

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_wp009

Request ID: cder_sir_wp009_nsdv_v01

Request Description: In this report, we performed signal identification for guselkumab by monitoring non-pregnancy and non-cancer outcomes among new users of guselkumab (exposure of interest) compared to new users of risankizumab (active comparator) in the Sentinel Distributed Database (SDD).

Note: This request re-used the study design (selection criteria, exposures, outcomes) and propensity score parameters as in the request ID: **cderv_sir_wp008_nsdv_v01**, where the purpose was signal identification for risankizumab (exposure) using an active comparator, new user design (active comparator - guselkumab). Additionally, the current study used the aggregated data from the propensity score matched analytic cohorts returned from the Data Partners (DPs) as requested in request ID: **cderv_sir_wp008_nsdv_v01** to conduct the Tree Only Scan analysis for signal identification of guselkumab.

Sentinel Routine Querying Module: Cohort Identification and Descriptive Analysis (CIDA) module, version 13.0.1, with the Propensity Score Analysis (PSA) and Signal Identification (SI) modules.

Data Source: We distributed this query to 13 Sentinel Data Partners on March 11, 2024. We included data from six Data Partners where the propensity score models converged. The DPs that were not included in the analysis lacked sufficient exposures to ensure propensity score model convergence. The study period included data from April 23, 2019 through September 30, 2023. See Appendix A for a list of dates of available data for each of the six Data Partners who contributed to this report.

Study Design: We conducted this signal identification assessment using an active comparator, new user design to identify incident outcomes following initiation of risankizumab and guselkumab using Tree Only Scan analyses. As part of request id: **cderv_sir_wp008_nsdv_v01**, we identified all valid incident users of risankizumab and guselkumab in women aged 18 years or older without evidence of pregnancy, and estimated propensity scores (PS) using both a conventional user-specified and a high-dimensional (hdPS) approach. We created matched exposure pairs using 1:1 fixed ratio matching of risankizumab users to guselkumab users. We monitored the pairs for non-pregnancy and non-cancer health outcomes of interest (HOIs) through 183 days post-treatment. This is a Type 2 analysis using the Propensity Score Analysis and Signal Identification modules in the Query Request Package (QRP) documentation.

Exposure of Interest: We defined the exposure of interest, guselkumab, and the comparator of interest, risankizumab, using National Drug Codes (NDCs) and Healthcare Common Procedure Coding System (HCPCS) codes. NDCs were queried in the dispensing and procedure tables in the Sentinel Common Data Model (SCDM) format. Only the first valid and qualifying treatment dispensings (index exposures) were evaluated; cohort re-entry was not allowed. Please see Appendix B for generic and brand names of medical products and Appendix C for HCPCS codes used to define the exposure in this request.

Cohort Eligibility Criteria: We required members to be enrolled in health plans with medical and drug coverage for at least 400 days prior to the index exposure date, during which gaps in coverage of up to 45 days were allowed and treated as continuous enrollment. The following age groups were included in the cohort: 18-39, 40-64, and 65+ years. We defined incident exposure as no evidence of guselkumab or risankizumab in the previous 183 days.

Exclusion Criteria: We excluded evidence of ongoing pregnancy in the 183 days before and after index, and live-birth delivery or other pregnancy outcome in the 183 days after and including the index date.

Exclusion criteria were defined using Current Procedural Terminology, Fourth Edition (CPT-4), HCPCS, International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) codes. See Appendix D for diagnosis and procedure codes used to define exclusion criteria.

Overview for Request: cder_sir_wp009

Follow-up Time: Follow-up began on the day after the index dispensing and continued for 183 days or until the first occurrence of any of the following: 1) death, 2) disenrollment, 3) end of the query period, 4) end of Data Partner data, 5) dispensing or administration of opposite study drug, or 6) dispensing or administration of any other alternative biological treatment (including tildrakizumab, ustekinumab, secukinumab, ixekizumab, and brodalumab).

Baseline Characteristics: We evaluated the following demographic characteristics on the index date: age, sex, race, ethnicity, and year of treatment initiation. We additionally evaluated the following characteristics:

- Indications assessed over [-400, 0] days from index date i.e., date of treatment initiation: plaque psoriasis, psoriatic arthritis, Crohn's disease, any of the previously listed indications, only plaque psoriasis without the other two indications, and the absence of any of the above indications.
- Immunocompromised status assessed over [-400, 0] days from index date.
- Chronic conditions assessed over [-400, -1] days from index date: acute myocardial infarction, Alzheimer's disease, anemia, asthma, atrial fibrillation or flutter, benign prostatic hyperplasia, breast cancer, colorectal cancer, endometrial cancer, lung cancer, prostate cancer, urologic cancer, cataracts, chronic kidney disease, chronic obstructive pulmonary disorder, depression/bipolar or other mood disorders, diabetes, glaucoma, heart failure and non-ischemic heart disease, hip/pelvic fractures, hyperlipidemia, hypertension, hypothyroidism, ischemic heart disease, non-Alzheimer's dementia, osteoporosis, Parkinson's disease and secondary parkinsonism, rheumatoid arthritis/osteoarthritis, stroke/transient ischemic attack, and hepatic disorders.
- Prior treatments of interest assessed over [-400, 0] days from index date: non-anti-TNF systemic biological treatments (including tildrakizumab, ustekinumab, secukinumab, ixekizumab, and brodalumab), anti-TNF systemic biological treatments (including adalimumab, etanercept, and infliximab), systemic non-biologic treatments (including cyclosporine and methotrexate), and topical treatments (including corticosteroids, vitamin D analogs, tar, retinoids, tacrolimus, and pimecrolimus).
- Concomitant treatments of interest assessed over [0, 28] days from index date: anti-TNF systemic biological treatments, systemic non-biologic treatments, and topical treatments.
- Two or more systemic alternative treatments (including non-anti-TNF systemic biological treatments, systemic non-biological treatments, or anti-TNF systemic biological treatments) over [0, 56] days from index date.
- Healthcare utilization metrics, drug utilization metrics, and Charlson/Elixhauser combined comorbidity score over [-400, -1] days from index date.

Please see Appendix E for a list of CPT-4, Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), HCPCS, and ICD-10-PCS procedure codes along with ICD-10-CM diagnosis codes, and Appendix F for a list of generic and brand names used to define characteristics in this request.

Propensity Score Adjustment: The conventional user-specified PS model regressed against the characteristics noted above, with the exception of the following: post-index alternative treatments, any indication, no indication, plaque psoriasis without evidence of any other indication, race, ethnicity, mean number of generics dispensed, and mean number of non-acute institutional encounters. The hdPS model included the same characteristics as the conventional PS model, in addition to using characteristics at each Data Partner identified by the hdPS algorithm as proxy confounders. We considered the top 100 codes (truncating ICD-10 codes to the 3rd level) in the [-183, -1] days around the index date from each category dimension (i.e., diagnosis, procedure, etc) based on the strength of the relationship between the proxy confounder and exposure, and ultimately selected the top 300 to include in the hdPS model. Please see Appendix G for the top 100 codes selected from each Data Partner. After estimating the PS, we performed 1:1 fixed ratio, nearest neighbor propensity score matching of risankizumab users to guselkumab users without replacement using a caliper of 0.05 on the probability scale.

Overview for Request: cder_sir_wp009

Outcome Assessment via Signal Identification: We evaluated new HOIs using a hierarchical tree based on ICD-10-CM diagnosis codes. We trimmed our tree to exclude outcomes that are unlikely to be drug-related (such as those with long induction and latency windows like neoplasms; or those caused by external factors). Chapters beginning with C (neoplasms), D* (neoplasms), O (pregnancy), P (perinatal), Q (congenital malformations), V-Y* were excluded. The asterisk * indicates some exceptions, for example, neoplasms of uncertain behavior of lymphoid, hematopoietic, and related tissue (D47), falls (W00-W19), intentional self-harm (X71-X83) are retained on the tree as they may be related to drug exposures.

In our primary Tree-Only Scan analyses, we identified incident HOIs occurring in the inpatient or emergency department settings. In our sensitivity analyses, we identified HOIs occurring in the inpatient, emergency department, or ambulatory settings. An outcome was considered to be incident if there was no evidence of an outcome with the same first 3 digits of the ICD-10-CM code in the prior 400 days in any setting.

Tree-Based Scan Statistics: Potential signals were identified via the TreeScan™ software (version 2.1.1), which is a data-mining software that implements tree-based scan statistics. The software was used to determine whether there were imbalances in outcome occurrence between the guselkumab (exposure) and risankizumab (comparator) groups that rose to the level of statistical significance. 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-5th level node of the outcome tree. Please see Appendix H for calculation of test statistics.

Please see Appendices I-K for the specifications of parameters used in this request and design diagrams. Please note that the selection criteria, characteristics, PS matching parameters and Tree Scan parameters (except for Group Labels) are the same as in request ID: cder_sir_wp008_nsdp_v01. The main distinction lies in that the Tree Scan analysis for the current request (cdersir_wp009_nsdp_v01) considers guselkumab as the exposure of interest and risankizumab as the active comparator.

Limitations: Statistical signals identified in these analyses do not imply causal relationships between treatments and outcomes, and require further evaluation. Algorithms to define exposures, outcomes, exclusion criteria, and characteristics 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>).

Table of Contents

<u>Glossary (CIDA)</u>	Glossary of Terms for Analyses Using Cohort Identification and Descriptive Analysis (CIDA) Module
<u>Glossary (PSA)</u>	Glossary of Terms for Analyses Using Propensity Score Analysis (PSA) Module
<u>Table 1a</u>	Aggregated Unadjusted Characteristics of Guselkumab and Risankizumab Users in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023
<u>Table 1b</u>	Aggregated Adjusted Characteristics of Guselkumab and Risankizumab Users - PS Analysis (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.05), in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023
<u>Table 1c</u>	Aggregated Adjusted Characteristics of Guselkumab and Risankizumab Users - HDPS Analysis (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.05), in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023
<u>Table 2</u>	Signal Identification Outcome Assessment for Guselkumab, via Unconditional Bernoulli Tree-Based Scan Statistic among Risankizumab Initiators Matched to Guselkumab Initiators in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, P-Value ≤ 0.05
<u>Table 3</u>	Signal Identification Outcome Assessment for Guselkumab, via Unconditional Bernoulli Tree-Based Scan Statistic among Risankizumab Initiators Matched to Guselkumab Initiators using High Dimensional Propensity Score in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, P-Value ≤ 0.05
<u>Table 4</u>	Summary of Patient Level Cohort Attrition in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023
<u>Figure 1</u>	Histograms Depicting Propensity Score Distributions Before and After Adjustment for Risankizumab and Guselkumab - PS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023
<u>Figure 2</u>	Histograms Depicting Propensity Score Distributions Before and After Adjustment for Risankizumab and Guselkumab - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023
<u>Appendix A</u>	Dates of Available Data for Each Data Partner (DP) Included in the Analysis as of Request Distribution Date (March 11, 2024)
<u>Appendix B</u>	List of Generic and Brand Names of Medical Products Used to Define Exposures in this Request
<u>Appendix C</u>	List of Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Exposures in this Request
<u>Appendix D</u>	List of Current Procedural Terminology, Fourth Edition (CPT-4), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Exclusion Criteria in this Request
<u>Appendix E</u>	List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request
<u>Appendix F</u>	List of Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Table of Contents	
<u>Appendix G</u>	Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)
<u>Appendix H</u>	Calculation of the Test Statistic for Unconditional Bernoulli Probability
<u>Appendix I</u>	Specifications Defining Parameters Used in this Request
<u>Appendix J</u>	Specifications Defining Covariate Parameters Used in this Request
<u>Appendix K</u>	Design Diagram of Cohort Entry Requirements

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

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

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

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 Guselkumab and Risankizumab Users in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Guselkumab		Risankizumab			
	Number/ Mean	Percent/ Standard Deviation ²	Number/ Mean	Percent/ Standard Deviation ²	Absolute Difference	Standardized Difference
Unique patients	18,352	100.0%	30,663	100.0%	N/A	N/A
Demographic Characteristics						
Age (years)	51.8	12.7	52.2	13.6	-0.424	-0.032
Age						
18-39 years	4,066	22.2%	7,383	24.1%	-1.922	-0.046
40-64 years	10,943	59.6%	16,226	52.9%	6.711	0.136
≥ 65 years	3,343	18.2%	7,054	23.0%	-4.789	-0.119
Sex						
Female	9,767	53.2%	15,692	51.2%	2.045	0.041
Male	8,585	46.8%	14,971	48.8%	-2.045	-0.041
Race ³						
American Indian or Alaska Native	43	0.2%	89	0.3%	-0.056	-0.011
Asian	247	1.3%	501	1.6%	-0.288	-0.024
Black or African American	395	2.2%	934	3.0%	-0.894	-0.056
Multi-racial	223	1.2%	373	1.2%	-0.001	0.000
Native Hawaiian or Other Pacific Islander	15	0.1%	29	0.1%	-0.013	-0.004
Unknown	12,043	65.6%	17,938	58.5%	7.122	0.147
White	5,386	29.3%	10,799	35.2%	-5.870	-0.126
Hispanic origin						
Yes	377	2.1%	687	2.2%	-0.186	-0.013
No	4,571	24.9%	9,626	31.4%	-6.486	-0.145
Unknown	13,404	73.0%	20,350	66.4%	6.672	0.146
Year						
2019	2,260	12.3%	2,241	7.3%	5.006	0.169
2020	3,553	19.4%	5,506	18.0%	1.404	0.036
2021	4,905	26.7%	5,827	19.0%	7.724	0.185
2022	5,189	28.3%	9,693	31.6%	-3.337	-0.073
2023	2,445	13.3%	7,396	24.1%	-10.880	-0.279
Indication and Comorbid Condition Characteristics [-400, 0]						
Any risankizumab indication	18,105	98.7%	30,240	98.6%	0.034	0.003
Plaque psoriasis	17,031	92.8%	27,442	89.5%	3.306	0.117
Psoriatic arthritis	7,270	39.6%	6,466	21.1%	18.527	0.411
Crohn's disease	144	0.8%	2,728	8.9%	-8.112	-0.385
Plaque psoriasis ONLY	10,767	58.7%	21,167	69.0%	-10.362	-0.217

