ICD-10-CM
Q04.1	Arhinencephaly	Diagnosis	ICD-10-CM
Q00.0	Anencephaly	Diagnosis	ICD-10-CM
Q06.0	Amyelia	Diagnosis	ICD-10-CM
Spinal Injury			
S12.201B	Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.201A	Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S12.501B	Unspecified nondisplaced fracture of sixth cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.501A	Unspecified nondisplaced fracture of sixth cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S12.601B	Unspecified nondisplaced fracture of seventh cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.601A	Unspecified nondisplaced fracture of seventh cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S12.101B	Unspecified nondisplaced fracture of second cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.101A	Unspecified nondisplaced fracture of second cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S12.301B	Unspecified nondisplaced fracture of fourth cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.301A	Unspecified nondisplaced fracture of fourth cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S12.001B	Unspecified nondisplaced fracture of first cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.001A	Unspecified nondisplaced fracture of first cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S12.401B	Unspecified nondisplaced fracture of fifth cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.401A	Unspecified nondisplaced fracture of fifth cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S34.109S	Unspecified injury to unspecified level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.109A	Unspecified injury to unspecified level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S34.139S	Unspecified injury to sacral spinal cord, sequela	Diagnosis	ICD-10-CM
S34.139A	Unspecified injury to sacral spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.105S	Unspecified injury to L5 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.105A	Unspecified injury to L5 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.104S	Unspecified injury to L4 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.104A	Unspecified injury to L4 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.103S	Unspecified injury to L3 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.103A	Unspecified injury to L3 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.102S	Unspecified injury to L2 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.102A	Unspecified injury to L2 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.101S	Unspecified injury to L1 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.101A	Unspecified injury to L1 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.109S	Unspecified injury at unspecified level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.109A	Unspecified injury at unspecified level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.109S	Unspecified injury at unspecified level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.109A	Unspecified injury at unspecified level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.103S	Unspecified injury at T7-T10 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.103A	Unspecified injury at T7-T10 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.102S	Unspecified injury at T2-T6 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.102A	Unspecified injury at T2-T6 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.104S	Unspecified injury at T11-T12 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.104A	Unspecified injury at T11-T12 level of thoracic spinal cord, initial	Diagnosis	ICD-10-CM
S24.101S	Unspecified injury at T1 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.101A	Unspecified injury at T1 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.108S	Unspecified injury at C8 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.108A	Unspecified injury at C8 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.107S	Unspecified injury at C7 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.107A	Unspecified injury at C7 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.106S	Unspecified injury at C6 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.106A	Unspecified injury at C6 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.105S	Unspecified injury at C5 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.105A	Unspecified injury at C5 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.104S	Unspecified injury at C4 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.104A	Unspecified injury at C4 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.103S	Unspecified injury at C3 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.103A	Unspecified injury at C3 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.102S	Unspecified injury at C2 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.102A	Unspecified injury at C2 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.101S	Unspecified injury at C1 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.101A	Unspecified injury at C1 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S22.009B	Unspecified fracture of unspecified thoracic vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S22.009A	Unspecified fracture of unspecified thoracic vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.009B	Unspecified fracture of unspecified lumbar vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.009A	Unspecified fracture of unspecified lumbar vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S22.039B	Unspecified fracture of third thoracic vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S22.039A	Unspecified fracture of third thoracic vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.039B	Unspecified fracture of third lumbar vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.039A	Unspecified fracture of third lumbar vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S22.079B	Unspecified fracture of T9-T10 vertebra, initial encounter for open	Diagnosis	ICD-10-CM
S22.079A	Unspecified fracture of T9-T10 vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S22.069B	Unspecified fracture of T7-T8 vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S22.069A	Unspecified fracture of T7-T8 vertebra, initial encounter for closed	Diagnosis	ICD-10-CM
S22.059B	Unspecified fracture of T5-T6 vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S22.059A	Unspecified fracture of T5-T6 vertebra, initial encounter for closed	Diagnosis	ICD-10-CM
S22.089B	Unspecified fracture of T11-T12 vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S22.089A	Unspecified fracture of T11-T12 vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S22.029B	Unspecified fracture of second thoracic vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S22.029A	Unspecified fracture of second thoracic vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.029B	Unspecified fracture of second lumbar vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.029A	Unspecified fracture of second lumbar vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.10XB	Unspecified fracture of sacrum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.10XA	Unspecified fracture of sacrum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S22.049B	Unspecified fracture of fourth thoracic vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S22.049A	Unspecified fracture of fourth thoracic vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.049B	Unspecified fracture of fourth lumbar vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.049A	Unspecified fracture of fourth lumbar vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S22.019B	Unspecified fracture of first thoracic vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S22.019A	Unspecified fracture of first thoracic vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.019B	Unspecified fracture of first lumbar vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.019A	Unspecified fracture of first lumbar vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.059B	Unspecified fracture of fifth lumbar vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.059A	Unspecified fracture of fifth lumbar vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S12.200B	Unspecified displaced fracture of third cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.200A	Unspecified displaced fracture of third cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S12.500B	Unspecified displaced fracture of sixth cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.500A	Unspecified displaced fracture of sixth cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S12.600B	Unspecified displaced fracture of seventh cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.600A	Unspecified displaced fracture of seventh cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S12.100B	Unspecified displaced fracture of second cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.100A	Unspecified displaced fracture of second cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S12.300B	Unspecified displaced fracture of fourth cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.300A	Unspecified displaced fracture of fourth cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S12.000B	Unspecified displaced fracture of first cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.000A	Unspecified displaced fracture of first cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S12.400B	Unspecified displaced fracture of fifth cervical vertebra, initial encounter for open fracture	Diagnosis	ICD-10-CM
S12.400A	Unspecified displaced fracture of fifth cervical vertebra, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S24.159S	Other incomplete lesion at unspecified level of thoracic spinal cord,	Diagnosis	ICD-10-CM
S24.159A	Other incomplete lesion at unspecified level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.159S	Other incomplete lesion at unspecified level of cervical spinal cord,	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S14.159A	Other incomplete lesion at unspecified level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.153S	Other incomplete lesion at T7-T10 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.153A	Other incomplete lesion at T7-T10 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.152S	Other incomplete lesion at T2-T6 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.152A	Other incomplete lesion at T2-T6 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.154S	Other incomplete lesion at T11-T12 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.154A	Other incomplete lesion at T11-T12 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.151S	Other incomplete lesion at T1 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.151A	Other incomplete lesion at T1 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.158S	Other incomplete lesion at C8 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.158A	Other incomplete lesion at C8 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.157S	Other incomplete lesion at C7 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.157A	Other incomplete lesion at C7 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.156S	Other incomplete lesion at C6 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.156A	Other incomplete lesion at C6 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.155S	Other incomplete lesion at C5 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.155A	Other incomplete lesion at C5 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.154S	Other incomplete lesion at C4 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.154A	Other incomplete lesion at C4 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.153S	Other incomplete lesion at C3 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.153A	Other incomplete lesion at C3 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.152S	Other incomplete lesion at C2 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.152A	Other incomplete lesion at C2 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.151S	Other incomplete lesion at C1 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.151A	Other incomplete lesion at C1 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.3XXA	Injury of cauda equina, initial encounter	Diagnosis	ICD-10-CM