Table 1a. Aggregated Unadjusted Characteristics of Guselkumab and Risankizumab Users in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Guselkumab		Risankizumab		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ²	Number/ Mean	Percent/ Standard Deviation ²		
No risankizumab indication	247	1.3%	423	1.4%	-0.034	-0.003
Immunocompromised	10,523	57.3%	16,576	54.1%	3.281	0.066
Health Characteristics [-400, -1]						
Charlson/Elixhauser combined comorbidity score ⁴	1.2	2.0	1.3	2.1	-0.166	-0.08
Acute Myocardial Infarction	213	1.2%	351	1.1%	0.016	0.001
Alzheimer's Disease	38	0.2%	94	0.3%	-0.099	-0.02
Anemia	2,537	13.8%	4,976	16.2%	-2.404	-0.067
Asthma	1,877	10.2%	3,002	9.8%	0.437	0.015
Atrial Fibrillation or Flutter	763	4.2%	1,444	4.7%	-0.552	-0.027
Benign Prostatic Hyperplasia	978	5.3%	1,796	5.9%	-0.528	-0.023
Breast Cancer	363	2.0%	551	1.8%	0.181	0.013
Colorectal Cancer	93	0.5%	213	0.7%	-0.188	-0.024
Endometrial Cancer	69	0.4%	95	0.3%	0.066	0.011
Lung Cancer	75	0.4%	129	0.4%	-0.012	-0.002
Prostate Cancer	188	1.0%	375	1.2%	-0.199	-0.019
Urologic Cancer	58	0.3%	127	0.4%	-0.098	-0.016
Cataract	2,065	11.3%	3,767	12.3%	-1.033	-0.032
Chronic Kidney Disease	1,499	8.2%	2,820	9.2%	-1.029	-0.037
Chronic Obstructive Pulmonary Disorder	1,758	9.6%	3,313	10.8%	-1.225	-0.041
Depression/Bipolar/Other Mood Disorders	4,502	24.5%	7,571	24.7%	-0.160	-0.004
Diabetes	4,324	23.6%	7,008	22.9%	0.707	0.017
Glaucoma	945	5.1%	1,716	5.6%	-0.447	-0.020
Heart Failure and Non-ischemic Heart Disease	896	4.9%	1,787	5.8%	-0.946	-0.042
Hip/Pelvic Fracture	45	0.2%	84	0.3%	-0.029	-0.006
Hyperlipidemia	8,252	45.0%	13,645	44.5%	0.465	0.009
Hypertension	8,556	46.6%	14,107	46.0%	0.615	0.012
Hypothyroidism	2,961	16.1%	4,775	15.6%	0.562	0.015
Ischemic Heart Disease	1,819	9.9%	3,255	10.6%	-0.704	-0.023
Non-Alzheimer's Dementia	159	0.9%	351	1.1%	-0.278	-0.028
Osteoporosis	873	4.8%	1,558	5.1%	-0.324	-0.015
Parkinson's Disease or Secondary Parkinsonism	64	0.3%	119	0.4%	-0.039	-0.006
Rheumatoid Arthritis/Osteoarthritis	9,408	51.3%	11,655	38.0%	13.254	0.269
Stroke/Transient Ischemic Attack	421	2.3%	776	2.5%	-0.237	-0.015
Hepatic Disorders	2,131	11.6%	3,581	11.7%	-0.067	-0.002

Table 1a. Aggregated Unadjusted Characteristics of Guselkumab and Risankizumab Users in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Guselkumab		Risankizumab			
	Number/ Mean	Percent/ Standard Deviation ²	Number/ Mean	Percent/ Standard Deviation ²	Absolute Difference	Standardized Difference
Prior Medication Use [-400, 0]						
Any potential alternative biological treatment (tildrakizumab, ustekinumab, secukinumab, ixekizumab, broadlumab)	5,465	29.8%	7,514	24.5%	5.274	0.119
Topical treatments	12,286	66.9%	21,731	70.9%	-3.924	-0.085
Systemic non-biologic treatments	4,349	23.7%	6,945	22.6%	1.048	0.025
Systemic biologic anti-TNF treatments	3,244	17.7%	5,616	18.3%	-0.639	-0.017
Concomitant Medication Use [0, 28]						
Topical treatments	5,292	28.8%	10,315	33.6%	-4.804	-0.104
Systemic non-biologic treatments	1,760	9.6%	2,627	8.6%	1.023	0.036
Systemic biologic anti-TNF treatments	979	5.3%	2,017	6.6%	-1.243	-0.053
Concomitant Medication Use [0, 56]						
At least 2 dispensings of systemic alternative treatments (tildrakizumab, ustekinumab, secukinumab, ixekizumab, broadlumab, systemic non-biologic treatments, systemic biologic anti-TNF treatments)	1,008	5.5%	1,462	4.8%	0.725	0.033
Health Service Utilization Intensity Metrics [-400, -1]						
Mean number of ambulatory encounters	21.6	21.6	22.0	22.8	-0.340	-0.015
Mean number of emergency room encounters	0.5	1.3	0.5	1.6	-0.070	-0.048
Mean number of inpatient hospital encounters	0.1	0.5	0.2	0.6	-0.042	-0.072
Mean number of non-acute institutional encounters	0.0	0.2	0.0	0.2	-0.005	-0.023
Mean number of other ambulatory encounters	6.0	15.4	6.5	16.6	-0.480	-0.030
Mean number of filled prescriptions	42.1	39.3	40.4	37.6	1.637	0.043
Mean number of generics dispensed	11.4	7.7	11.1	7.2	0.318	0.043
Mean number of unique drug classes dispensed	10.1	6.5	9.8	6.2	0.320	0.050

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

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

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

⁴Gagne 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.

N/A: Not applicable

Table 1b. Aggregated Adjusted Characteristics of Guselkumab and Risankizumab Users - PS Analysis (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.05) in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Guselkumab		Risankizumab		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ²	Number/ Mean	Percent/ Standard Deviation ²		
Unique patients	18,352	87.7%	16,096	52.5%	N/A	N/A
Demographic Characteristics						
Age (years)	51.4	12.8	51.5	13.2	-0.048	-0.004
Age						
18-39 years	3,772	23.4%	3,834	23.8%	-0.385	-0.009
40-64 years	9,383	58.3%	9,176	57.0%	1.286	0.026
≥ 65 years	2,941	18.3%	3,086	19.2%	-0.901	-0.023
Sex						
Female	8,362	52.0%	8,363	52.0%	-0.006	0.000
Male	7,734	48.0%	7,733	48.0%	0.006	0.000
Race ³						
American Indian or Alaska Native	37	0.2%	42	0.3%	-0.031	-0.006
Asian	222	1.4%	231	1.4%	-0.056	-0.005
Black or African American	364	2.3%	377	2.3%	-0.081	-0.005
Multi-racial	197	1.2%	*****	1.2%	0.000	0.000
Native Hawaiian or Other Pacific Islander	13	0.1%	*****	0.0%	0.031	0.012
Unknown	10,531	65.4%	10,429	64.8%	0.634	0.013
White	4,732	29.4%	4,812	29.9%	-0.497	-0.011
Hispanic origin						
Yes	329	2.0%	350	2.2%	-0.130	-0.009
No	4,004	24.9%	4,076	25.3%	-0.447	-0.010
Unknown	11,763	73.1%	11,670	72.5%	0.578	0.013
Year						
2019	1,876	11.7%	1,788	11.1%	0.547	0.017
2020	3,295	20.5%	3,301	20.5%	-0.037	-0.001
2021	3,827	23.8%	3,837	23.8%	-0.062	-0.001
2022	4,727	29.4%	4,780	29.7%	-0.329	-0.007
2023	2,371	14.7%	2,390	14.8%	-0.118	-0.003
Indication and Comorbid Condition Characteristics [-400, 0]						
Any risankizumab indication	15,866	98.6%	15,820	98.3%	0.286	0.023
Plaque psoriasis	15,312	95.1%	15,355	95.4%	-0.267	-0.013
Psoriatic arthritis	5,165	32.1%	5,190	32.2%	-0.155	-0.003
Crohn's disease	143	0.9%	116	0.7%	0.168	0.019
Plaque psoriasis ONLY	10,633	66.1%	10,537	65.5%	0.596	0.013

Table 1b. Aggregated Adjusted Characteristics of Guselkumab and Risankizumab Users - PS Analysis (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.05) in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023

	Medical Product				Covariate Balance	
	Guselkumab		Risankizumab			
	Number/ Mean	Percent/ Standard Deviation ²	Number/ Mean	Percent/ Standard Deviation ²	Absolute Difference	Standardized Difference
Patient Characteristics¹						
No risankizumab indication	230	1.4%	276	1.7%	-0.286	-0.023
Immunocompromised	8,790	54.6%	8,770	54.5%	0.124	0.002
Health Characteristics [-400, -1]						
Charlson/Elixhauser combined comorbidity score ⁴	1.1	2.0	1.1	1.9	0.006	0.003
Acute Myocardial Infarction	174	1.1%	168	1.0%	0.037	0.004
Alzheimer's Disease	32	0.2%	39	0.2%	-0.043	-0.009
Anemia	2,110	13.1%	2,071	12.9%	0.242	0.007
Asthma	1,557	9.7%	1,555	9.7%	0.012	0.000
Atrial Fibrillation or Flutter	661	4.1%	663	4.1%	-0.012	-0.001
Benign Prostatic Hyperplasia	846	5.3%	857	5.3%	-0.068	-0.003
Breast Cancer	298	1.9%	295	1.8%	0.019	0.001
Colorectal Cancer	84	0.5%	84	0.5%	0.000	0.000
Endometrial Cancer	47	0.3%	42	0.3%	0.031	0.006
Lung Cancer	60	0.4%	59	0.4%	0.006	0.001
Prostate Cancer	166	1.0%	174	1.1%	-0.050	-0.005
Urologic Cancer	51	0.3%	50	0.3%	0.006	0.001
Cataract	1,749	10.9%	1,769	11.0%	-0.124	-0.004
Chronic Kidney Disease	1,265	7.9%	1,272	7.9%	-0.043	-0.002
Chronic Obstructive Pulmonary Disorder	1,530	9.5%	1,503	9.3%	0.168	0.006
Depression/Bipolar/Other Mood Disorders	3,821	23.7%	3,798	23.6%	0.143	0.003
Diabetes	3,685	22.9%	3,661	22.7%	0.149	0.004
Glaucoma	797	5.0%	831	5.2%	-0.211	-0.010
Heart Failure and Non-ischemic Heart Disease	783	4.9%	788	4.9%	-0.031	-0.001
Hip/Pelvic Fracture	34	0.2%	37	0.2%	-0.019	-0.004
Hyperlipidemia	7,085	44.0%	7,073	43.9%	0.075	0.002
Hypertension	7,314	45.4%	7,321	45.5%	-0.043	-0.001
Hypothyroidism	2,459	15.3%	2,494	15.5%	-0.217	-0.006
Ischemic Heart Disease	1,547	9.6%	1,536	9.5%	0.068	0.002
Non-Alzheimer's Dementia	141	0.9%	137	0.9%	0.025	0.003
Osteoporosis	685	4.3%	686	4.3%	-0.006	0.000
Parkinson's Disease or Secondary Parkinsonism	51	0.3%	51	0.3%	0.000	0.000
Rheumatoid Arthritis/Osteoarthritis	7,276	45.2%	7,284	45.3%	-0.050	-0.001
Stroke/Transient Ischemic Attack	358	2.2%	375	2.3%	-0.106	-0.007
Hepatic Disorders	1,772	11.0%	1,747	10.9%	0.155	0.005

Table 1b. Aggregated Adjusted Characteristics of Guselkumab and Risankizumab Users - PS Analysis (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.05) in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023

	Medical Product				Covariate Balance	
	Guselkumab		Risankizumab			
Patient Characteristics ¹	Number/ Mean	Percent/ Standard Deviation ²	Number/ Mean	Percent/ Standard Deviation ²	Absolute Difference	Standardized Difference
Prior Medication Use [-400, 0]						
Any potential alternative biological treatment (tildrakizumab, ustekinumab, secukinumab, ixekizumab, broadlumab)	4,369	27.1%	4,358	27.1%	0.068	0.002
Topical treatments	11,227	69.8%	11,333	70.4%	-0.659	-0.014
Systemic non-biologic treatments	3,771	23.4%	3,820	23.7%	-0.304	-0.007
Systemic biologic anti-TNF treatments	2,771	17.2%	2,761	17.2%	0.062	0.002
Concomitant Medication Use [0, 28]						
Topical treatments	4,803	29.8%	5,436	33.8%	-3.933	-0.085
Systemic non-biologic treatments	1,454	9.0%	1,469	9.1%	-0.093	-0.003
Systemic biologic anti-TNF treatments	850	5.3%	992	6.2%	-0.882	-0.038
Concomitant Medication Use [0, 56]						
At least 2 dispensings of systemic alternative treatments (tildrakizumab, ustekinumab, secukinumab, ixekizumab, broadlumab, systemic non-biologic treatments, systemic biologic anti-TNF treatments)	798	5.0%	858	5.3%	-0.373	-0.017
Health Service Utilization Intensity Metrics [-400, -1]						
Mean number of ambulatory encounters	20.9	21.4	20.8	21.6	0.125	0.006
Mean number of emergency room encounters	0.5	1.2	0.5	1.2	0.002	0.002
Mean number of inpatient hospital encounters	0.1	0.5	0.1	0.5	0.002	0.004
Mean number of non-acute institutional encounters	0.0	0.2	0.0	0.2	0.002	0.008
Mean number of other ambulatory encounters	5.8	15.1	5.7	14.6	0.099	0.007
Mean number of filled prescriptions	39.8	37.4	40.0	37.3	-0.127	-0.003
Mean number of generics dispensed	11.0	7.4	11.0	7.2	0.036	0.005
Mean number of unique drug classes dispensed	9.7	6.3	9.7	6.1	0.061	0.010

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

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

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

⁴Gagne 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.

N/A: Not applicable

*****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 Adjusted Characteristics of Guselkumab and Risankizumab Users - HDPS Analysis (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.05) in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Guselkumab		Risankizumab		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ²	Number/ Mean	Percent/ Standard Deviation ²		
Unique patients	18,352	80.7%	14,819	48.3%	N/A	N/A
Demographic Characteristics						
Age (years)	51.3	12.9	51.3	13.2	0.003	0.000
Age						
18-39 years	3,556	24.0%	3,573	24.1%	-0.115	-0.003
40-64 years	8,524	57.5%	8,450	57.0%	0.499	0.010
≥ 65 years	2,739	18.5%	2,796	18.9%	-0.385	-0.010
Sex						
Female	7,542	50.9%	7,635	51.5%	-0.628	-0.013
Male	7,277	49.1%	7,184	48.5%	0.628	0.013
Race ³						
American Indian or Alaska Native	33	0.2%	39	0.3%	-0.040	-0.008
Asian	203	1.4%	206	1.4%	-0.020	-0.002
Black or African American	323	2.2%	352	2.4%	-0.196	-0.013
Multi-racial	167	1.1%	*****	1.1%	0.013	0.001
Native Hawaiian or Other Pacific Islander	11	0.1%	*****	0.1%	0.007	0.003
Unknown	9,850	66.5%	9,779	66.0%	0.479	0.010
White	4,232	28.6%	4,268	28.8%	-0.243	-0.005
Hispanic origin						
Yes	273	1.8%	295	2.0%	-0.148	-0.011
No	3,591	24.2%	3,629	24.5%	-0.256	-0.006
Unknown	10,955	73.9%	10,895	73.5%	0.405	0.009
Year						
2019	1,664	11.2%	1,675	11.3%	-0.074	-0.002
2020	3,009	20.3%	2,992	20.2%	0.115	0.003
2021	3,586	24.2%	3,568	24.1%	0.121	0.003
2022	4,373	29.5%	4,395	29.7%	-0.148	-0.003
2023	2,187	14.8%	2,189	14.8%	-0.013	0.000
Indication and Comorbid Condition Characteristics [-400, 0]						
Any risankizumab indication	14,606	98.6%	14,560	98.3%	0.310	0.025
Plaque psoriasis	14,102	95.2%	14,137	95.4%	-0.236	-0.011
Psoriatic arthritis	4,540	30.6%	4,544	30.7%	-0.027	-0.001
Crohn's disease	121	0.8%	113	0.8%	0.054	0.006
Plaque psoriasis ONLY	10,003	67.5%	9,929	67.0%	0.499	0.011

Table 1c. Aggregated Adjusted Characteristics of Guselkumab and Risankizumab Users - HDPS Analysis (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.05) in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023

Patient Characteristics ¹	Medical Product				Covariate Balance	
	Guselkumab		Risankizumab		Absolute Difference	Standardized Difference
	Number/ Mean	Percent/ Standard Deviation ²	Number/ Mean	Percent/ Standard Deviation ²		
No risankizumab indication	213	1.4%	259	1.7%	-0.310	-0.025
Immunocompromised	7,838	52.9%	7,856	53.0%	-0.121	-0.002
Health Characteristics [-400, -1]						
Charlson/Elixhauser combined comorbidity score ⁴	1.0	1.9	1.0	1.9	0.004	0.002
Acute Myocardial Infarction	144	1.0%	149	1.0%	-0.034	-0.003
Alzheimer's Disease	30	0.2%	31	0.2%	-0.007	-0.001
Anemia	1,817	12.3%	1,864	12.6%	-0.317	-0.010
Asthma	1,362	9.2%	1,396	9.4%	-0.229	-0.008
Atrial Fibrillation or Flutter	586	4.0%	580	3.9%	0.040	0.002
Benign Prostatic Hyperplasia	774	5.2%	767	5.2%	0.047	0.002
Breast Cancer	281	1.9%	267	1.8%	0.094	0.007
Colorectal Cancer	74	0.5%	59	0.4%	0.101	0.015
Endometrial Cancer	45	0.3%	44	0.3%	0.007	0.001
Lung Cancer	54	0.4%	52	0.4%	0.013	0.002
Prostate Cancer	151	1.0%	155	1.0%	-0.027	-0.003
Urologic Cancer	47	0.3%	45	0.3%	0.013	0.002
Cataract	1,598	10.8%	1,580	10.7%	0.121	0.004
Chronic Kidney Disease	1,122	7.6%	1,130	7.6%	-0.054	-0.002
Chronic Obstructive Pulmonary Disorder	1,344	9.1%	1,362	9.2%	-0.121	-0.004
Depression/Bipolar/Other Mood Disorders	3,362	22.7%	3,400	22.9%	-0.256	-0.006
Diabetes	3,318	22.4%	3,277	22.1%	0.277	0.007
Glaucoma	717	4.8%	722	4.9%	-0.034	-0.002
Heart Failure and Non-ischemic Heart Disease	668	4.5%	669	4.5%	-0.007	0.000
Hip/Pelvic Fracture	28	0.2%	34	0.2%	-0.040	-0.009
Hyperlipidemia	6,435	43.4%	6,464	43.6%	-0.196	-0.004
Hypertension	6,610	44.6%	6,639	44.8%	-0.196	-0.004
Hypothyroidism	2,244	15.1%	2,229	15.0%	0.101	0.003
Ischemic Heart Disease	1,374	9.3%	1,354	9.1%	0.135	0.005
Non-Alzheimer's Dementia	129	0.9%	130	0.9%	-0.007	-0.001
Osteoporosis	600	4.0%	594	4.0%	0.040	0.002
Parkinson's Disease or Secondary Parkinsonism	45	0.3%	41	0.3%	0.027	0.005
Rheumatoid Arthritis/Osteoarthritis	6,441	43.5%	6,467	43.6%	-0.175	-0.004
Stroke/Transient Ischemic Attack	303	2.0%	311	2.1%	-0.054	-0.004
Hepatic Disorders	1,553	10.5%	1,512	10.2%	0.277	0.009

Table 1c. Aggregated Adjusted Characteristics of Guselkumab and Risankizumab Users - HDPS Analysis (Propensity Score Matched, Fixed Ratio 1:1, Caliper: 0.05) in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023

	Medical Product				Covariate Balance	
	Guselkumab		Risankizumab			
Patient Characteristics ¹	Number/ Mean	Percent/ Standard Deviation ²	Number/ Mean	Percent/ Standard Deviation ²	Absolute Difference	Standardized Difference
Prior Medication Use [-400, 0]						
Any potential alternative biological treatment (tildrakizumab, ustekinumab, secukinumab, ixekizumab, broadlumab)	3,943	26.6%	4,015	27.1%	-0.486	-0.011
Topical treatments	10,276	69.3%	10,364	69.9%	-0.594	-0.013
Systemic non-biologic treatments	3,393	22.9%	3,406	23.0%	-0.088	-0.002
Systemic biologic anti-TNF treatments	2,419	16.3%	2,447	16.5%	-0.189	-0.005
Concomitant Medication Use [0, 28]						
Topical treatments	4,440	30.0%	4,778	32.2%	-2.281	-0.049
Systemic non-biologic treatments	1,278	8.6%	1,296	8.7%	-0.121	-0.004
Systemic biologic anti-TNF treatments	748	5.0%	875	5.9%	-0.857	-0.038
Concomitant Medication Use [0, 56]						
At least 2 dispensings of systemic alternative treatments (tildrakizumab, ustekinumab, secukinumab, ixekizumab, broadlumab, systemic non-biologic treatments, systemic biologic anti-TNF treatments)	709	4.8%	782	5.3%	-0.493	-0.023
Health Service Utilization Intensity Metrics [-400, -1]						
Mean number of ambulatory encounters	20.1	20.5	20.2	19.9	-0.111	-0.005
Mean number of emergency room encounters	0.4	1.1	0.4	1.1	-0.006	-0.005
Mean number of inpatient hospital encounters	0.1	0.5	0.1	0.5	-0.006	-0.011
Mean number of non-acute institutional encounters	0.0	0.2	0.0	0.2	0.001	0.005
Mean number of other ambulatory encounters	5.4	13.9	5.5	14.4	-0.030	-0.002
Mean number of filled prescriptions	37.9	35.8	38.3	36.6	-0.366	-0.010
Mean number of generics dispensed	10.6	7.1	10.6	7.1	-0.065	-0.009
Mean number of unique drug classes dispensed	9.3	6.1	9.4	6.0	-0.034	-0.006

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

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

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

⁴Gagne 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.

N/A: Not applicable

*****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 2. Signal Identification Outcome Assessment¹ for Guselkumab, via Unconditional Bernoulli Tree-Based Scan Statistic² among Risankizumab Initiators Matched to Guselkumab Initiators in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, P-Value ≤ 0.05

Node Name	Node ID	Node Level	Total Node Outcomes among Risk and Control Groups	Node Outcomes among Guselkumab Initiators	Expected Node Outcomes among Guselkumab Initiators	Relative Risk	Test Statistic ²	P-Value
Inpatient or Emergency Department Setting								
N/A ³								
Inpatient, Emergency Department, or Outpatient Setting								
N/A ³								

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

²Bernoulli log likelihood ratio (LLR) based test statistic. Please see Appendix H for additional details.

³In this analysis there were no outcome nodes that met the 0.05 p-value threshold.

N/A: Not applicable

Table 3. Signal Identification Outcome Assessment¹ for Guselkumab, via Unconditional Bernoulli Tree-Based Scan Statistic² among Risankizumab Initiators Matched to Guselkumab Initiators using High Dimensional Propensity Score in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, P-Value ≤ 0.05

Node Name	Node ID	Node Level	Total Node Outcomes among Risk and Control Groups	Node Outcomes among Guselkumab Initiators	Expected Node Outcomes among Guselkumab Initiators	Relative Risk	Test Statistic ²	P-Value
Inpatient or Emergency Department Setting								
N/A ³								
Inpatient, Emergency Department, or Outpatient Setting								
N/A ³								

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

²Bernoulli log likelihood ratio (LLR) based test statistic. Please see Appendix H for additional details.

³In this analysis there were no outcome nodes that met the 0.05 p-value threshold.

N/A: Not applicable

Table 4. Summary of Patient Level Cohort Attrition in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023*

	Guselkumab and Risankizumab - PS Analysis				Guselkumab and Risankizumab - HDPS Analysis			
	Guselkumab		Risankizumab		Guselkumab		Risankizumab	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	268,779,580	N/A	268,779,580	N/A	268,779,580	N/A	268,779,580	N/A
Had required coverage type (medical and/or drug coverage)	196,408,485	72,371,095	196,408,485	72,371,095	196,408,485	72,371,095	196,408,485	72,371,095
Enrolled during specified age range	147,822,027	48,586,458	147,822,027	48,586,458	147,822,027	48,586,458	147,822,027	48,586,458
Had requestable medical charts	147,822,027	0	147,822,027	0	147,822,027	0	147,822,027	0
Met demographic requirements (sex, race, and Hispanic origin)	147,774,643	47,384	147,774,643	47,384	147,774,643	47,384	147,774,643	47,384
Members with a valid index event								
Had any cohort-defining claim during the query period	34,423	147,740,220	49,747	147,724,896	34,423	147,740,220	49,747	147,724,896
Claim recorded during specified age range	34,408	15	49,734	13	34,408	15	49,734	13
Episode defining index claim recorded during the query period	34,408	0	49,734	0	34,408	0	49,734	0
Members with required pre-index history								
Had sufficient pre-index continuous enrollment	27,160	7,248	38,557	11,177	27,160	7,248	38,557	11,177
Met inclusion and exclusion criteria ¹	18,510	8,650	31,014	7,543	18,510	8,650	31,014	7,543
<i>Evidence of pregnancy outcome/delivery</i>	N/A	34	N/A	38	N/A	34	N/A	38
<i>Evidence of ongoing pregnancy</i>	N/A	167	N/A	194	N/A	167	N/A	194
<i>Evidence of exposure/comparator washout</i>	N/A	8,639	N/A	7,511	N/A	8,639	N/A	7,511
Met event incidence criteria	18,510	0	31,014	0	18,510	0	31,014	0
Had sufficient post-index continuous enrollment	18,510	0	31,014	0	18,510	0	31,014	0
Had index episode of at least required length	18,510	0	31,014	0	18,510	0	31,014	0
Had index episode longer than blackout period	18,510	0	31,014	0	18,510	0	31,014	0
Did not have an event during blackout period	18,510	0	31,014	0	18,510	0	31,014	0
Final cohort								
Number of members	18,510	N/A	31,014	N/A	18,510	N/A	31,014	N/A
Number of episodes	18,510	N/A	31,014	N/A	18,510	N/A	31,014	N/A
Members meeting comparative cohort eligibility requirements								

Table 4. Summary of Patient Level Cohort Attrition in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023*

	Guselkumab and Risankizumab - PS Analysis				Guselkumab and Risankizumab - HDPS Analysis			
	Guselkumab		Risankizumab		Guselkumab		Risankizumab	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Excluded due to same-day initiation of both exposure groups	*****	*****	*****	*****	*****	*****	*****	*****
Excluded due to prior initiation of other exposure group	18,352	*****	30,663	*****	18,352	*****	30,663	*****
Excluded due to prior initiation of other exposure group in a prior look	18,352	0	30,663	0	18,352	0	30,663	0
Included in comparative analysis	16,096	2,256	16,096	14,567	14,819	3,533	14,819	15,844

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.

*The attrition table is the same as in the request ID: cder_sir_wp008_nsdv_v01.