S34.129S	Incomplete lesion of unspecified level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.129A	Incomplete lesion of unspecified level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.132S	Incomplete lesion of sacral spinal cord, sequela	Diagnosis	ICD-10-CM
S34.132A	Incomplete lesion of sacral spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.125S	Incomplete lesion of L5 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.125A	Incomplete lesion of L5 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.124S	Incomplete lesion of L4 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.124A	Incomplete lesion of L4 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.123S	Incomplete lesion of L3 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.123A	Incomplete lesion of L3 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.122S	Incomplete lesion of L2 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.122A	Incomplete lesion of L2 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.121S	Incomplete lesion of L1 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S34.121A	Incomplete lesion of L1 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S12.9XXA	Fracture of neck, unspecified, initial encounter	Diagnosis	ICD-10-CM
S32.2XXB	Fracture of coccyx, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.2XXA	Fracture of coccyx, initial encounter for closed fracture	Diagnosis	ICD-10-CM
G96.11	Dural tear	Diagnosis	ICD-10-CM
S24.0XXS	Concussion and edema of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.0XXA	Concussion and edema of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.02XS	Concussion and edema of sacral spinal cord, sequela	Diagnosis	ICD-10-CM
S34.02XA	Concussion and edema of sacral spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.01XS	Concussion and edema of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.01XA	Concussion and edema of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.0XXS	Concussion and edema of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.0XXA	Concussion and edema of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.119S	Complete lesion of unspecified level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.119A	Complete lesion of unspecified level of lumbar spinal cord, initial	Diagnosis	ICD-10-CM
S34.131S	Complete lesion of sacral spinal cord, sequela	Diagnosis	ICD-10-CM
S34.131A	Complete lesion of sacral spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.115S	Complete lesion of L5 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.115A	Complete lesion of L5 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.114S	Complete lesion of L4 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.114A	Complete lesion of L4 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.113S	Complete lesion of L3 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.113A	Complete lesion of L3 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.112S	Complete lesion of L2 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.112A	Complete lesion of L2 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S34.111S	Complete lesion of L1 level of lumbar spinal cord, sequela	Diagnosis	ICD-10-CM
S34.111A	Complete lesion of L1 level of lumbar spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.119S	Complete lesion at unspecified level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.119A	Complete lesion at unspecified level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.119S	Complete lesion at unspecified level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.119A	Complete lesion at unspecified level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.113S	Complete lesion at T7-T10 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.113A	Complete lesion at T7-T10 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.112S	Complete lesion at T2-T6 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.112A	Complete lesion at T2-T6 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.114S	Complete lesion at T11-T12 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.114A	Complete lesion at T11-T12 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.111S	Complete lesion at T1 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.111A	Complete lesion at T1 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.118S	Complete lesion at C8 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.118A	Complete lesion at C8 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.117S	Complete lesion at C7 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S14.117A	Complete lesion at C7 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.116S	Complete lesion at C6 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.116A	Complete lesion at C6 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.115S	Complete lesion at C5 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.115A	Complete lesion at C5 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.114S	Complete lesion at C4 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.114A	Complete lesion at C4 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.113S	Complete lesion at C3 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.112S	Complete lesion at C2 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.112A	Complete lesion at C2 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.111S	Complete lesion at C1 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.111A	Complete lesion at C1 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.129S	Central cord syndrome at unspecified level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.129A	Central cord syndrome at unspecified level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.128S	Central cord syndrome at C8 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.128A	Central cord syndrome at C8 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.127S	Central cord syndrome at C7 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.127A	Central cord syndrome at C7 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.126S	Central cord syndrome at C6 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.126A	Central cord syndrome at C6 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.125S	Central cord syndrome at C5 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.125A	Central cord syndrome at C5 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.124S	Central cord syndrome at C4 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.124A	Central cord syndrome at C4 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.123S	Central cord syndrome at C3 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.123A	Central cord syndrome at C3 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.122S	Central cord syndrome at C2 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.122A	Central cord syndrome at C2 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.121S	Central cord syndrome at C1 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.121A	Central cord syndrome at C1 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.149S	Brown-Sequard syndrome at unspecified level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.149A	Brown-Sequard syndrome at unspecified level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.149S	Brown-Sequard syndrome at unspecified level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.149A	Brown-Sequard syndrome at unspecified level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.143S	Brown-Sequard syndrome at T7-T10 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.143A	Brown-Sequard syndrome at T7-T10 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.142S	Brown-Sequard syndrome at T2-T6 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S24.142A	Brown-Sequard syndrome at T2-T6 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.144S	Brown-Sequard syndrome at T11-T12 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.144A	Brown-Sequard syndrome at T11-T12 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.141S	Brown-Sequard syndrome at T1 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.141A	Brown-Sequard syndrome at T1 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.148S	Brown-Sequard syndrome at C8 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.148A	Brown-Sequard syndrome at C8 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.147S	Brown-Sequard syndrome at C7 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.147A	Brown-Sequard syndrome at C7 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.146S	Brown-Sequard syndrome at C6 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.146A	Brown-Sequard syndrome at C6 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.145S	Brown-Sequard syndrome at C5 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.145A	Brown-Sequard syndrome at C5 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.144S	Brown-Sequard syndrome at C4 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.144A	Brown-Sequard syndrome at C4 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.143S	Brown-Sequard syndrome at C3 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.143A	Brown-Sequard syndrome at C3 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.142S	Brown-Sequard syndrome at C2 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.142A	Brown-Sequard syndrome at C2 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.141S	Brown-Sequard syndrome at C1 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.141A	Brown-Sequard syndrome at C1 level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.139S	Anterior cord syndrome at unspecified level of thoracic spinal cord,	Diagnosis	ICD-10-CM
S24.139A	Anterior cord syndrome at unspecified level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S14.139S	Anterior cord syndrome at unspecified level of cervical spinal cord,	Diagnosis	ICD-10-CM
S14.139A	Anterior cord syndrome at unspecified level of cervical spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.133S	Anterior cord syndrome at T7-T10 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.133A	Anterior cord syndrome at T7-T10 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.132S	Anterior cord syndrome at T2-T6 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.132A	Anterior cord syndrome at T2-T6 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S24.134S	Anterior cord syndrome at T11-T12 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.134A	Anterior cord syndrome at T11-T12 level of thoracic spinal cord, initial encounter	Diagnosis	ICD-10-CM
S24.131S	Anterior cord syndrome at T1 level of thoracic spinal cord, sequela	Diagnosis	ICD-10-CM
S24.131A	Anterior cord syndrome at T1 level of thoracic spinal cord, initial	Diagnosis	ICD-10-CM
S14.138S	Anterior cord syndrome at C8 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.138A	Anterior cord syndrome at C8 level of cervical spinal cord, initial	Diagnosis	ICD-10-CM
S14.137S	Anterior cord syndrome at C7 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.137A	Anterior cord syndrome at C7 level of cervical spinal cord, initial	Diagnosis	ICD-10-CM
S14.136S	Anterior cord syndrome at C6 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.136A	Anterior cord syndrome at C6 level of cervical spinal cord, initial	Diagnosis	ICD-10-CM
S14.135S	Anterior cord syndrome at C5 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.135A	Anterior cord syndrome at C5 level of cervical spinal cord, initial	Diagnosis	ICD-10-CM
S14.134S	Anterior cord syndrome at C4 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.134A	Anterior cord syndrome at C4 level of cervical spinal cord, initial	Diagnosis	ICD-10-CM
S14.133S	Anterior cord syndrome at C3 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.133A	Anterior cord syndrome at C3 level of cervical spinal cord, initial	Diagnosis	ICD-10-CM
S14.132S	Anterior cord syndrome at C2 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.132A	Anterior cord syndrome at C2 level of cervical spinal cord, initial	Diagnosis	ICD-10-CM
S14.131S	Anterior cord syndrome at C1 level of cervical spinal cord, sequela	Diagnosis	ICD-10-CM