*****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.

N/A: Not applicable

Figure 1. Histograms Depicting Propensity Score Distributions Before and After Adjustment for Risankizumab and Guselkumab - PS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023

Unadjusted Propensity Score Distribution

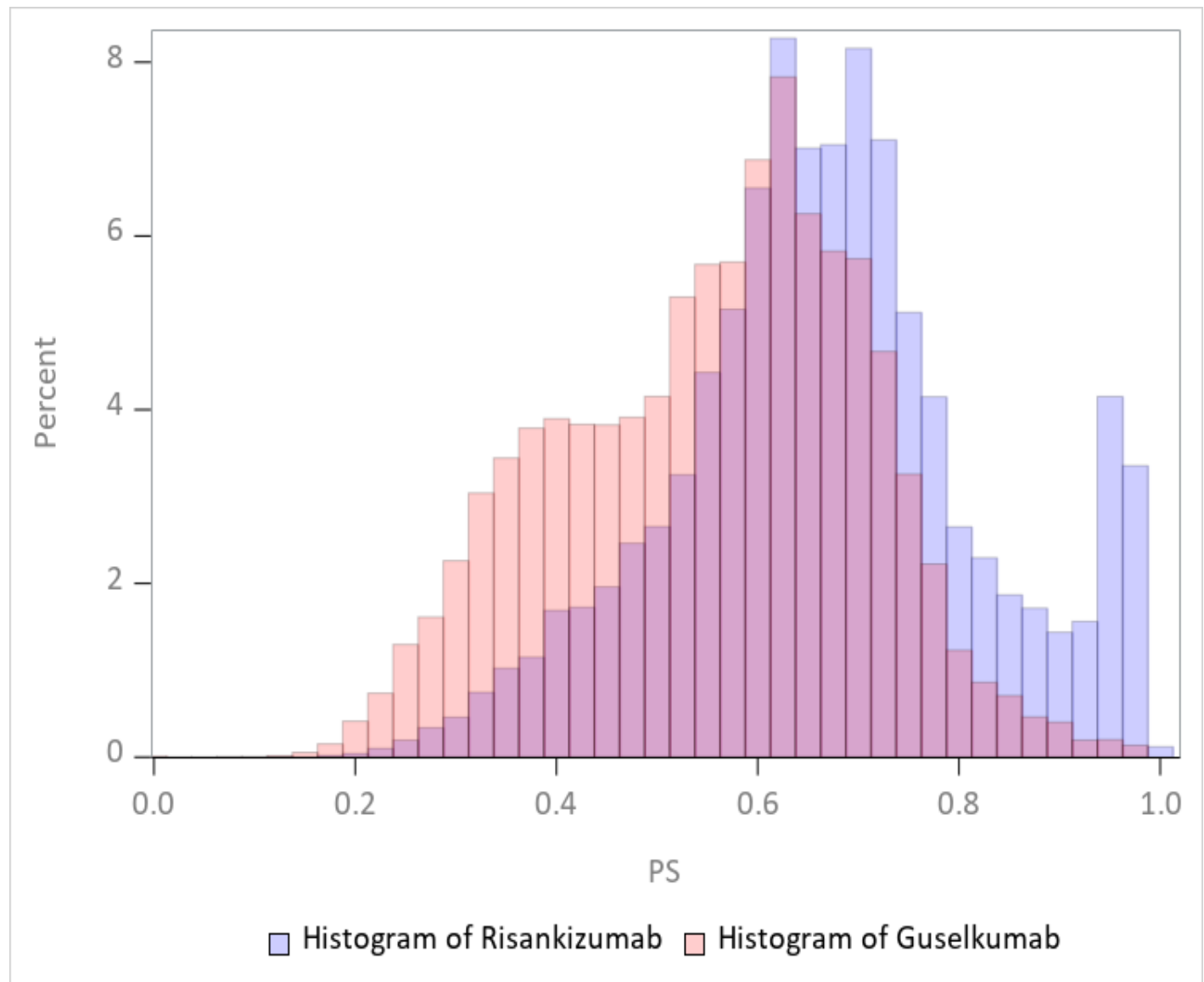


Figure 1. Histograms Depicting Propensity Score Distributions Before and After Adjustment for Risankizumab and Guselkumab - PS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023

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

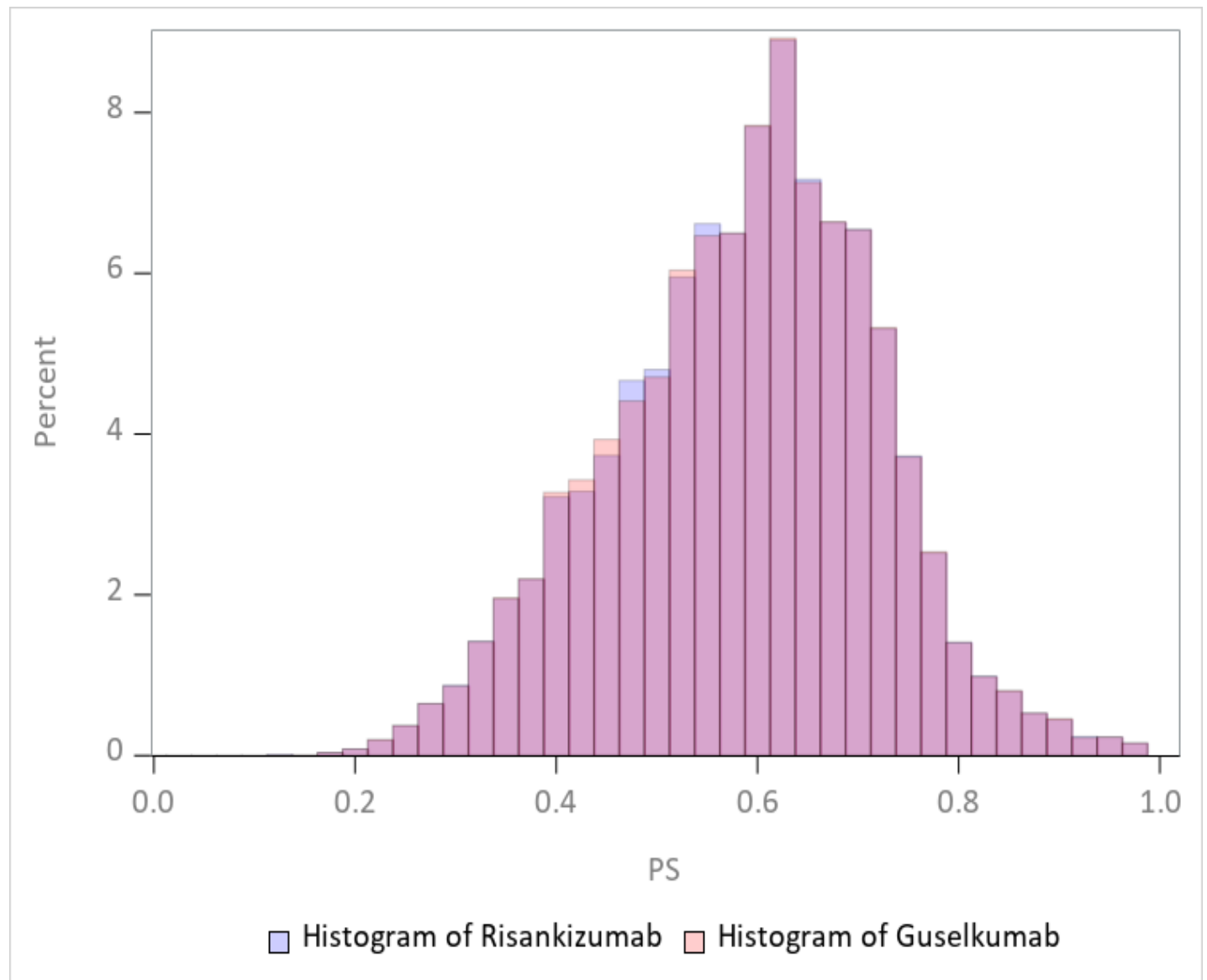


Figure 2. Histograms Depicting Propensity Score Distributions Before and After Adjustment for Risankizumab and Guselkumab - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023

Unadjusted Propensity Score Distribution

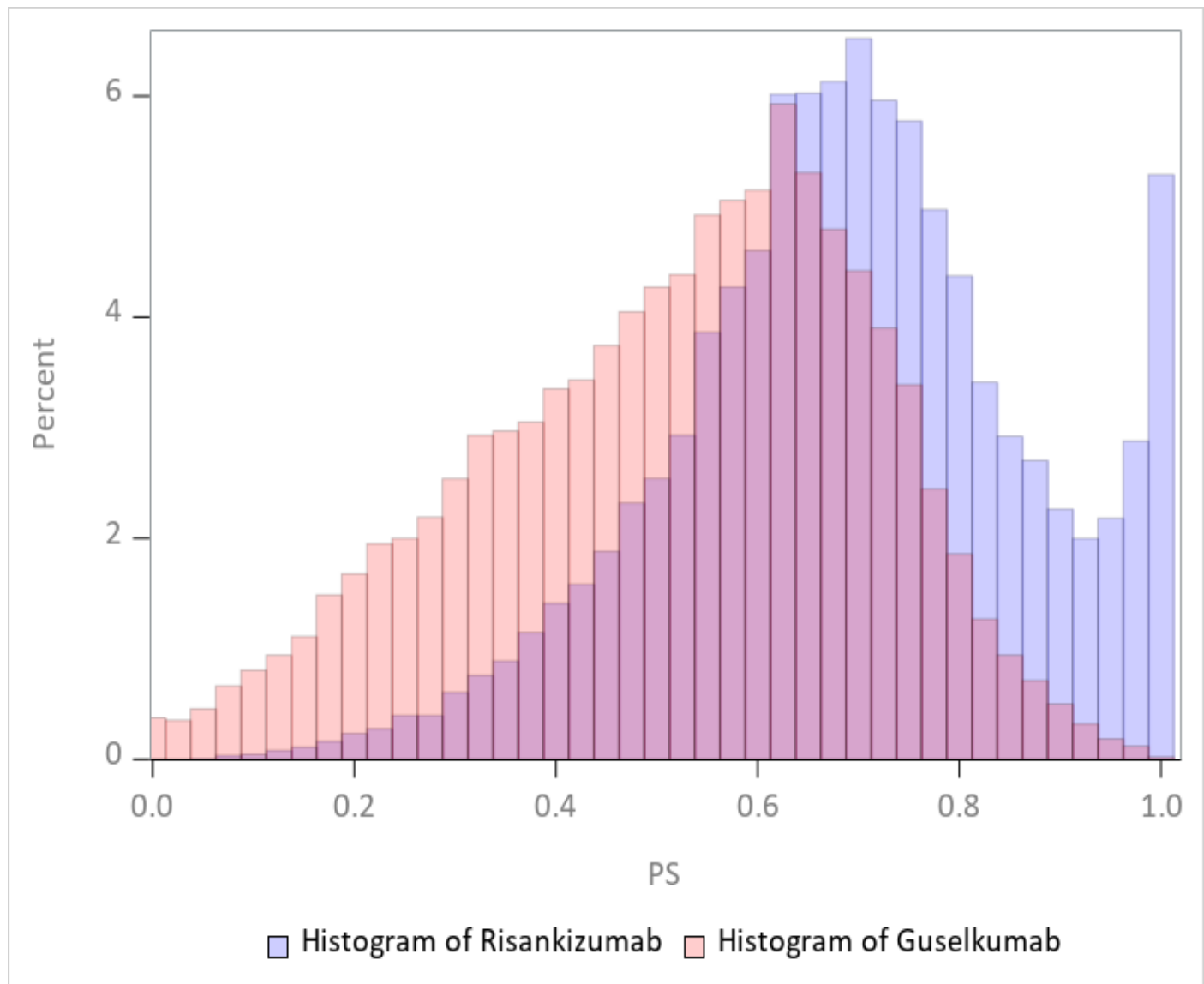
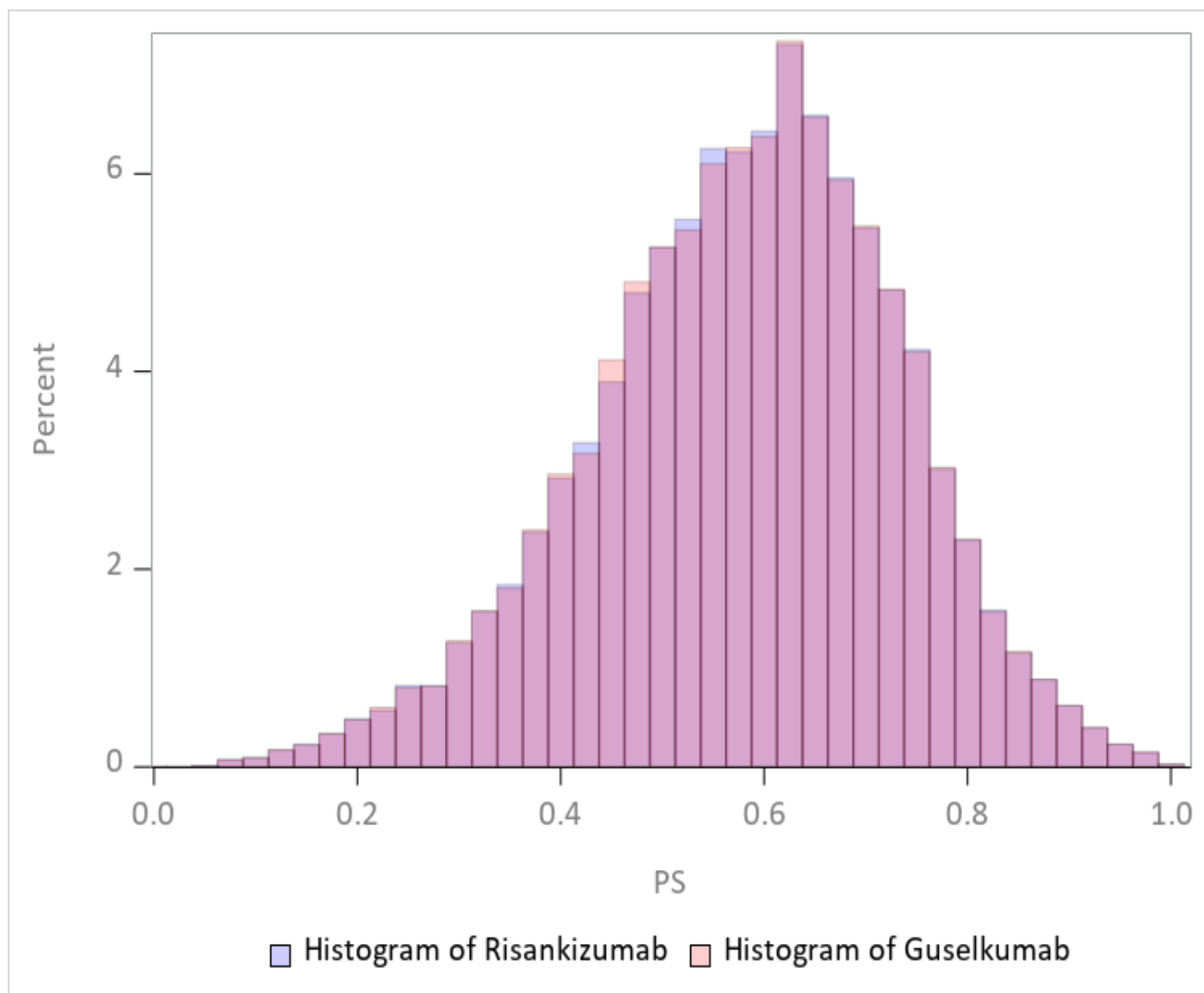