S14.131A	Anterior cord syndrome at C1 level of cervical spinal cord, initial	Diagnosis	ICD-10-CM
Stroke/TIA			
G45.0	Vertebro-basilar artery syndrome	Diagnosis	ICD-10-CM
G45.9	Transient cerebral ischemic attack, unspecified	Diagnosis	ICD-10-CM
I67.841	Reversible cerebrovascular vasoconstriction syndrome	Diagnosis	ICD-10-CM
G46.6	Pure sensory lacunar syndrome	Diagnosis	ICD-10-CM
G46.5	Pure motor lacunar syndrome	Diagnosis	ICD-10-CM
I97.821	Postprocedural cerebrovascular infarction following other surgery	Diagnosis	ICD-10-CM
I97.820	Postprocedural cerebrovascular infarction following cardiac surgery	Diagnosis	ICD-10-CM
G46.2	Posterior cerebral artery syndrome	Diagnosis	ICD-10-CM
G46.8	Other vascular syndromes of brain in cerebrovascular diseases	Diagnosis	ICD-10-CM
G45.8	Other transient cerebral ischemic attacks and related syndromes	Diagnosis	ICD-10-CM
I60.8	Other nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I61.8	Other nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
G46.7	Other lacunar syndromes	Diagnosis	ICD-10-CM
I67.848	Other cerebrovascular vasospasm and vasoconstriction	Diagnosis	ICD-10-CM
I67.89	Other cerebrovascular disease	Diagnosis	ICD-10-CM
I63.81	Other cerebral infarction due to occlusion or stenosis of small artery	Diagnosis	ICD-10-CM
I63.8	Other cerebral infarction	Diagnosis	ICD-10-CM
I63.89	Other cerebral infarction	Diagnosis	ICD-10-CM
I62.00	Nontraumatic subdural hemorrhage, unspecified	Diagnosis	ICD-10-CM
I60.9	Nontraumatic subarachnoid hemorrhage, unspecified	Diagnosis	ICD-10-CM
I60.50	Nontraumatic subarachnoid hemorrhage from unspecified vertebral	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I60.30	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery	Diagnosis	ICD-10-CM
I60.10	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I60.7	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery	Diagnosis	ICD-10-CM
I60.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.20	Nontraumatic subarachnoid hemorrhage from unspecified anterior communicating artery	Diagnosis	ICD-10-CM
I60.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery	Diagnosis	ICD-10-CM
I60.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery	Diagnosis	ICD-10-CM
I60.11	Nontraumatic subarachnoid hemorrhage from right middle cerebral	Diagnosis	ICD-10-CM
I60.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.21	Nontraumatic subarachnoid hemorrhage from right anterior communicating artery	Diagnosis	ICD-10-CM
I60.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries	Diagnosis	ICD-10-CM
I60.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery	Diagnosis	ICD-10-CM
I60.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery	Diagnosis	ICD-10-CM
I60.12	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery	Diagnosis	ICD-10-CM
I60.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.22	Nontraumatic subarachnoid hemorrhage from left anterior communicating artery	Diagnosis	ICD-10-CM
I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery	Diagnosis	ICD-10-CM
I60.2	Nontraumatic subarachnoid hemorrhage from anterior communicating artery	Diagnosis	ICD-10-CM
I62.02	Nontraumatic subacute subdural hemorrhage	Diagnosis	ICD-10-CM
I62.9	Nontraumatic intracranial hemorrhage, unspecified	Diagnosis	ICD-10-CM
I61.9	Nontraumatic intracerebral hemorrhage, unspecified	Diagnosis	ICD-10-CM
I61.6	Nontraumatic intracerebral hemorrhage, multiple localized	Diagnosis	ICD-10-CM
I61.5	Nontraumatic intracerebral hemorrhage, intraventricular	Diagnosis	ICD-10-CM
I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified	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
I61.4	Nontraumatic intracerebral hemorrhage in cerebellum	Diagnosis	ICD-10-CM
I61.3	Nontraumatic intracerebral hemorrhage in brain stem	Diagnosis	ICD-10-CM
I62.01	Nontraumatic acute subdural hemorrhage	Diagnosis	ICD-10-CM
G45.2	Multiple and bilateral precerebral artery syndromes	Diagnosis	ICD-10-CM
G46.0	Middle cerebral artery syndrome	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
G97.32	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating other procedure	Diagnosis	ICD-10-CM
G97.31	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating a nervous system procedure	Diagnosis	ICD-10-CM
I97.811	Intraoperative cerebrovascular infarction during other surgery	Diagnosis	ICD-10-CM
I97.810	Intraoperative cerebrovascular infarction during cardiac surgery	Diagnosis	ICD-10-CM
I63.9	Cerebral infarction, unspecified	Diagnosis	ICD-10-CM
I63.219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.20	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries	Diagnosis	ICD-10-CM
I63.539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.519	Cerebral infarction due to unspecified occlusion or stenosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.529	Cerebral infarction due to unspecified occlusion or stenosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral artery	Diagnosis	ICD-10-CM
I63.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery	Diagnosis	ICD-10-CM
I63.231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries	Diagnosis	ICD-10-CM
I63.521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.29	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries	Diagnosis	ICD-10-CM
I63.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery	Diagnosis	ICD-10-CM
I63.212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral artery	Diagnosis	ICD-10-CM
I63.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery	Diagnosis	ICD-10-CM
I63.232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries	Diagnosis	ICD-10-CM
I63.522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.213	Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.513	Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.523	Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.22	Cerebral infarction due to unspecified occlusion or stenosis of basilar artery	Diagnosis	ICD-10-CM
I63.019	Cerebral infarction due to thrombosis of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.00	Cerebral infarction due to thrombosis of unspecified precerebral artery	Diagnosis	ICD-10-CM
I63.339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.30	Cerebral infarction due to thrombosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.349	Cerebral infarction due to thrombosis of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.039	Cerebral infarction due to thrombosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.011	Cerebral infarction due to thrombosis of right vertebral artery	Diagnosis	ICD-10-CM
I63.331	Cerebral infarction due to thrombosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.311	Cerebral infarction due to thrombosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.341	Cerebral infarction due to thrombosis of right cerebellar artery	Diagnosis	ICD-10-CM
I63.031	Cerebral infarction due to thrombosis of right carotid artery	Diagnosis	ICD-10-CM
I63.321	Cerebral infarction due to thrombosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.09	Cerebral infarction due to thrombosis of other precerebral artery	Diagnosis	ICD-10-CM
I63.39	Cerebral infarction due to thrombosis of other cerebral artery	Diagnosis	ICD-10-CM
I63.012	Cerebral infarction due to thrombosis of left vertebral artery	Diagnosis	ICD-10-CM
I63.332	Cerebral infarction due to thrombosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.312	Cerebral infarction due to thrombosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.342	Cerebral infarction due to thrombosis of left cerebellar artery	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I63.032	Cerebral infarction due to thrombosis of left carotid artery	Diagnosis	ICD-10-CM
I63.322	Cerebral infarction due to thrombosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.013	Cerebral infarction due to thrombosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.333	Cerebral infarction due to thrombosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.313	Cerebral infarction due to thrombosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.343	Cerebral infarction due to thrombosis of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.033	Cerebral infarction due to thrombosis of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.323	Cerebral infarction due to thrombosis of bilateral anterior cerebral	Diagnosis	ICD-10-CM
I63.02	Cerebral infarction due to thrombosis of basilar artery	Diagnosis	ICD-10-CM
I63.119	Cerebral infarction due to embolism of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.10	Cerebral infarction due to embolism of unspecified precerebral artery	Diagnosis	ICD-10-CM
I63.439	Cerebral infarction due to embolism of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.419	Cerebral infarction due to embolism of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.40	Cerebral infarction due to embolism of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.449	Cerebral infarction due to embolism of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.139	Cerebral infarction due to embolism of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.429	Cerebral infarction due to embolism of unspecified anterior cerebral	Diagnosis	ICD-10-CM
I63.111	Cerebral infarction due to embolism of right vertebral artery	Diagnosis	ICD-10-CM
I63.431	Cerebral infarction due to embolism of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.411	Cerebral infarction due to embolism of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.441	Cerebral infarction due to embolism of right cerebellar artery	Diagnosis	ICD-10-CM
I63.131	Cerebral infarction due to embolism of right carotid artery	Diagnosis	ICD-10-CM
I63.421	Cerebral infarction due to embolism of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.19	Cerebral infarction due to embolism of other precerebral artery	Diagnosis	ICD-10-CM
I63.49	Cerebral infarction due to embolism of other cerebral artery	Diagnosis	ICD-10-CM
I63.112	Cerebral infarction due to embolism of left vertebral artery	Diagnosis	ICD-10-CM
I63.432	Cerebral infarction due to embolism of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.412	Cerebral infarction due to embolism of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.442	Cerebral infarction due to embolism of left cerebellar artery	Diagnosis	ICD-10-CM
I63.132	Cerebral infarction due to embolism of left carotid artery	Diagnosis	ICD-10-CM
I63.422	Cerebral infarction due to embolism of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.113	Cerebral infarction due to embolism of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.433	Cerebral infarction due to embolism of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.413	Cerebral infarction due to embolism of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.443	Cerebral infarction due to embolism of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.133	Cerebral infarction due to embolism of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.423	Cerebral infarction due to embolism of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.12	Cerebral infarction due to embolism of basilar artery	Diagnosis	ICD-10-CM
I63.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic	Diagnosis	ICD-10-CM
G46.4	Cerebellar stroke syndrome	Diagnosis	ICD-10-CM
G45.1	Carotid artery syndrome (hemispheric)	Diagnosis	ICD-10-CM
G46.3	Brain stem stroke syndrome	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
G46.1	Anterior cerebral artery syndrome	Diagnosis	ICD-10-CM
G45.3	Amaurosis fugax	Diagnosis	ICD-10-CM
Thrombotic Thrombocytopenic Purpura			
M31.1	Thrombotic microangiopathy	Diagnosis	ICD-10-CM
Tobacco Use			
T65.224A	Toxic effect of tobacco cigarettes, undetermined, initial encounter	Diagnosis	ICD-10-CM
T65.222A	Toxic effect of tobacco cigarettes, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T65.223A	Toxic effect of tobacco cigarettes, assault, initial encounter	Diagnosis	ICD-10-CM
T65.221A	Toxic effect of tobacco cigarettes, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T65.294A	Toxic effect of other tobacco and nicotine, undetermined, initial	Diagnosis	ICD-10-CM
T65.292A	Toxic effect of other tobacco and nicotine, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T65.293A	Toxic effect of other tobacco and nicotine, assault, initial encounter	Diagnosis	ICD-10-CM
T65.291A	Toxic effect of other tobacco and nicotine, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T65.214A	Toxic effect of chewing tobacco, undetermined, initial encounter	Diagnosis	ICD-10-CM
T65.212A	Toxic effect of chewing tobacco, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T65.213A	Toxic effect of chewing tobacco, assault, initial encounter	Diagnosis	ICD-10-CM
T65.211A	Toxic effect of chewing tobacco, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
Z72.0	Tobacco use	Diagnosis	ICD-10-CM
O99.335	Smoking (tobacco) complicating the puerperium	Diagnosis	ICD-10-CM
O99.330	Smoking (tobacco) complicating pregnancy, unspecified trimester	Diagnosis	ICD-10-CM
O99.333	Smoking (tobacco) complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O99.332	Smoking (tobacco) complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O99.331	Smoking (tobacco) complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O99.334	Smoking (tobacco) complicating childbirth	Diagnosis	ICD-10-CM
F17.209	Nicotine dependence, unspecified, with unspecified nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.208	Nicotine dependence, unspecified, with other nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.200	Nicotine dependence, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F17.201	Nicotine dependence, unspecified, in remission	Diagnosis	ICD-10-CM
F17.293	Nicotine dependence, other tobacco product, with withdrawal	Diagnosis	ICD-10-CM
F17.299	Nicotine dependence, other tobacco product, with unspecified nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.298	Nicotine dependence, other tobacco product, with other nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.290	Nicotine dependence, other tobacco product, uncomplicated	Diagnosis	ICD-10-CM
F17.291	Nicotine dependence, other tobacco product, in remission	Diagnosis	ICD-10-CM
F17.213	Nicotine dependence, cigarettes, with withdrawal	Diagnosis	ICD-10-CM
F17.219	Nicotine dependence, cigarettes, with unspecified nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.218	Nicotine dependence, cigarettes, with other nicotine-induced disorders	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
F17.210	Nicotine dependence, cigarettes, uncomplicated	Diagnosis	ICD-10-CM
F17.211	Nicotine dependence, cigarettes, in remission	Diagnosis	ICD-10-CM
F17.223	Nicotine dependence, chewing tobacco, with withdrawal	Diagnosis	ICD-10-CM
F17.229	Nicotine dependence, chewing tobacco, with unspecified nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.228	Nicotine dependence, chewing tobacco, with other nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.220	Nicotine dependence, chewing tobacco, uncomplicated	Diagnosis	ICD-10-CM
F17.221	Nicotine dependence, chewing tobacco, in remission	Diagnosis	ICD-10-CM
F17.203	Nicotine dependence unspecified, with withdrawal	Diagnosis	ICD-10-CM
Traumatic Brain Injury			
S06.9X0S	Unspecified intracranial injury without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.9X9S	Unspecified intracranial injury with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.9X8S	Unspecified intracranial injury with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.9X7S	Unspecified intracranial injury with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.9X4S	Unspecified intracranial injury with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.9X2S	Unspecified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.9X1S	Unspecified intracranial injury with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.9X3S	Unspecified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.9X6S	Unspecified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.9X5S	Unspecified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S06.300S	Unspecified focal traumatic brain injury without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.309S	Unspecified focal traumatic brain injury with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.308S	Unspecified focal traumatic brain injury with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.307S	Unspecified focal traumatic brain injury with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.304S	Unspecified focal traumatic brain injury with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S06.302S	Unspecified focal traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.301S	Unspecified focal traumatic brain injury with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.303S	Unspecified focal traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.306S	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.305S	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S06.5X0S	Traumatic subdural hemorrhage without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.5X9S	Traumatic subdural hemorrhage with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.5X8S	Traumatic subdural hemorrhage with loss of consciousness of any duration with death due to other cause before regaining consciousness,	Diagnosis	ICD-10-CM
S06.5X7S	Traumatic subdural hemorrhage with loss of consciousness of any duration with death due to brain injury before regaining consciousness,	Diagnosis	ICD-10-CM
S06.5X4S	Traumatic subdural hemorrhage with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.5X2S	Traumatic subdural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.5X1S	Traumatic subdural hemorrhage with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.5X3S	Traumatic subdural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.5X6S	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.5X5S	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S06.6X0S	Traumatic subarachnoid hemorrhage without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.6X9S	Traumatic subarachnoid hemorrhage with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.6X8S	Traumatic subarachnoid hemorrhage with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.6X7S	Traumatic subarachnoid hemorrhage with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.6X4S	Traumatic subarachnoid hemorrhage with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S06.6X2S	Traumatic subarachnoid hemorrhage with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.6X1S	Traumatic subarachnoid hemorrhage with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.6X3S	Traumatic subarachnoid hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.6X6S	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.6X5S	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S06.340S	Traumatic hemorrhage of right cerebrum without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.349S	Traumatic hemorrhage of right cerebrum with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.348S	Traumatic hemorrhage of right cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.347S	Traumatic hemorrhage of right cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.344S	Traumatic hemorrhage of right cerebrum with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.342S	Traumatic hemorrhage of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.341S	Traumatic hemorrhage of right cerebrum with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.343S	Traumatic hemorrhage of right cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.346S	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.345S	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S06.350S	Traumatic hemorrhage of left cerebrum without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.359S	Traumatic hemorrhage of left cerebrum with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.358S	Traumatic hemorrhage of left cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.357S	Traumatic hemorrhage of left cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S06.354S	Traumatic hemorrhage of left cerebrum with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.352S	Traumatic hemorrhage of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.351S	Traumatic hemorrhage of left cerebrum with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.353S	Traumatic hemorrhage of left cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.356S	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.355S	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S06.360S	Traumatic hemorrhage of cerebrum, unspecified, without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.369S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.368S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.367S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.364S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.362S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.361S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.363S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 1 hours to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.366S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.365S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S06.1X0S	Traumatic cerebral edema without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.1X9S	Traumatic cerebral edema with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.1X8S	Traumatic cerebral edema with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.1X7S	Traumatic cerebral edema with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S06.1X4S	Traumatic cerebral edema with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.1X2S	Traumatic cerebral edema with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.1X1S	Traumatic cerebral edema with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.1X3S	Traumatic cerebral edema with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.1X6S	Traumatic cerebral edema with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.1X5S	Traumatic cerebral edema with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S06.A0XS	Traumatic brain compression without herniation, sequela	Diagnosis	ICD-10-CM
S06.A1XS	Traumatic brain compression with herniation, sequela	Diagnosis	ICD-10-CM
F48.2	Pseudobulbar affect	Diagnosis	ICD-10-CM
F07.81	Postconcussional syndrome	Diagnosis	ICD-10-CM
F07.0	Personality change due to known physiological condition	Diagnosis	ICD-10-CM
S06.890S	Other specified intracranial injury without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.899S	Other specified intracranial injury with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.898S	Other specified intracranial injury with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.897S	Other specified intracranial injury with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.894S	Other specified intracranial injury with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.892S	Other specified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.891S	Other specified intracranial injury with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.893S	Other specified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.896S	Other specified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.895S	Other specified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
F07.89	Other personality and behavioral disorders due to known physiological condition	Diagnosis	ICD-10-CM
S04.049S	Injury of visual cortex, unspecified side, sequela	Diagnosis	ICD-10-CM
S04.041S	Injury of visual cortex, right side, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S04.042S	Injury of visual cortex, left side, sequela	Diagnosis	ICD-10-CM
S04.9XXS	Injury of unspecified cranial nerve, sequela	Diagnosis	ICD-10-CM
S04.20XS	Injury of trochlear nerve, unspecified side, sequela	Diagnosis	ICD-10-CM
S04.21XS	Injury of trochlear nerve, right side, sequela	Diagnosis	ICD-10-CM
S04.22XS	Injury of trochlear nerve, left side, sequela	Diagnosis	ICD-10-CM
S04.30XS	Injury of trigeminal nerve, unspecified side, sequela	Diagnosis	ICD-10-CM
S04.31XS	Injury of trigeminal nerve, right side, sequela	Diagnosis	ICD-10-CM
S04.32XS	Injury of trigeminal nerve, left side, sequela	Diagnosis	ICD-10-CM
S06.810S	Injury of right internal carotid artery, intracranial portion, not elsewhere classified without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.819S	Injury of right internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.818S	Injury of right internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.817S	Injury of right internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.814S	Injury of right internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.812S	Injury of right internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.811S	Injury of right internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.813S	Injury of right internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.816S	Injury of right internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.815S	Injury of right internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S04.899S	Injury of other cranial nerves, unspecified side, sequela	Diagnosis	ICD-10-CM