Figure 2. Histograms Depicting Propensity Score Distributions Before and After Adjustment for Risankizumab and Guselkumab - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023

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



Appendix A. Dates of Available Data for Each Data Partner (DP) Included in the Analysis as of Request Distribution Date (March 11, 2024)*

Masked DP ID	DP Start Date	DP End Date ¹
DP01	01/01/2006	06/30/2023
DP02	01/01/2007	06/30/2023
DP03	01/01/2008	04/30/2023
DP04	01/01/2014	12/31/2020
DP05	01/01/2008	09/30/2023
DP06	01/01/2010	06/30/2023

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

*The Request Distribution Date refers to the distribution date for request id: cder_sir_wp008_nsdp_v01

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

Generic Name	Brand Name
Guselkumab	
guselkumab	Tremfya
Risankizumab	
risankizumab-rzaa	Skyrizi

Appendix C. List of Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Exposures in this Request

Code	Description	Code Category	Code Type
Guselkumab			
C9029	Injection, guselkumab, 1 mg	Procedure	HCPCS
J1628	Injection, guselkumab, 1 mg	Procedure	HCPCS
Risankizumab			
J2327	Injection, risankizumab-rzaa, intravenous, 1 mg	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
Pregnancy Outcomes			
01964	ANESTHESIA FOR ABORTION PROCEDURES	Procedure	CPT-4
01965	Anesthesia for incomplete or missed abortion procedures	Procedure	CPT-4
01966	Anesthesia for induced abortion procedures	Procedure	CPT-4
0W8NXZZ	Division of Female Perineum, External Approach	Procedure	ICD-10-PCS
10900ZC	Drainage of Amniotic Fluid, Therapeutic from Products of Conception, Open Approach	Procedure	ICD-10-PCS
10903ZC	Drainage of Amniotic Fluid, Therapeutic from Products of Conception, Percutaneous Approach	Procedure	ICD-10-PCS
10904ZC	Drainage of Amniotic Fluid, Therapeutic from Products of Conception, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
10907ZC	Drainage of Amniotic Fluid, Therapeutic from Products of Conception, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
10908ZC	Drainage of Amniotic Fluid, Therapeutic from Products of Conception, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
10A00ZZ	Abortion of Products of Conception, Open Approach	Procedure	ICD-10-PCS
10A03ZZ	Abortion of Products of Conception, Percutaneous Approach	Procedure	ICD-10-PCS
10A04ZZ	Abortion of Products of Conception, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
10A07Z6	Abortion of Products of Conception, Vacuum, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
10A07ZW	Abortion of Products of Conception, Laminaria, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
10A07ZX	Abortion of Products of Conception, Abortifacient, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
10A07ZZ	Abortion of Products of Conception, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
10A08ZZ	Abortion of Products of Conception, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
10D00Z0	Extraction of Products of Conception, Classical, Open Approach	Procedure	ICD-10-PCS
10D00Z1	Extraction of Products of Conception, Low Cervical, Open Approach	Procedure	ICD-10-PCS
10D00Z2	Extraction of Products of Conception, Extraperitoneal, Open Approach	Procedure	ICD-10-PCS
10D07Z3	Extraction of Products of Conception, Low Forceps, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
10D07Z4	Extraction of Products of Conception, Mid Forceps, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
10D07Z5	Extraction of Products of Conception, High Forceps, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
10D07Z6	Extraction of Products of Conception, Vacuum, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
10D07Z7	Extraction of Products of Conception, Internal Version, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
10D07Z8	Extraction of Products of Conception, Other, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
10D27ZZ	Extraction of products of conception, ectopic, via natural or artificial opening	Procedure	ICD-10-PCS

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

Code	Description	Code Category	Code Type
10D28ZZ	Extraction of products of conception, ectopic, via natural or artificial opening endoscopic	Procedure	ICD-10-PCS
10E0XZZ	Delivery of Products of Conception, External Approach	Procedure	ICD-10-PCS
10S07ZZ	Reposition Products of Conception, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
10T20ZZ	Resection of products of conception, ectopic, open approach	Procedure	ICD-10-PCS
10T23ZZ	Resection of products of conception, ectopic, percutaneous approach	Procedure	ICD-10-PCS
10T24ZZ	Resection of products of conception, ectopic, percutaneous endoscopic approach	Procedure	ICD-10-PCS
10T27ZZ	Resection of products of conception, ectopic, via natural or artificial opening	Procedure	ICD-10-PCS
10T28ZZ	Resection of products of conception, ectopic, via natural or artificial opening endoscopic	Procedure	ICD-10-PCS
59100	Surgical treatment of ectopic pregnancy; tubal or ovarian, requiring salpingectomy and/or oophorectomy, abdominal or vaginal approach	Procedure	CPT-4
59120	Surgical treatment of ectopic pregnancy; tubal or ovarian, requiring salpingectomy and/or oophorectomy, abdominal or vaginal approach	Procedure	CPT-4
59121	Surgical treatment of ectopic pregnancy; tubal or ovarian, without salpingectomy and/or oophorectomy	Procedure	CPT-4
59125	Surgical Treatment Of Ectopic Pregnancy	Procedure	CPT-4
59126	Surgical Treatment Of Ectopic Pregnancy	Procedure	CPT-4
59130	Surgical treatment of ectopic pregnancy; abdominal pregnancy	Procedure	CPT-4
59135	Surgical treatment of ectopic pregnancy; interstitial, uterine pregnancy requiring total hysterectomy	Procedure	CPT-4
59136	Surgical treatment of ectopic pregnancy; interstitial, uterine pregnancy with partial resection of uterus	Procedure	CPT-4
59140	Surgical treatment of ectopic pregnancy; cervical, with evacuation	Procedure	CPT-4
59150	Laparoscopic treatment of ectopic pregnancy; without salpingectomy and/or oophorectomy	Procedure	CPT-4
59151	Laparoscopic treatment of ectopic pregnancy; with salpingectomy and/or oophorectomy	Procedure	CPT-4
59400	Routine obstetric care including antepartum care, vaginal delivery (with or without episiotomy, and/or forceps) and postpartum care	Procedure	CPT-4
59409	Vaginal delivery only (with or without episiotomy and/or forceps);	Procedure	CPT-4
59410	Vaginal delivery only (with or without episiotomy and/or forceps); including postpartum care	Procedure	CPT-4
59510	Routine obstetric care including antepartum care, cesarean delivery, and postpartum care	Procedure	CPT-4
59514	Cesarean delivery only;	Procedure	CPT-4
59515	Cesarean delivery only; including postpartum care	Procedure	CPT-4
59610	Routine obstetric care including antepartum care, vaginal delivery (with or without episiotomy, and/or forceps) and postpartum care, after previous cesarean delivery	Procedure	CPT-4
59612	Vaginal delivery only, after previous cesarean delivery (with or without episiotomy and/or forceps);	Procedure	CPT-4

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

Code	Description	Code Category	Code Type
59614	Vaginal delivery only, after previous cesarean delivery (with or without episiotomy and/or forceps); including postpartum care	Procedure	CPT-4
59618	Routine obstetric care including antepartum care, cesarean delivery, and postpartum care, following attempted vaginal delivery after previous cesarean delivery	Procedure	CPT-4
59620	Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery;	Procedure	CPT-4
59622	Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery; including postpartum care	Procedure	CPT-4
59812	Treatment of incomplete abortion, any trimester, completed surgically	Procedure	CPT-4
59820	Treatment of incomplete abortion completed surgically, first trimester	Procedure	CPT-4
59821	Treatment of incomplete abortion completed surgically, second trimester	Procedure	CPT-4
59830	Treatment of septic abortion, completed surgically	Procedure	CPT-4
59840	INDUCED ABORTION, BY DILATION AND CURETTAGE	Procedure	CPT-4
59841	INDUCED ABORTION, BY DILATION AND EVACUATION	Procedure	CPT-4
59850	INDUCED ABORTION, BY ONE OR MORE INTRAAMNIOTIC INJECTIONS	Procedure	CPT-4
59851	INDUCED ABORTION, BY ONE OR MORE INTRAAMNIOTIC INJECTIONS, WITH DILATION AND CURETTAGE AND/OR EVACUATION	Procedure	CPT-4
59852	INDUCED ABORTION, BY ONE OR MORE INTRAAMNIOTIC INJECTIONS, WITH HYSTEROTOMY	Procedure	CPT-4
59855	INDUCED ABORTION, BY ONE OR MORE VAGINAL SUPPOSITORIES	Procedure	CPT-4
59856	INDUCED ABORTION, BY ONE OR MORE VAGINAL SUPPOSITORIES, WITH DILATION AND CURETTAGE AND/OR EVACUATION	Procedure	CPT-4
59857	INDUCED ABORTION, BY ONE OR MORE VAGINAL SUPPOSITORIES, WITH HYSTEROTOMY	Procedure	CPT-4
59870	Evacuation and curettage of uterus for hydatidiform mole	Procedure	CPT-4
88016	Necropsy (autopsy), gross examination only; macerated stillborn	Procedure	CPT-4
000	Ectopic pregnancy	Diagnosis	ICD-10-CM
0000	Abdominal pregnancy	Diagnosis	ICD-10-CM
00000	Abdominal pregnancy without intrauterine pregnancy	Diagnosis	ICD-10-CM
00001	Abdominal pregnancy with intrauterine pregnancy	Diagnosis	ICD-10-CM
0001	Tubal pregnancy	Diagnosis	ICD-10-CM
00010	Tubal pregnancy without intrauterine pregnancy	Diagnosis	ICD-10-CM
000101	Right tubal pregnancy without intrauterine pregnancy	Diagnosis	ICD-10-CM
000102	Left tubal pregnancy without intrauterine pregnancy	Diagnosis	ICD-10-CM
000109	Unspecified tubal pregnancy without intrauterine pregnancy	Diagnosis	ICD-10-CM
00011	Tubal pregnancy wit intrauterine pregnancy	Diagnosis	ICD-10-CM
000111	Right tubal pregnancy with intrauterine pregnancy	Diagnosis	ICD-10-CM
000112	Left tubal pregnancy with intrauterine pregnancy	Diagnosis	ICD-10-CM
000119	Unspecified tubal pregnancy with intrauterine pregnancy	Diagnosis	ICD-10-CM
0002	Ovarian pregnancy	Diagnosis	ICD-10-CM
00020	Ovarian pregnancy WITHOUT INTRAUTERINE PREGNANCY	Diagnosis	ICD-10-CM
000201	Right ovarian pregnancy without intrauterine pregnancy	Diagnosis	ICD-10-CM
000202	Left ovarian pregnancy without intrauterine pregnancy	Diagnosis	ICD-10-CM
000209	Unspecified ovarian pregnancy without intrauterine pregnancy	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
00021	Ovarian pregnancy with intrauterine pregnancy	Diagnosis	ICD-10-CM
000211	Right ovarian pregnancy with intrauterine pregnancy	Diagnosis	ICD-10-CM
000212	Left ovarian pregnancy without intrauterine pregnancy	Diagnosis	ICD-10-CM
000219	Unspecified ovarian pregnancy with intrauterine pregnancy	Diagnosis	ICD-10-CM
0008	Other ectopic pregnancy	Diagnosis	ICD-10-CM
00080	Other ectopic pregnancy without intrauterine pregnancy	Diagnosis	ICD-10-CM
00081	Other ectopic pregnancy with intrauterine pregnancy	Diagnosis	ICD-10-CM
0009	Ectopic pregnancy, unspecified	Diagnosis	ICD-10-CM
00090	Unspecified ectopic pregnancy without intrauterine pregnancy	Diagnosis	ICD-10-CM
00091	Unspecified ectopic pregnancy with intrauterine pregnancy	Diagnosis	ICD-10-CM
001	Hydatidiform mole	Diagnosis	ICD-10-CM
0010	Classical hydatidiform mole	Diagnosis	ICD-10-CM
0011	Incomplete and partial hydatidiform mole	Diagnosis	ICD-10-CM
0019	Hydatidiform mole, unspecified	Diagnosis	ICD-10-CM
0020	Blighted ovum and nonhydatidiform mole	Diagnosis	ICD-10-CM
0021	Missed abortion	Diagnosis	ICD-10-CM
00289	Other abnormal products of conception	Diagnosis	ICD-10-CM
0029	Abnormal products of conception, unspecified	Diagnosis	ICD-10-CM
003	Spontaneous abortion	Diagnosis	ICD-10-CM
0030	Genital tract and pelvic infection following incomplete spontaneous abortion	Diagnosis	ICD-10-CM
0031	Delayed or excessive hemorrhage following incomplete spontaneous abortion	Diagnosis	ICD-10-CM
0032	Embolism following incomplete spontaneous abortion	Diagnosis	ICD-10-CM
00330	Unspecified complication following incomplete spontaneous abortion	Diagnosis	ICD-10-CM
00331	Shock following incomplete spontaneous abortion	Diagnosis	ICD-10-CM
00332	Renal failure following incomplete spontaneous abortion	Diagnosis	ICD-10-CM
00333	Metabolic disorder following incomplete spontaneous abortion	Diagnosis	ICD-10-CM
00334	Damage to pelvic organs following incomplete spontaneous abortion	Diagnosis	ICD-10-CM
00335	Other venous complications following incomplete spontaneous abortion	Diagnosis	ICD-10-CM
00336	Cardiac arrest following incomplete spontaneous abortion	Diagnosis	ICD-10-CM
00337	Sepsis following incomplete spontaneous abortion	Diagnosis	ICD-10-CM
00338	Urinary tract infection following incomplete spontaneous abortion	Diagnosis	ICD-10-CM
00339	Incomplete spontaneous abortion with other complications	Diagnosis	ICD-10-CM
0034	Incomplete spontaneous abortion without complication	Diagnosis	ICD-10-CM
0035	Genital tract and pelvic infection following complete or unspecified spontaneous abortion	Diagnosis	ICD-10-CM
0036	Delayed or excessive hemorrhage following complete or unspecified spontaneous abortion	Diagnosis	ICD-10-CM
0037	Embolism following complete or unspecified spontaneous abortion	Diagnosis	ICD-10-CM
00380	Unspecified complication following complete or unspecified spontaneous abortion	Diagnosis	ICD-10-CM
00381	Shock following complete or unspecified spontaneous abortion	Diagnosis	ICD-10-CM
00382	Renal failure following complete or unspecified spontaneous abortion	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
00383	Metabolic disorder following complete or unspecified spontaneous abortion	Diagnosis	ICD-10-CM
00384	Damage to pelvic organs following complete or unspecified spontaneous abortion	Diagnosis	ICD-10-CM
00385	Other venous complications following complete or unspecified spontaneous abortion	Diagnosis	ICD-10-CM
00386	Cardiac arrest following complete or unspecified spontaneous abortion	Diagnosis	ICD-10-CM
00387	Sepsis following complete or unspecified spontaneous abortion	Diagnosis	ICD-10-CM
00388	Urinary tract infection following complete or unspecified spontaneous abortion	Diagnosis	ICD-10-CM
00389	Complete or unspecified spontaneous abortion with other complications	Diagnosis	ICD-10-CM
0039	Complete or unspecified spontaneous abortion without complication	Diagnosis	ICD-10-CM
004	Complications following (induced) termination of pregnancy	Diagnosis	ICD-10-CM
0045	Genital tract and pelvic infection following (induced) termination of pregnancy	Diagnosis	ICD-10-CM
0046	Delayed or excessive hemorrhage following (induced) termination of pregnancy	Diagnosis	ICD-10-CM
0047	Embolism following (induced) termination of pregnancy	Diagnosis	ICD-10-CM
0048	(Induced) termination of pregnancy with other and unspecified complications	Diagnosis	ICD-10-CM
00480	(Induced) termination of pregnancy with unspecified complications	Diagnosis	ICD-10-CM
00481	Shock following (induced) termination of pregnancy	Diagnosis	ICD-10-CM
00482	Renal failure following (induced) termination of pregnancy	Diagnosis	ICD-10-CM
00483	Metabolic disorder following (induced) termination of pregnancy	Diagnosis	ICD-10-CM
00484	Damage to pelvic organs following (induced) termination of pregnancy	Diagnosis	ICD-10-CM
00485	Other venous complications following (induced) termination of pregnancy	Diagnosis	ICD-10-CM
00486	Cardiac arrest following (induced) termination of pregnancy	Diagnosis	ICD-10-CM
00487	Sepsis following (induced) termination of pregnancy	Diagnosis	ICD-10-CM
00488	Urinary tract infection following (induced) termination of pregnancy	Diagnosis	ICD-10-CM
00489	(Induced) termination of pregnancy with other complications	Diagnosis	ICD-10-CM
0080	Genital tract and pelvic infection following ectopic and molar pregnancy	Diagnosis	ICD-10-CM
0081	Delayed or excessive hemorrhage following ectopic and molar pregnancy	Diagnosis	ICD-10-CM
0082	Embolism following ectopic and molar pregnancy	Diagnosis	ICD-10-CM
0083	Shock following ectopic and molar pregnancy	Diagnosis	ICD-10-CM
0084	Renal failure following ectopic and molar pregnancy	Diagnosis	ICD-10-CM
0085	Metabolic disorders following an ectopic and molar pregnancy	Diagnosis	ICD-10-CM
0086	Damage to pelvic organs and tissues following an ectopic and molar pregnancy	Diagnosis	ICD-10-CM
0087	Other venous complications following an ectopic and molar pregnancy	Diagnosis	ICD-10-CM
00881	Cardiac arrest following an ectopic and molar pregnancy	Diagnosis	ICD-10-CM
00882	Sepsis following ectopic and molar pregnancy	Diagnosis	ICD-10-CM
00883	Urinary tract infection following an ectopic and molar pregnancy	Diagnosis	ICD-10-CM
00889	Other complications following an ectopic and molar pregnancy	Diagnosis	ICD-10-CM
0089	Unspecified complication following an ectopic and molar pregnancy	Diagnosis	ICD-10-CM
O1002	Pre-existing essential hypertension complicating childbirth	Diagnosis	ICD-10-CM
O1012	Pre-existing hypertensive heart disease complicating childbirth	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O1022	Pre-existing hypertensive chronic kidney disease complicating childbirth	Diagnosis	ICD-10-CM
O1032	Pre-existing hypertensive heart and chronic kidney disease complicating childbirth	Diagnosis	ICD-10-CM
O1042	Pre-existing secondary hypertension complicating childbirth	Diagnosis	ICD-10-CM
O1092	Unspecified pre-existing hypertension complicating childbirth	Diagnosis	ICD-10-CM
O114	Pre-existing hypertension with pre-eclampsia, complicating childbirth	Diagnosis	ICD-10-CM
O1204	Gestational edema, complicating childbirth	Diagnosis	ICD-10-CM
O1214	Gestational proteinuria, complicating childbirth	Diagnosis	ICD-10-CM
O1224	Gestational edema with proteinuria, complicating childbirth	Diagnosis	ICD-10-CM
O134	Gestational [pregnancy-induced] hypertension without significant proteinuria, complicating childbirth	Diagnosis	ICD-10-CM
O1404	Mild to moderate pre-eclampsia, complicating childbirth	Diagnosis	ICD-10-CM
O1414	Severe pre-eclampsia complicating childbirth	Diagnosis	ICD-10-CM
O1424	HELLP syndrome, complicating childbirth	Diagnosis	ICD-10-CM
O1494	Unspecified pre-eclampsia, complicating childbirth	Diagnosis	ICD-10-CM
O164	Unspecified maternal hypertension, complicating childbirth	Diagnosis	ICD-10-CM
O2402	Pre-existing type 1 diabetes mellitus, in childbirth	Diagnosis	ICD-10-CM
O2412	Pre-existing type 2 diabetes mellitus, in childbirth	Diagnosis	ICD-10-CM
O2432	Unspecified pre-existing diabetes mellitus in childbirth	Diagnosis	ICD-10-CM
O24420	Gestational diabetes mellitus in childbirth, diet controlled	Diagnosis	ICD-10-CM
O24424	Gestational diabetes mellitus in childbirth, insulin controlled	Diagnosis	ICD-10-CM
O24425	Gestational diabetes mellitus in childbirth, controlled by oral hypoglycemic drugs	Diagnosis	ICD-10-CM
O24429	Gestational diabetes mellitus in childbirth, unspecified control	Diagnosis	ICD-10-CM
O2482	Other pre-existing diabetes mellitus in childbirth	Diagnosis	ICD-10-CM
O2492	Unspecified diabetes mellitus in childbirth	Diagnosis	ICD-10-CM
O252	Malnutrition in childbirth	Diagnosis	ICD-10-CM
O2662	Liver and biliary tract disorders in childbirth	Diagnosis	ICD-10-CM
O2672	Subluxation of symphysis (pubis) in childbirth	Diagnosis	ICD-10-CM
O3100X0	Papyraceous fetus, unspecified trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3100X1	Papyraceous fetus, unspecified trimester, fetus 1	Diagnosis	ICD-10-CM
O3100X2	Papyraceous fetus, unspecified trimester, fetus 2	Diagnosis	ICD-10-CM
O3100X3	Papyraceous fetus, unspecified trimester, fetus 3	Diagnosis	ICD-10-CM
O3100X4	Papyraceous fetus, unspecified trimester, fetus 4	Diagnosis	ICD-10-CM
O3100X5	Papyraceous fetus, unspecified trimester, fetus 5	Diagnosis	ICD-10-CM
O3100X9	Papyraceous fetus, unspecified trimester, other fetus	Diagnosis	ICD-10-CM
O3102X0	Papyraceous fetus, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3102X1	Papyraceous fetus, second trimester, fetus 1	Diagnosis	ICD-10-CM
O3102X2	Papyraceous fetus, second trimester, fetus 2	Diagnosis	ICD-10-CM
O3102X3	Papyraceous fetus, second trimester, fetus 3	Diagnosis	ICD-10-CM
O3102X4	Papyraceous fetus, second trimester, fetus 4	Diagnosis	ICD-10-CM
O3102X5	Papyraceous fetus, second trimester, fetus 5	Diagnosis	ICD-10-CM
O3102X9	Papyraceous fetus, second trimester, other fetus	Diagnosis	ICD-10-CM
O3103X0	Papyraceous fetus, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3103X1	Papyraceous fetus, third trimester, fetus 1	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O3103X2	Papyraceous fetus, third trimester, fetus 2	Diagnosis	ICD-10-CM
O3103X3	Papyraceous fetus, third trimester, fetus 3	Diagnosis	ICD-10-CM
O3103X4	Papyraceous fetus, third trimester, fetus 4	Diagnosis	ICD-10-CM
O3103X5	Papyraceous fetus, third trimester, fetus 5	Diagnosis	ICD-10-CM
O3103X9	Papyraceous fetus, third trimester, other fetus	Diagnosis	ICD-10-CM
O3110X0	Continuing pregnancy after spontaneous abortion of one fetus or more, unspecified trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3110X1	Continuing pregnancy after spontaneous abortion of one fetus or more, unspecified trimester, fetus 1	Diagnosis	ICD-10-CM
O3110X2	Continuing pregnancy after spontaneous abortion of one fetus or more, unspecified trimester, fetus 2	Diagnosis	ICD-10-CM
O3110X3	Continuing pregnancy after spontaneous abortion of one fetus or more, unspecified trimester, fetus 3	Diagnosis	ICD-10-CM
O3110X4	Continuing pregnancy after spontaneous abortion of one fetus or more, unspecified trimester, fetus 4	Diagnosis	ICD-10-CM
O3110X5	Continuing pregnancy after spontaneous abortion of one fetus or more, unspecified trimester, fetus 5	Diagnosis	ICD-10-CM
O3110X9	Continuing pregnancy after spontaneous abortion of one fetus or more, unspecified trimester, other fetus	Diagnosis	ICD-10-CM
O3111X0	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3111X1	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 1	Diagnosis	ICD-10-CM