S04.891S	Injury of other cranial nerves, right side, sequela	Diagnosis	ICD-10-CM
S04.892S	Injury of other cranial nerves, left side, sequela	Diagnosis	ICD-10-CM
S04.039S	Injury of optic tract and pathways, unspecified side, sequela	Diagnosis	ICD-10-CM
S04.031S	Injury of optic tract and pathways, right side, sequela	Diagnosis	ICD-10-CM
S04.032S	Injury of optic tract and pathways, left side, sequela	Diagnosis	ICD-10-CM
S04.019S	Injury of optic nerve, unspecified eye, sequela	Diagnosis	ICD-10-CM
S04.011S	Injury of optic nerve, right eye, sequela	Diagnosis	ICD-10-CM
S04.012S	Injury of optic nerve, left eye, sequela	Diagnosis	ICD-10-CM
S04.02XS	Injury of optic chiasm, sequela	Diagnosis	ICD-10-CM
S04.819S	Injury of olfactory [1st] nerve, unspecified side, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S04.811S	Injury of olfactory [1st] nerve, right side, sequela	Diagnosis	ICD-10-CM
S04.812S	Injury of olfactory [1st] nerve, left side, sequela	Diagnosis	ICD-10-CM
S04.10XS	Injury of oculomotor nerve, unspecified side, sequela	Diagnosis	ICD-10-CM
S04.11XS	Injury of oculomotor nerve, right side, sequela	Diagnosis	ICD-10-CM
S04.12XS	Injury of oculomotor nerve, left side, sequela	Diagnosis	ICD-10-CM
S06.820S	Injury of left internal carotid artery, intracranial portion, not elsewhere classified without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.829S	Injury of left internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.828S	Injury of left internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.827S	Injury of left internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.824S	Injury of left internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.822S	Injury of left internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.821S	Injury of left internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.823S	Injury of left internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.826S	Injury of left internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.825S	Injury of left internal carotid artery, intracranial portion, not elsewhere classified with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S04.50XS	Injury of facial nerve, unspecified side, sequela	Diagnosis	ICD-10-CM
S04.51XS	Injury of facial nerve, right side, sequela	Diagnosis	ICD-10-CM
S04.52XS	Injury of facial nerve, left side, sequela	Diagnosis	ICD-10-CM
S04.60XS	Injury of acoustic nerve, unspecified side, sequela	Diagnosis	ICD-10-CM
S04.61XS	Injury of acoustic nerve, right side, sequela	Diagnosis	ICD-10-CM
S04.62XS	Injury of acoustic nerve, left side, sequela	Diagnosis	ICD-10-CM
S04.70XS	Injury of accessory nerve, unspecified side, sequela	Diagnosis	ICD-10-CM
S04.71XS	Injury of accessory nerve, right side, sequela	Diagnosis	ICD-10-CM
S04.72XS	Injury of accessory nerve, left side, sequela	Diagnosis	ICD-10-CM
S04.40XS	Injury of abducent nerve, unspecified side, sequela	Diagnosis	ICD-10-CM
S04.41XS	Injury of abducent nerve, right side, sequela	Diagnosis	ICD-10-CM
S04.42XS	Injury of abducent nerve, left side, sequela	Diagnosis	ICD-10-CM
S06.4X0S	Epidural hemorrhage without loss of consciousness, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S06.4X9S	Epidural hemorrhage with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.4X8S	Epidural hemorrhage with loss of consciousness of any duration with death due to other causes prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.4X7S	Epidural hemorrhage with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.4X4S	Epidural hemorrhage with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.4X2S	Epidural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.4X1S	Epidural hemorrhage with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.4X3S	Epidural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.4X6S	Epidural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.4X5S	Epidural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S06.2X0S	Diffuse traumatic brain injury without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.2X9S	Diffuse traumatic brain injury with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.2X8S	Diffuse traumatic brain injury with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.2X7S	Diffuse traumatic brain injury with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.2X4S	Diffuse traumatic brain injury with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.2X2S	Diffuse traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.2X1S	Diffuse traumatic brain injury with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.2X3S	Diffuse traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.2X6S	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.2X5S	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious levels, sequela	Diagnosis	ICD-10-CM
S06.370S	Contusion, laceration, and hemorrhage of cerebellum without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.379S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S06.378S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.377S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.374S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.372S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.371S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.373S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.376S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.375S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S06.380S	Contusion, laceration, and hemorrhage of brainstem without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.389S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.388S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.387S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.384S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.382S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.381S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.383S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.386S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.385S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S06.310S	Contusion and laceration of right cerebrum without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.319S	Contusion and laceration of right cerebrum with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.318S	Contusion and laceration of right cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.317S	Contusion and laceration of right cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.314S	Contusion and laceration of right cerebrum with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.312S	Contusion and laceration of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.311S	Contusion and laceration of right cerebrum with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.313S	Contusion and laceration of right cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.316S	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.315S	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S06.320S	Contusion and laceration of left cerebrum without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.329S	Contusion and laceration of left cerebrum with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.328S	Contusion and laceration of left cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.327S	Contusion and laceration of left cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.324S	Contusion and laceration of left cerebrum with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.322S	Contusion and laceration of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.321S	Contusion and laceration of left cerebrum with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.323S	Contusion and laceration of left cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.326S	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S06.325S	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S06.330S	Contusion and laceration of cerebrum, unspecified, without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.339S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.338S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.337S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.334S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.332S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.331S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.333S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.336S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.335S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
S06.0X0S	Concussion without loss of consciousness, sequela	Diagnosis	ICD-10-CM
S06.0X9S	Concussion with loss of consciousness of unspecified duration, sequela	Diagnosis	ICD-10-CM
S06.0X8S	Concussion with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.0X7S	Concussion with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, sequela	Diagnosis	ICD-10-CM
S06.0X4S	Concussion with loss of consciousness of 6 hours to 24 hours, sequela	Diagnosis	ICD-10-CM
S06.0X2S	Concussion with loss of consciousness of 31 minutes to 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.0X1S	Concussion with loss of consciousness of 30 minutes or less, sequela	Diagnosis	ICD-10-CM
S06.0X3S	Concussion with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela	Diagnosis	ICD-10-CM
S06.0X6S	Concussion with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela	Diagnosis	ICD-10-CM
S06.0X5S	Concussion with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela	Diagnosis	ICD-10-CM
Viral Hepatitis			
B19.9	Unspecified viral hepatitis without hepatic coma	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
B19.0	Unspecified viral hepatitis with hepatic coma	Diagnosis	ICD-10-CM
B19.20	Unspecified viral hepatitis C without hepatic coma	Diagnosis	ICD-10-CM
B19.21	Unspecified viral hepatitis C with hepatic coma	Diagnosis	ICD-10-CM
B19.10	Unspecified viral hepatitis B without hepatic coma	Diagnosis	ICD-10-CM
B19.11	Unspecified viral hepatitis B with hepatic coma	Diagnosis	ICD-10-CM
B17.8	Other specified acute viral hepatitis	Diagnosis	ICD-10-CM
B18.8	Other chronic viral hepatitis	Diagnosis	ICD-10-CM
B15.9	Hepatitis A without hepatic coma	Diagnosis	ICD-10-CM
B15.0	Hepatitis A with hepatic coma	Diagnosis	ICD-10-CM
B18.9	Chronic viral hepatitis, unspecified	Diagnosis	ICD-10-CM
B18.2	Chronic viral hepatitis C	Diagnosis	ICD-10-CM
B18.1	Chronic viral hepatitis B without delta-agent	Diagnosis	ICD-10-CM
B18.0	Chronic viral hepatitis B with delta-agent	Diagnosis	ICD-10-CM
Z22.52	Carrier of viral hepatitis C	Diagnosis	ICD-10-CM
Z22.51	Carrier of viral hepatitis B	Diagnosis	ICD-10-CM
Z22.50	Carrier of unspecified viral hepatitis	Diagnosis	ICD-10-CM
Z22.59	Carrier of other viral hepatitis	Diagnosis	ICD-10-CM
B17.9	Acute viral hepatitis, unspecified	Diagnosis	ICD-10-CM
B17.2	Acute hepatitis E	Diagnosis	ICD-10-CM
B17.10	Acute hepatitis C without hepatic coma	Diagnosis	ICD-10-CM
B17.11	Acute hepatitis C with hepatic coma	Diagnosis	ICD-10-CM
B16.2	Acute hepatitis B without delta-agent with hepatic coma	Diagnosis	ICD-10-CM
B16.9	Acute hepatitis B without delta-agent and without hepatic coma	Diagnosis	ICD-10-CM
B16.1	Acute hepatitis B with delta-agent without hepatic coma	Diagnosis	ICD-10-CM
B16.0	Acute hepatitis B with delta-agent with hepatic coma	Diagnosis	ICD-10-CM
B17.0	Acute delta-(super) infection of hepatitis B carrier	Diagnosis	ICD-10-CM
Weight Loss			
E40	Kwashiorkor	Diagnosis	ICD-10-CM
E41	Nutritional marasmus	Diagnosis	ICD-10-CM
E42	Marasmic kwashiorkor	Diagnosis	ICD-10-CM
E43	Unspecified severe protein-calorie malnutrition	Diagnosis	ICD-10-CM
E44.0	Moderate protein-calorie malnutrition	Diagnosis	ICD-10-CM
E44.1	Mild protein-calorie malnutrition	Diagnosis	ICD-10-CM
E45	Retarded development following protein-calorie malnutrition	Diagnosis	ICD-10-CM
E46	Unspecified protein-calorie malnutrition	Diagnosis	ICD-10-CM
E64.0	Sequelae of protein-calorie malnutrition	Diagnosis	ICD-10-CM

Appendix K. Calculation of the Test Statistic for Unconditional Bernoulli Probability

The log likelihood ratio (LLR) based test statistic T can be calculated as:

Where: T = unconditional Bernoulli tree-based scan statistic
 c_G = cases in the treatment group for a given node G
 n_G = cases in the reference group for a given node G
 p = probability of being in the treatment group
(for 1:1 matched pairs, this is 0.5)
 G = node of interest

$$LLR(G) = \ln \left(\frac{\left(\frac{c_G}{c_G + n_G} \right)^{c_G} \left(\frac{n_G}{c_G + n_G} \right)^{n_G}}{(p)^{c_G} (1-p)^{n_G}} \right) I \left(\frac{c_G}{c_G + n_G} > p \right)$$

$$T = \max_G LLR(G)$$

¹Expression in blue: This is the maximum likelihood estimation. It takes the form of a Bernoulli probability model. The numerator of the equation is based on the observed data. The denominator of the equation is based on the expectation under the null hypothesis. If the observed data “fit” the pattern of the null hypothesis, then this expression would be 1. The “log” of the function is for mathematical convenience. The $\ln(1) = 0$.

²Expression in green: This is an indication function. It means that a log-likelihood ratio (LLR) is ONLY recorded if there are more cases in the treatment group (ACEI) than expected. So, a LLR is only calculated among nodes on the tree when the LLR would normally exceed 0 (or the likelihood ratio would exceed 1).

³Expression in red: The Log Likelihood Ratio is calculated for every position (node) on the tree including each individual diagnosis code and groupings of codes. For any dataset (i.e., across all nodes of the tree), the test statistic for that dataset is the maximum across all the nodes.

Appendix L. Specifications Defining Parameters for this Request

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) tool, version 11.3.0, to perform signal identification on semaglutide (Ozempic) compared to sitagliptin among Type 2 diabetics in the Sentinel Distributed Database. This is a 1:1 propensity-score matched TreeScan analysis that scans all non-pregnancy related outcomes to determine whether there are imbalances in outcome occurrence between the two groups that rises to the level of statistical significance. The analytic dataset files created will be used as input to the TreeScan software (v.2.0).

Index start date¹: 1/1/2018-Latest Available Data
Index end date options²: Follow Up Driven
Follow-up end date: Latest Available Data
Censor at Data Partner End Date: Yes
Coverage Requirement: Medical and Drug Coverage
Enrollment Requirement: 400 days
Enrollment Gap: 45 days
Age Groups: 18-39, 40-64, 65+
Freeze Data: Matched

	Analysis 2 (No Insulin Exclusion)			
Drug/Exposure	Semaglutide (Just Ozempic not other semaglutide products)	Sitagliptin	Semaglutide (Just Ozempic not other semaglutide products)	Sitagliptin
Incident Exposure/Comparator	Semaglutide (Just Ozempic not other semaglutide products)	Sitagliptin	Semaglutide (Just Ozempic not other semaglutide products)	Sitagliptin
Washout (days)	365	365	365	365
Cohort Definition	First valid exposure episode during query period only	First valid exposure episode during query period only	First valid exposure episode during query period only	First valid exposure episode during query period only
Stockpiling	Default	Default	Default	Default
Episode Gap	14	14	14	14
Episode Extension Period	14	14	14	14
Minimum Episode Duration	1	1	1	1
Minimum Days Supplied	1	1	1	1
Maximum Episode Duration	183	183	183	183
Censor exposure episode at the earliest evidence of:	Recorded death, end date of query period, disenrollment, end of exposure episode, end date of DP, initiation of sitigliptin, rybelsus, wegovy, DPP4i, and GLP-1 RA use	Recorded death, end date of query period, disenrollment, end of exposure episode, end date of DP, initiation of semagultide rybelsus, wegovy, DPP4i, and GLP-1 use	Recorded death, end date of query period, disenrollment, end of exposure episode, end date of DP, initiation of sitigliptin, rybelsus, wegovy, DPP4i, and GLP-1 RA use	Recorded death, end date of query period, disenrollment, end of exposure episode, end date of DP, initiation of semagultide rybelsus, wegovy, DPP4i, and GLP-1 use

Appendix L. Specifications Defining Parameters for this Request				
Inclusion/Exclusion				
Pre-Existing Condition	T2DM		T2DM	
Include/Exclude	Include		Include	
Care Setting/PDX	1 IP or 2 AV/ED		1 IP or 2 AV/ED	
Lookback Period	-400, 0		-400, 0	
Pre-Existing Condition	Cancer		Cancer	
Include/Exclude	Exclude		Exclude	
Care Setting/PDX	Any		Any	
Lookback Period	-400, 0		-400, 0	
Pre-Existing Condition	ESRD		ESRD	
Include/Exclude	Exclude		Exclude	
Care Setting/PDX	Any		Any	
Lookback Period	-400, 0		-400, 0	
Pre-Existing Condition	T1DM diagnoses		T1DM diagnoses	
Include/Exclude	Exclude		Exclude	
Care Setting/PDX	1 IP or 2 AV/ED		1 IP or 2 AV/ED	
Lookback Period	-400, 0		-400, 0	
Pre-Existing Condition	Sitagliptin	Semagultide	Sitagliptin	Semagultide
Include/Exclude	Exclude	Exclude	Exclude	Exclude
Care Setting/PDX	Any	Any	Any	Any
Lookback Period	-400, 0	-400, 0	-400, 0	-400, 0
Event/Outcome				
Outcome	TreeScan ³		TreeScan ³	
Outcome Node Assessment	3rd levels of ICD10 MLCCS tree		3rd levels of ICD10 MLCCS tree	
Care Setting/PDX	IP*, ED*		IP*, ED*, AV*	
Care Setting/PDX washout	Any		Any	
Washout (days)	400		400	
Blackout Period	--		--	
Start of at-risk period	1		1	

Appendix L. Specifications Defining Parameters for this Request	
Propensity Score Matching	
Covariates	See Covariate tab
Covariate Evaluation Window	-400, -1
Matching Ratio	1:1
Matching Caliper Settings	0.025
High-Dimensional Propensity Score	No
Analysis Type	Signal Identification
¹ Index start date identifies the date on which patients may begin contribute eligible index exposures/events. Data prior to the index start date may be used to determine	
² The query will establish a fixed risk window analysis.	
³ TreeScan software will be used to evaluate signal identification.	
<i>ICD-10-CM, HCPCS, and CPT codes are provided by Optum360. ICD-10-CM codes were mapped from ICD-9-CM codes using the Centers for Medicare and Medicaid Services General Equivalence Mappings. NDC codes are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."</i>	