O3111X2	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 2	Diagnosis	ICD-10-CM
O3111X3	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 3	Diagnosis	ICD-10-CM
O3111X4	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 4	Diagnosis	ICD-10-CM
O3111X5	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 5	Diagnosis	ICD-10-CM
O3111X9	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, other fetus	Diagnosis	ICD-10-CM
O3112X0	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3112X1	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 1	Diagnosis	ICD-10-CM
O3112X2	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 2	Diagnosis	ICD-10-CM
O3112X3	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 3	Diagnosis	ICD-10-CM
O3112X4	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 4	Diagnosis	ICD-10-CM
O3112X5	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 5	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O3112X9	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, other fetus	Diagnosis	ICD-10-CM
O3113X0	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3113X1	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 1	Diagnosis	ICD-10-CM
O3113X2	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 2	Diagnosis	ICD-10-CM
O3113X3	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 3	Diagnosis	ICD-10-CM
O3113X4	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 4	Diagnosis	ICD-10-CM
O3113X5	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 5	Diagnosis	ICD-10-CM
O3113X9	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, other fetus	Diagnosis	ICD-10-CM
O312	Continuing pregnancy after intrauterine death of one fetus or more	Diagnosis	ICD-10-CM
O3120X0	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3120X1	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, fetus 1	Diagnosis	ICD-10-CM
O3120X2	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, fetus 2	Diagnosis	ICD-10-CM
O3120X3	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, fetus 3	Diagnosis	ICD-10-CM
O3120X4	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, fetus 4	Diagnosis	ICD-10-CM
O3120X5	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, fetus 5	Diagnosis	ICD-10-CM
O3120X9	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, other fetus	Diagnosis	ICD-10-CM
O3122X0	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3122X1	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 1	Diagnosis	ICD-10-CM
O3122X2	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 2	Diagnosis	ICD-10-CM
O3122X3	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 3	Diagnosis	ICD-10-CM
O3122X4	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 4	Diagnosis	ICD-10-CM
O3122X5	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 5	Diagnosis	ICD-10-CM
O3122X9	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, other fetus	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O3123X1	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 1	Diagnosis	ICD-10-CM
O3123X2	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 2	Diagnosis	ICD-10-CM
O3123X3	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 3	Diagnosis	ICD-10-CM
O3123X4	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 4	Diagnosis	ICD-10-CM
O3123X5	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 5	Diagnosis	ICD-10-CM
O364	Maternal care for intrauterine death	Diagnosis	ICD-10-CM
O364XX0	Maternal care for intrauterine death, not applicable or unspecified	Diagnosis	ICD-10-CM
O364XX1	Maternal care for intrauterine death, fetus 1	Diagnosis	ICD-10-CM
O364XX2	Maternal care for intrauterine death, fetus 2	Diagnosis	ICD-10-CM
O364XX3	Maternal care for intrauterine death, fetus 3	Diagnosis	ICD-10-CM
O364XX4	Maternal care for intrauterine death, fetus 4	Diagnosis	ICD-10-CM
O364XX5	Maternal care for intrauterine death, fetus 5	Diagnosis	ICD-10-CM
O364XX9	Maternal care for intrauterine death, other fetus	Diagnosis	ICD-10-CM
O6010X1	Preterm labor with preterm delivery, unspecified trimester, fetus 1	Diagnosis	ICD-10-CM
O6010X2	Preterm labor with preterm delivery, unspecified trimester, fetus 2	Diagnosis	ICD-10-CM
O6010X3	Preterm labor with preterm delivery, unspecified trimester, fetus 3	Diagnosis	ICD-10-CM
O6010X4	Preterm labor with preterm delivery, unspecified trimester, fetus 4	Diagnosis	ICD-10-CM
O6010X5	Preterm labor with preterm delivery, unspecified trimester, fetus 5	Diagnosis	ICD-10-CM
O6010X9	Preterm labor with preterm delivery, unspecified trimester, other fetus	Diagnosis	ICD-10-CM
O6012X0	Preterm labor second trimester with preterm delivery second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O6012X1	Preterm labor second trimester with preterm delivery second trimester, fetus 1	Diagnosis	ICD-10-CM
O6012X2	Preterm labor second trimester with preterm delivery second trimester, fetus 2	Diagnosis	ICD-10-CM
O6012X3	Preterm labor second trimester with preterm delivery second trimester, fetus 3	Diagnosis	ICD-10-CM
O6012X4	Preterm labor second trimester with preterm delivery second trimester, fetus 4	Diagnosis	ICD-10-CM
O6012X5	Preterm labor second trimester with preterm delivery second trimester, fetus 5	Diagnosis	ICD-10-CM
O6012X9	Preterm labor second trimester with preterm delivery second trimester, other fetus	Diagnosis	ICD-10-CM
O6013X0	Preterm labor second trimester with preterm delivery third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O6013X1	Preterm labor second trimester with preterm delivery third trimester, fetus 1	Diagnosis	ICD-10-CM
O6013X2	Preterm labor second trimester with preterm delivery third trimester, fetus 2	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O6013X3	Preterm labor second trimester with preterm delivery third trimester, fetus 3	Diagnosis	ICD-10-CM
O6013X4	Preterm labor second trimester with preterm delivery third trimester, fetus 4	Diagnosis	ICD-10-CM
O6013X5	Preterm labor second trimester with preterm delivery third trimester, fetus 5	Diagnosis	ICD-10-CM
O6013X9	Preterm labor second trimester with preterm delivery third trimester, other fetus	Diagnosis	ICD-10-CM
O6014X0	Preterm labor third trimester with preterm delivery third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O6014X1	Preterm labor third trimester with preterm delivery third trimester, fetus 1	Diagnosis	ICD-10-CM
O6014X2	Preterm labor third trimester with preterm delivery third trimester, fetus 2	Diagnosis	ICD-10-CM
O6014X3	Preterm labor third trimester with preterm delivery third trimester, fetus 3	Diagnosis	ICD-10-CM
O6014X4	Preterm labor third trimester with preterm delivery third trimester, fetus 4	Diagnosis	ICD-10-CM
O6014X5	Preterm labor third trimester with preterm delivery third trimester, fetus 5	Diagnosis	ICD-10-CM
O6014X9	Preterm labor third trimester with preterm delivery third trimester, other fetus	Diagnosis	ICD-10-CM
O6020X0	Term delivery with preterm labor, unspecified trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O6020X1	Term delivery with preterm labor, unspecified trimester, fetus 1	Diagnosis	ICD-10-CM
O6020X2	Term delivery with preterm labor, unspecified trimester, fetus 2	Diagnosis	ICD-10-CM
O6020X3	Term delivery with preterm labor, unspecified trimester, fetus 3	Diagnosis	ICD-10-CM
O6020X4	Term delivery with preterm labor, unspecified trimester, fetus 4	Diagnosis	ICD-10-CM
O6020X5	Term delivery with preterm labor, unspecified trimester, fetus 5	Diagnosis	ICD-10-CM
O6020X9	Term delivery with preterm labor, unspecified trimester, other fetus	Diagnosis	ICD-10-CM
O6022X0	Term delivery with preterm labor, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O6022X1	Term delivery with preterm labor, second trimester, fetus 1	Diagnosis	ICD-10-CM
O6022X2	Term delivery with preterm labor, second trimester, fetus 2	Diagnosis	ICD-10-CM
O6022X3	Term delivery with preterm labor, second trimester, fetus 3	Diagnosis	ICD-10-CM
O6022X4	Term delivery with preterm labor, second trimester, fetus 4	Diagnosis	ICD-10-CM
O6022X5	Term delivery with preterm labor, second trimester, fetus 5	Diagnosis	ICD-10-CM
O6022X9	Term delivery with preterm labor, second trimester, other fetus	Diagnosis	ICD-10-CM
O6023X0	Term delivery with preterm labor, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O6023X1	Term delivery with preterm labor, third trimester, fetus 1	Diagnosis	ICD-10-CM
O6023X2	Term delivery with preterm labor, third trimester, fetus 2	Diagnosis	ICD-10-CM
O6023X3	Term delivery with preterm labor, third trimester, fetus 3	Diagnosis	ICD-10-CM
O6023X4	Term delivery with preterm labor, third trimester, fetus 4	Diagnosis	ICD-10-CM
O6023X5	Term delivery with preterm labor, third trimester, fetus 5	Diagnosis	ICD-10-CM
O6023X9	Term delivery with preterm labor, third trimester, other fetus	Diagnosis	ICD-10-CM
O632	Delayed delivery of second twin, triplet, etc	Diagnosis	ICD-10-CM
O670	Intrapartum hemorrhage with coagulation defect	Diagnosis	ICD-10-CM
O678	Other intrapartum hemorrhage	Diagnosis	ICD-10-CM
O679	Intrapartum hemorrhage, unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O68	Labor and delivery complicated by abnormality of fetal acid-base balance	Diagnosis	ICD-10-CM
O690XX0	Labor and delivery complicated by prolapse of cord, not applicable or unspecified	Diagnosis	ICD-10-CM
O690XX1	Labor and delivery complicated by prolapse of cord, fetus 1	Diagnosis	ICD-10-CM
O690XX2	Labor and delivery complicated by prolapse of cord, fetus 2	Diagnosis	ICD-10-CM
O690XX3	Labor and delivery complicated by prolapse of cord, fetus 3	Diagnosis	ICD-10-CM
O690XX4	Labor and delivery complicated by prolapse of cord, fetus 4	Diagnosis	ICD-10-CM
O690XX5	Labor and delivery complicated by prolapse of cord, fetus 5	Diagnosis	ICD-10-CM
O690XX9	Labor and delivery complicated by prolapse of cord, other fetus	Diagnosis	ICD-10-CM
O691XX0	Labor and delivery complicated by cord around neck, with compression, not applicable or unspecified	Diagnosis	ICD-10-CM
O691XX1	Labor and delivery complicated by cord around neck, with compression, fetus 1	Diagnosis	ICD-10-CM
O691XX2	Labor and delivery complicated by cord around neck, with compression, fetus 2	Diagnosis	ICD-10-CM
O691XX3	Labor and delivery complicated by cord around neck, with compression, fetus 3	Diagnosis	ICD-10-CM
O691XX4	Labor and delivery complicated by cord around neck, with compression, fetus 4	Diagnosis	ICD-10-CM
O691XX5	Labor and delivery complicated by cord around neck, with compression, fetus 5	Diagnosis	ICD-10-CM
O691XX9	Labor and delivery complicated by cord around neck, with compression, other fetus	Diagnosis	ICD-10-CM
O692XX0	Labor and delivery complicated by other cord entanglement, with compression, not applicable or unspecified	Diagnosis	ICD-10-CM
O692XX1	Labor and delivery complicated by other cord entanglement, with compression, fetus 1	Diagnosis	ICD-10-CM
O692XX2	Labor and delivery complicated by other cord entanglement, with compression, fetus 2	Diagnosis	ICD-10-CM
O692XX3	Labor and delivery complicated by other cord entanglement, with compression, fetus 3	Diagnosis	ICD-10-CM
O692XX4	Labor and delivery complicated by other cord entanglement, with compression, fetus 4	Diagnosis	ICD-10-CM
O692XX5	Labor and delivery complicated by other cord entanglement, with compression, fetus 5	Diagnosis	ICD-10-CM
O692XX9	Labor and delivery complicated by other cord entanglement, with compression, other fetus	Diagnosis	ICD-10-CM
O693XX0	Labor and delivery complicated by short cord, not applicable or unspecified	Diagnosis	ICD-10-CM
O693XX1	Labor and delivery complicated by short cord, fetus 1	Diagnosis	ICD-10-CM
O693XX2	Labor and delivery complicated by short cord, fetus 2	Diagnosis	ICD-10-CM
O693XX3	Labor and delivery complicated by short cord, fetus 3	Diagnosis	ICD-10-CM
O693XX4	Labor and delivery complicated by short cord, fetus 4	Diagnosis	ICD-10-CM
O693XX5	Labor and delivery complicated by short cord, fetus 5	Diagnosis	ICD-10-CM
O693XX9	Labor and delivery complicated by short cord, other fetus	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O694XX0	Labor and delivery complicated by vasa previa, not applicable or unspecified	Diagnosis	ICD-10-CM
O694XX1	Labor and delivery complicated by vasa previa, fetus 1	Diagnosis	ICD-10-CM
O694XX2	Labor and delivery complicated by vasa previa, fetus 2	Diagnosis	ICD-10-CM
O694XX3	Labor and delivery complicated by vasa previa, fetus 3	Diagnosis	ICD-10-CM
O694XX4	Labor and delivery complicated by vasa previa, fetus 4	Diagnosis	ICD-10-CM
O694XX5	Labor and delivery complicated by vasa previa, fetus 5	Diagnosis	ICD-10-CM
O694XX9	Labor and delivery complicated by vasa previa, other fetus	Diagnosis	ICD-10-CM
O695XX0	Labor and delivery complicated by vascular lesion of cord, not applicable or unspecified	Diagnosis	ICD-10-CM
O695XX1	Labor and delivery complicated by vascular lesion of cord, fetus 1	Diagnosis	ICD-10-CM
O695XX2	Labor and delivery complicated by vascular lesion of cord, fetus 2	Diagnosis	ICD-10-CM
O695XX3	Labor and delivery complicated by vascular lesion of cord, fetus 3	Diagnosis	ICD-10-CM
O695XX4	Labor and delivery complicated by vascular lesion of cord, fetus 4	Diagnosis	ICD-10-CM
O695XX5	Labor and delivery complicated by vascular lesion of cord, fetus 5	Diagnosis	ICD-10-CM
O695XX9	Labor and delivery complicated by vascular lesion of cord, other fetus	Diagnosis	ICD-10-CM
O6981X0	Labor and delivery complicated by cord around neck, without compression, not applicable or unspecified	Diagnosis	ICD-10-CM
O6981X1	Labor and delivery complicated by cord around neck, without compression, fetus 1	Diagnosis	ICD-10-CM
O6981X2	Labor and delivery complicated by cord around neck, without compression, fetus 2	Diagnosis	ICD-10-CM
O6981X3	Labor and delivery complicated by cord around neck, without compression, fetus 3	Diagnosis	ICD-10-CM
O6981X4	Labor and delivery complicated by cord around neck, without compression, fetus 4	Diagnosis	ICD-10-CM
O6981X5	Labor and delivery complicated by cord around neck, without compression, fetus 5	Diagnosis	ICD-10-CM
O6981X9	Labor and delivery complicated by cord around neck, without compression, other fetus	Diagnosis	ICD-10-CM
O6982X0	Labor and delivery complicated by other cord entanglement, without compression, not applicable or unspecified	Diagnosis	ICD-10-CM
O6982X1	Labor and delivery complicated by other cord entanglement, without compression, fetus 1	Diagnosis	ICD-10-CM
O6982X2	Labor and delivery complicated by other cord entanglement, without compression, fetus 2	Diagnosis	ICD-10-CM
O6982X3	Labor and delivery complicated by other cord entanglement, without compression, fetus 3	Diagnosis	ICD-10-CM