Appendix L. Specifications Defining Parameters for this Request				
	Analysis 2 (No Insulin Exclusion)			
Drug/Exposure				
Incident Exposure/Comparator	Semaglutide (Just Ozempic not other semaglutide products)	Sitagliptin	Semaglutide (Just Ozempic not other semaglutide products)	Sitagliptin
Washout (days)	365	365	365	365
Cohort Definition	First valid exposure episode during query period only	First valid exposure episode during query period only	First valid exposure episode during query period only	First valid exposure episode during query period only
Stockpiling	Default	Default	Default	Default
Episode Gap	14	14	14	14
Episode Extension Period	14	14	14	14
Minimum Episode Duration	1	1	1	1
Minimum Days Supplied	1	1	1	1
Maximum Episode Duration	183	183	183	183
Censor exposure episode at the earliest evidence of:	Recorded death, end date of query period, disenrollment, end of exposure episode, end date of DP, initiation of sitigliptin, rybelsus, wegovy, DPP4i, and GLP-1 RA use	Recorded death, end date of query period, disenrollment, end of exposure episode, end date of DP, initiation of semaglutide rybelsus, wegovy, DPP4i, and GLP-1 use	Recorded death, end date of query period, disenrollment, end of exposure episode, end date of DP, initiation of sitigliptin, rybelsus, wegovy, DPP4i, and GLP-1 RA use	Recorded death, end date of query period, disenrollment, end of exposure episode, end date of DP, initiation of semaglutide rybelsus, wegovy, DPP4i, and GLP-1 use
Inclusion/Exclusion				
Pre-Existing Condition		T2DM		T2DM
Include/Exclude		Include		Include
Care Setting/PDX		1 IP or 2 AV/ED		1 IP or 2 AV/ED
Lookback Period		-400, 0		-400, 0
Pre-Existing Condition		Cancer		Cancer
Include/Exclude		Exclude		Exclude
Care Setting/PDX		Any		Any
Lookback Period		-400, 0		-400, 0
Pre-Existing Condition		ESRD		ESRD
Include/Exclude		Exclude		Exclude
Care Setting/PDX		Any		Any
Lookback Period		-400, 0		-400, 0

Appendix L. Specifications Defining Parameters for this Request				
Pre-Existing Condition	T1DM diagnoses		T1DM diagnoses	
Include/Exclude	Exclude		Exclude	
Care Setting/PDX	1 IP or 2 AV/ED		1 IP or 2 AV/ED	
Lookback Period	-400, 0		-400, 0	
Pre-Existing Condition	Sitagliptin	Semagultide	Sitagliptin	Semagultide
Include/Exclude	Exclude	Exclude	Exclude	Exclude
Care Setting/PDX	Any	Any	Any	Any
Lookback Period	-400, 0	-400, 0	-400, 0	-400, 0
Event/Outcome	TreeScan ³		TreeScan ³	
Outcome	3rd levels of ICD10 MLCCS tree		3rd levels of ICD10 MLCCS tree	
Outcome Node Assessment	IP*, ED*		IP*, ED*, AV*	
Care Setting/PDX	Any		Any	
Care Setting/PDX washout	400		400	
Washout (days)	--		--	
Blackout Period	1		1	
Start of at-risk period				
Propensity Score Matching	See Covariate tab			
Covariates	-400, -1			
Covariate Evaluation Window	1:1			
Matching Ratio	0.025			
Matching Caliper Settings	Yes			
High-Dimensional Propensity Score	Signal Identification			
Analysis Type				
¹ Index start date identifies the date on which patients may begin contribute eligible index exposures/events. Data prior to the index start date may be used to determine				
² The query will establish a fixed risk window analysis.				
³ TreeScan software will be used to evaluate signal identification.				
<i>ICD-10-CM, HCPCS, and CPT codes are provided by Optum360. ICD-10-CM codes were mapped from ICD-9-CM codes using the Centers for Medicare and Medicaid Services General Equivalence Mappings. NDC codes are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."</i>				

Appendix M. Specifications Defining Parameters for Baseline Characteristics in this Request

	Evaluation Period	
	Start	End
Patient demographics		
<i>Age (mean; year)</i>	0	0
<i>Sex</i>		
Female	0	0
Male	0	0
Other	0	0
<i>Year</i>		
2018	0	0
2019	0	0
2020	0	0
2021	0	0
Existing conditions or medical history		
<i>Combined comorbidity score (mean)</i>	-400	-1
<i>Acute Myocardial Infarction</i>	-400	-1
<i>ADHD, Conduct Disorders, Hyperkinetic Syndrome</i>	-400	-1
<i>Alcohol Use Disorders</i>	-400	-1
<i>Alzheimer's Disease</i>	-400	-1
<i>Anemia</i>	-400	-1
<i>Anxiety Disorders</i>	-400	-1
<i>Arrhythmia</i>	-400	-1
<i>Asthma</i>	-400	-1
<i>Autism Spectrum Disorders</i>	-400	-1
<i>Autoimmune disease</i>	-400	-1
<i>Bacterial infection</i>	-400	-1
<i>Benign Prostatic Hyperplasia</i>	-400	-1
<i>Bipolar Disorder</i>	-400	-1
<i>Cataracts</i>	-400	-1
<i>Cerebral Palsy</i>	-400	-1
<i>CKD</i>	-400	-1
<i>Coagulopathy</i>	-400	-1
<i>Colonoscopy</i>	-400	-1
<i>COPD</i>	-400	-1
<i>Cystic Fibrosis and Other Metabolic Developmental Disorders</i>	-400	-1
<i>Degenerative Disease of CNS</i>	-400	-1
<i>Depression, Bipolar or other depressive mood disorders</i>	-400	-1
<i>Depressive Disorders</i>	-400	-1
<i>Diabetes</i>	-400	-1
<i>Drug Use Disorders</i>	-400	-1
<i>Durable Medical Equipment</i>	-400	-1
<i>Epilepsy</i>	-400	-1
<i>Fecal occult blood test</i>	-400	-1
<i>Fibromyalgia, Chronic Pain and Fatigue</i>	-400	-1
<i>Fluid and electrolyte disorder</i>	-400	-1
<i>Gallstones</i>	-400	-1
<i>Glaucoma</i>	-400	-1

Appendix M. Specifications Defining Parameters for Baseline Characteristics in this Request

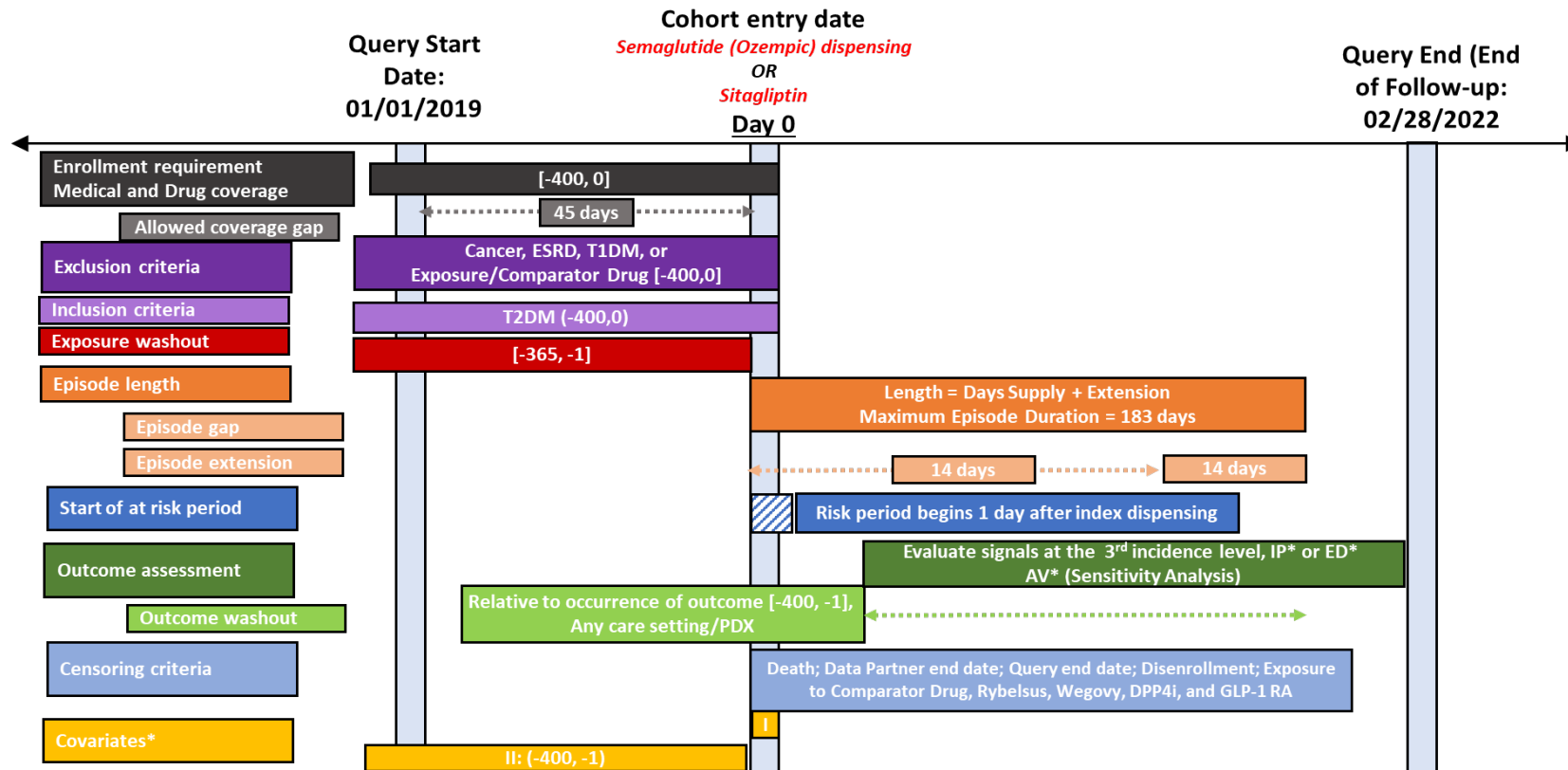
	Evaluation Period	
	Start	End
<i>Heart Failure and Non-Ischemic Heart Disease</i>	-400	-1
<i>Hip/Pelvic Fracture</i>	-400	-1
<i>HIV/AIDS</i>	-400	-1
<i>Hyperparathyroidism</i>	-400	-1
<i>HPV DNA test</i>	-400	-1
<i>Hyperlipidemia</i>	-400	-1
<i>Hypertension</i>	-400	-1
<i>Hypothyroidism</i>	-400	-1
<i>Intellectual Disabilities and Related Conditions</i>	-400	-1
<i>Ischemic Heart Disease</i>	-400	-1
<i>Kawasaki Disease</i>	-400	-1
<i>Learning Disabilities</i>	-400	-1
<i>Leukemias and Lymphomas</i>	-400	-1
<i>Liver Disease, Cirrhosis and Other Liver Conditions</i>	-400	-1
<i>Mammogram</i>	-400	-1
<i>Medicines for gout</i>	-400	-1
<i>Mental and Physical Impairments</i>	-400	-1
<i>Migraine and Chronic Headache</i>	-400	-1
<i>Mobility Impairments</i>	-400	-1
<i>Multiple Sclerosis and Transverse Myelitis</i>	-400	-1
<i>Muscular Dystrophy</i>	-400	-1
<i>Non-Alzheimer's Dementia</i>	-400	-1
<i>Obesity</i>	-400	-1
<i>Opioid Use Disorder</i>	-400	-1
<i>Organ Transplant</i>	-400	-1
<i>Osteoporosis With or Without Pathological Fracture</i>	-400	-1
<i>Other Developmental Delays</i>	-400	-1
<i>Other Infections (mumps, flu/influenza, Herpes, Coxsackie, Epstein-Barr, Cytomegalic</i>	-400	-1
<i>Oxicam anti inflammatory drugs</i>	-400	-1
<i>Pap smear</i>	-400	-1
<i>Parkinson's Disease and Secondary Parkinsonism</i>	-400	-1
<i>Peripheral vascular disease</i>	-400	-1
<i>Personality Disorders</i>	-400	-1
<i>Pneumonia, All-cause</i>	-400	-1
<i>Post-Traumatic Stress Disorder (PTSD)</i>	-400	-1
<i>Pressure and Chronic Ulcers</i>	-400	-1
<i>PSA Test</i>	-400	-1
<i>Psychosis</i>	-400	-1
<i>Pulmonary circulation disorders</i>	-400	-1
<i>Pulmonary Disease</i>	-400	-1
<i>Renal Failure</i>	-400	-1
<i>Reyes Syndrome</i>	-400	-1
<i>Rheumatoid Arthritis/Osteoarthritis</i>	-400	-1
<i>Schizophrenia</i>	-400	-1
<i>Schizophrenia and Other Psychotic disorders</i>	-400	-1
<i>Screening examinations and disease management</i>	-400	-1

Appendix M. Specifications Defining Parameters for Baseline Characteristics in this Request

	Evaluation Period	
	Start	End
Sensory - Blindness and Visual Impairment	-400	-1
Sensory - Deafness and Hearing Impairment	-400	-1
<i>Sertraline</i>	-400	-1
<i>Spina Bifida and Other Congenital Anomalies of the Nervous System</i>	-400	-1
<i>Spinal Cord Injury</i>	-400	-1
<i>Stroke/Transient Ischemic attack</i>	-400	-1
<i>Sulfa Antibiotics</i>	-400	-1
Thrombotic Thrombocytopenic purpura	-400	-1
<i>Tobacco Use</i>	-400	-1
<i>Traumatic Brain Injury and Nonpsychotic Mental Disorders due to Brain Damage</i>	-400	-1
<i>Viral Hepatitis</i>	-400	-1
<i>Weight Loss</i>	-400	-1
<i>Insulin dispensings</i>	-400	-1
<i>Insulin procedures</i>	-400	-1
Health service utilization metrics		
<i>Mean number of dispensings</i>	-400	-1
<i>Mean number of unique drug classes</i>	-400	-1
<i>Mean number of inpatient encounters</i>	-400	-1
<i>Mean number of emergency department encounters</i>	-400	-1
<i>Mean number of ambulatory encounters</i>	-400	-1

*Covariates in italics indicate those that were included in the propensity score model

Appendix N. Diagram Detailing the Design of this Request



*Window I: Age, Sex, Year

*Window II: CCI, Acquired hypothyroidism, ADHD, Conduct Disorders, Hyperkinetic Syndrome, AMI, Alzheimer's disease, Anemia, Anxiety Disorders, Asthma, Arrhythmia, Autoimmune Disease, Autism Spectrum Disorder, Bacterial infection, Benign prostatic hyperplasia, Cataracts, Chronic kidney disease, COPD, Coagulopathy, Cystic Fibrosis and other metabolic developmental disorders, Cerebral palsy, Degenerative disease of central nervous system; Depression, Bipolar or other Depressive Disorders, Drug Use Disorders, Diabetes, Durable medical equipment, Epilepsy; Fibromyalgia, Chronic Pain and Fatigue, Fluid and Electrolyte Disorder, Gallstones, Glaucoma, Gout medication, Heart failure and non-ischemic heart disease, Hip/Pelvic Fracture, HIV/AIDS, HPV DNA test, Hyperlipidemia, Hyperparathyroidism, Hypertension, Hypothyroidism, Intellectual Disabilities and Related Conditions, Ischemic heart disease, Insulin use, Learning disabilities, Leukemias and lymphomas, Liver Disease, Cirrhosis and Other Liver Conditions, Kawasaki disease, Migraine and chronic headache, Mobility impairments, MS and transvers myelitis, Muscular dystrophy, Non-Alzheimer's Dementia, Obesity, Opioid Use Disorder, Osteoporosis, Organ transplant, Other Developmental Delays, Other infectious Diseases, Oxicam anti-inflammatory drugs, Parkinson's Disease and Secondary Parkinsonism, Pap smear, All-cause Pneumonia, Peripheral Vascular Disease, Personality Disorder, Pressure or Chronic Ulcers, PTSD, Pulmonary Disease, Pulmonary Circulation, PSA test, Psychosis Renal Failure, Reyes syndrome, Rheumatoid arthritis and osteoarthritis, Stroke/Transient ischemic attack; Screenings, examinations and disease management, Sulfa Antibiotics, Sertraline, Sensory - Deafness and Hearing Impairment, Sensory - Blindness and Visual Impairment, Schizophrenia, Schizophrenia, and other psychotic disorders, Spina Bifida and Other Congenital Anomalies of the Nervous System, Spinal cord injury, Thrombotic Thrombocytopenic purpura, Tobacco Use, Traumatic Brain Injury and Nonpsychotic Mental Disorders due to Brain Damage, Viral Hepatitis, Weight Loss, Mean number of ambulatory encounters, Mean number of emergency room encounters, Mean number of inpatient hospital encounters, Mean number of unique drug classes, Mean number of filled prescriptions