O6982X4	Labor and delivery complicated by other cord entanglement, without compression, fetus 4	Diagnosis	ICD-10-CM
O6982X5	Labor and delivery complicated by other cord entanglement, without compression, fetus 5	Diagnosis	ICD-10-CM
O6982X9	Labor and delivery complicated by other cord entanglement, without compression, other fetus	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O6989X0	Labor and delivery complicated by other cord complications, not applicable or unspecified	Diagnosis	ICD-10-CM
O6989X1	Labor and delivery complicated by other cord complications, fetus 1	Diagnosis	ICD-10-CM
O6989X2	Labor and delivery complicated by other cord complications, fetus 2	Diagnosis	ICD-10-CM
O6989X3	Labor and delivery complicated by other cord complications, fetus 3	Diagnosis	ICD-10-CM
O6989X4	Labor and delivery complicated by other cord complications, fetus 4	Diagnosis	ICD-10-CM
O6989X5	Labor and delivery complicated by other cord complications, fetus 5	Diagnosis	ICD-10-CM
O6989X9	Labor and delivery complicated by other cord complications, other fetus	Diagnosis	ICD-10-CM
O699XX0	Labor and delivery complicated by cord complication, unspecified, not applicable or unspecified	Diagnosis	ICD-10-CM
O699XX1	Labor and delivery complicated by cord complication, unspecified, fetus 1	Diagnosis	ICD-10-CM
O699XX2	Labor and delivery complicated by cord complication, unspecified, fetus 2	Diagnosis	ICD-10-CM
O699XX3	Labor and delivery complicated by cord complication, unspecified, fetus 3	Diagnosis	ICD-10-CM
O699XX4	Labor and delivery complicated by cord complication, unspecified, fetus 4	Diagnosis	ICD-10-CM
O699XX5	Labor and delivery complicated by cord complication, unspecified, fetus 5	Diagnosis	ICD-10-CM
O699XX9	Labor and delivery complicated by cord complication, unspecified, other fetus	Diagnosis	ICD-10-CM
O700	First degree perineal laceration during delivery	Diagnosis	ICD-10-CM
O701	Second degree perineal laceration during delivery	Diagnosis	ICD-10-CM
O7020	Third degree perineal laceration during delivery, unspecified	Diagnosis	ICD-10-CM
O7021	Third degree perineal laceration during delivery, IIIa	Diagnosis	ICD-10-CM
O7022	Third degree perineal laceration during delivery, IIIb	Diagnosis	ICD-10-CM
O7023	Third degree perineal laceration during delivery, IIIc	Diagnosis	ICD-10-CM
O703	Fourth degree perineal laceration during delivery	Diagnosis	ICD-10-CM
O704	Anal sphincter tear complicating delivery, not associated with third degree laceration	Diagnosis	ICD-10-CM
O709	Perineal laceration during delivery, unspecified	Diagnosis	ICD-10-CM
O740	Aspiration pneumonitis due to anesthesia during labor and delivery	Diagnosis	ICD-10-CM
O741	Other pulmonary complications of anesthesia during labor and delivery	Diagnosis	ICD-10-CM
O742	Cardiac complications of anesthesia during labor and delivery	Diagnosis	ICD-10-CM
O743	Central nervous system complications of anesthesia during labor and delivery	Diagnosis	ICD-10-CM
O744	Toxic reaction to local anesthesia during labor and delivery	Diagnosis	ICD-10-CM
O745	Spinal and epidural anesthesia-induced headache during labor and delivery	Diagnosis	ICD-10-CM
O746	Other complications of spinal and epidural anesthesia during labor and delivery	Diagnosis	ICD-10-CM
O747	Failed or difficult intubation for anesthesia during labor and delivery	Diagnosis	ICD-10-CM
O748	Other complications of anesthesia during labor and delivery	Diagnosis	ICD-10-CM
O749	Complication of anesthesia during labor and delivery, unspecified	Diagnosis	ICD-10-CM
O750	Maternal distress during labor and delivery	Diagnosis	ICD-10-CM
O751	Shock during or following labor and delivery	Diagnosis	ICD-10-CM
O755	Delayed delivery after artificial rupture of membranes	Diagnosis	ICD-10-CM
O7581	Maternal exhaustion complicating labor and delivery	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
07582	Onset (spontaneous) of labor after 37 completed weeks of gestation but before 39 completed weeks gestation, with delivery by (planned) cesarean section	Diagnosis	ICD-10-CM
07589	Other specified complications of labor and delivery	Diagnosis	ICD-10-CM
0759	Complication of labor and delivery, unspecified	Diagnosis	ICD-10-CM
076	Abnormality in fetal heart rate and rhythm complicating labor and delivery	Diagnosis	ICD-10-CM
0770	Labor and delivery complicated by meconium in amniotic fluid	Diagnosis	ICD-10-CM
0778	Labor and delivery complicated by other evidence of fetal stress	Diagnosis	ICD-10-CM
0779	Labor and delivery complicated by fetal stress, unspecified	Diagnosis	ICD-10-CM
080	Encounter for full-term uncomplicated delivery	Diagnosis	ICD-10-CM
082	Encounter for cesarean delivery without indication	Diagnosis	ICD-10-CM
08802	Air embolism in childbirth	Diagnosis	ICD-10-CM
08812	Amniotic fluid embolism in childbirth	Diagnosis	ICD-10-CM
08822	Thromboembolism in childbirth	Diagnosis	ICD-10-CM
08832	Pyemic and septic embolism in childbirth	Diagnosis	ICD-10-CM
08882	Other embolism in childbirth	Diagnosis	ICD-10-CM
09802	Tuberculosis complicating childbirth	Diagnosis	ICD-10-CM
09812	Syphilis complicating childbirth	Diagnosis	ICD-10-CM
09822	Gonorrhea complicating childbirth	Diagnosis	ICD-10-CM
09832	Other infections with a predominantly sexual mode of transmission complicating childbirth	Diagnosis	ICD-10-CM
09842	Viral hepatitis complicating childbirth	Diagnosis	ICD-10-CM
09852	Other viral diseases complicating childbirth	Diagnosis	ICD-10-CM
09862	Protozoal diseases complicating childbirth	Diagnosis	ICD-10-CM
09872	Human immunodeficiency virus [HIV] disease complicating childbirth	Diagnosis	ICD-10-CM
09882	Other maternal infectious and parasitic diseases complicating childbirth	Diagnosis	ICD-10-CM
09892	Unspecified maternal infectious and parasitic disease complicating childbirth	Diagnosis	ICD-10-CM
09902	Anemia complicating childbirth	Diagnosis	ICD-10-CM
09912	Other diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism complicating childbirth	Diagnosis	ICD-10-CM
099214	Obesity complicating childbirth	Diagnosis	ICD-10-CM
099284	Endocrine, nutritional and metabolic diseases complicating childbirth	Diagnosis	ICD-10-CM
099314	Alcohol use complicating childbirth	Diagnosis	ICD-10-CM
099324	Drug use complicating childbirth	Diagnosis	ICD-10-CM
099334	Smoking (tobacco) complicating childbirth	Diagnosis	ICD-10-CM
099344	Other mental disorders complicating childbirth	Diagnosis	ICD-10-CM
099354	Diseases of the nervous system complicating childbirth	Diagnosis	ICD-10-CM
09942	Diseases of the circulatory system complicating childbirth	Diagnosis	ICD-10-CM
09952	Diseases of the respiratory system complicating childbirth	Diagnosis	ICD-10-CM
09962	Diseases of the digestive system complicating childbirth	Diagnosis	ICD-10-CM
09972	Diseases of the skin and subcutaneous tissue complicating childbirth	Diagnosis	ICD-10-CM
099814	Abnormal glucose complicating childbirth	Diagnosis	ICD-10-CM
099824	Streptococcus B carrier state complicating childbirth	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O99834	Other infection carrier state complicating childbirth	Diagnosis	ICD-10-CM
O99844	Bariatric surgery status complicating childbirth	Diagnosis	ICD-10-CM
O9A12	Malignant neoplasm complicating childbirth	Diagnosis	ICD-10-CM
O9A22	Injury, poisoning and certain other consequences of external causes complicating childbirth	Diagnosis	ICD-10-CM
O9A32	Physical abuse complicating childbirth	Diagnosis	ICD-10-CM
O9A42	Sexual abuse complicating childbirth	Diagnosis	ICD-10-CM
O9A52	Psychological abuse complicating childbirth	Diagnosis	ICD-10-CM
P030	Newborn affected by breech delivery and extraction	Diagnosis	ICD-10-CM
P032	Newborn affected by forceps delivery	Diagnosis	ICD-10-CM
P033	Newborn affected by delivery by vacuum extractor [ventouse]	Diagnosis	ICD-10-CM
P034	Newborn affected by Cesarean delivery	Diagnosis	ICD-10-CM
P035	Newborn affected by precipitate delivery	Diagnosis	ICD-10-CM
P0700	Extremely low birth weight newborn, unspecified weight	Diagnosis	ICD-10-CM
P0701	Extremely low birth weight newborn, less than 500 grams	Diagnosis	ICD-10-CM
P0702	Extremely low birth weight newborn, 500-749 grams	Diagnosis	ICD-10-CM
P0703	Extremely low birth weight newborn, 750-999 grams	Diagnosis	ICD-10-CM
P0710	Other low birth weight newborn, unspecified weight	Diagnosis	ICD-10-CM
P0714	Other low birth weight newborn, 1000-1249 grams	Diagnosis	ICD-10-CM
P0715	Other low birth weight newborn, 1250-1499 grams	Diagnosis	ICD-10-CM
P0716	Other low birth weight newborn, 1500-1749 grams	Diagnosis	ICD-10-CM
P0717	Other low birth weight newborn, 1750-1999 grams	Diagnosis	ICD-10-CM
P0718	Other low birth weight newborn, 2000-2499 grams	Diagnosis	ICD-10-CM
P0720	Extreme immaturity of newborn, unspecified weeks of gestation	Diagnosis	ICD-10-CM
P0721	Extreme immaturity of newborn, gestational age less than 23 completed weeks	Diagnosis	ICD-10-CM
P0722	Extreme immaturity of newborn, gestational age 23 completed weeks	Diagnosis	ICD-10-CM
P0723	Extreme immaturity of newborn, gestational age 24 completed weeks	Diagnosis	ICD-10-CM
P0724	Extreme immaturity of newborn, gestational age 25 completed weeks	Diagnosis	ICD-10-CM
P0725	Extreme immaturity of newborn, gestational age 26 completed weeks	Diagnosis	ICD-10-CM
P0726	Extreme immaturity of newborn, gestational age 27 completed weeks	Diagnosis	ICD-10-CM
P0730	Preterm newborn, unspecified weeks of gestation	Diagnosis	ICD-10-CM
P0731	Preterm newborn, gestational age 28 completed weeks	Diagnosis	ICD-10-CM
P0732	Preterm newborn, gestational age 29 completed weeks	Diagnosis	ICD-10-CM
P0733	Preterm newborn, gestational age 30 completed weeks	Diagnosis	ICD-10-CM
P0734	Preterm newborn, gestational age 31 completed weeks	Diagnosis	ICD-10-CM
P0735	Preterm newborn, gestational age 32 completed weeks	Diagnosis	ICD-10-CM
P0736	Preterm newborn, gestational age 33 completed weeks	Diagnosis	ICD-10-CM
P0737	Preterm newborn, gestational age 34 completed weeks	Diagnosis	ICD-10-CM
P0738	Preterm newborn, gestational age 35 completed weeks	Diagnosis	ICD-10-CM
P0739	Preterm newborn, gestational age 36 completed weeks	Diagnosis	ICD-10-CM
P0821	Post-term newborn	Diagnosis	ICD-10-CM
P0822	Prolonged gestation of newborn	Diagnosis	ICD-10-CM
P95	Stillbirth	Diagnosis	ICD-10-CM
S0190	Mifepristone, oral, 200 mg	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
S0191	Misoprostol, oral, 200 mcg	Procedure	HCPCS
S0199	Medically induced abortion by oral ingestion of medication including all associated services and supplies (e.g., patient counseling, office visits, confirmation of pregnancy by HCG, ultrasound to confirm duration of pregnancy, ultrasound to confirm completion of abortion) except drugs	Procedure	HCPCS
S2260	Induced abortion, 17 to 24 weeks	Procedure	HCPCS
S2262	Abortion for maternal indication, 25 weeks or greater	Procedure	HCPCS
S2265	Induced abortion, 25 to 28 weeks	Procedure	HCPCS
S2266	Induced abortion, 29 to 31 weeks	Procedure	HCPCS
S2267	Induced abortion, 32 weeks or greater	Procedure	HCPCS
Z332	Encounter for elective termination of pregnancy	Diagnosis	ICD-10-CM
Z370	Single live birth	Diagnosis	ICD-10-CM
Z371	Single stillbirth	Diagnosis	ICD-10-CM
Z372	Twins, both liveborn	Diagnosis	ICD-10-CM
Z373	Twins, one liveborn and one stillborn	Diagnosis	ICD-10-CM
Z374	Twins, both stillborn	Diagnosis	ICD-10-CM
Z3750	Multiple births, unspecified, all liveborn	Diagnosis	ICD-10-CM
Z3751	Triplets, all liveborn	Diagnosis	ICD-10-CM
Z3752	Quadruplets, all liveborn	Diagnosis	ICD-10-CM
Z3753	Quintuplets, all liveborn	Diagnosis	ICD-10-CM
Z3754	Sextuplets, all liveborn	Diagnosis	ICD-10-CM
Z3759	Other multiple births, all liveborn	Diagnosis	ICD-10-CM
Z3760	Multiple births, unspecified, some liveborn	Diagnosis	ICD-10-CM
Z3761	Triplets, some liveborn	Diagnosis	ICD-10-CM
Z3762	Quadruplets, some liveborn	Diagnosis	ICD-10-CM
Z3763	Quintuplets, some liveborn	Diagnosis	ICD-10-CM
Z3764	Sextuplets, some liveborn	Diagnosis	ICD-10-CM
Z3769	Other multiple births, some liveborn	Diagnosis	ICD-10-CM
Z377	Other multiple births, all stillborn	Diagnosis	ICD-10-CM
Z379	Outcome of delivery, unspecified	Diagnosis	ICD-10-CM
Z3800	Single liveborn infant, delivered vaginally	Diagnosis	ICD-10-CM
Z3801	Single liveborn infant, delivered by cesarean	Diagnosis	ICD-10-CM
Z381	Single liveborn infant, born outside hospital	Diagnosis	ICD-10-CM
Z382	Single liveborn infant, unspecified as to place of birth	Diagnosis	ICD-10-CM
Z3830	Twin liveborn infant, delivered vaginally	Diagnosis	ICD-10-CM
Z3831	Twin liveborn infant, delivered by cesarean	Diagnosis	ICD-10-CM
Z384	Twin liveborn infant, born outside hospital	Diagnosis	ICD-10-CM
Z385	Twin liveborn infant, unspecified as to place of birth	Diagnosis	ICD-10-CM
Z3861	Triplet liveborn infant, delivered vaginally	Diagnosis	ICD-10-CM
Z3862	Triplet liveborn infant, delivered by cesarean	Diagnosis	ICD-10-CM
Z3863	Quadruplet liveborn infant, delivered vaginally	Diagnosis	ICD-10-CM
Z3864	Quadruplet liveborn infant, delivered by cesarean	Diagnosis	ICD-10-CM
Z3865	Quintuplet liveborn infant, delivered vaginally	Diagnosis	ICD-10-CM
Z3866	Quintuplet liveborn infant, delivered by cesarean	Diagnosis	ICD-10-CM
Z3868	Other multiple liveborn infant, delivered vaginally	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
Z3869	Other multiple liveborn infant, delivered by cesarean	Diagnosis	ICD-10-CM
Z387	Other multiple liveborn infant, born outside hospital	Diagnosis	ICD-10-CM
Z388	Other multiple liveborn infant, unspecified as to place of birth	Diagnosis	ICD-10-CM
Ongoing Pregnancy Markers			
58321	ARTIFICIAL INSEMINATION; INTRA-CERVICAL	Procedure	CPT-4
58322	ARTIFICIAL INSEMINATION	Procedure	CPT-4
58974	TRANSFER OF EMBRYO	Procedure	CPT-4
58976	Gamete, zygote, or embryo intrafallopian transfer	Procedure	CPT-4
59015	Chorionic villus sampling, any method	Procedure	CPT-4
76801	Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, first trimester (< 14 weeks 0 days), transabdominal approach; single or first gestation	Procedure	CPT-4
76802	Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, first trimester (< 14 weeks 0 days), transabdominal approach; each additional gestation	Procedure	CPT-4
76805	Complete Ultrasounds (Maternal and Fetal Evaluation); Second and Third Trimesters (Single or First Gestation)	Procedure	CPT-4
76810	Complete Ultrasounds (Maternal and Fetal Evaluation); Second and Third Trimesters (Each Additional Gestation)	Procedure	CPT-4
76811	Detailed fetal anatomic examination (single or first gestation)	Procedure	CPT-4
76812	Detailed fetal anatomic examination (Each additional Gestation)	Procedure	CPT-4
76813	Nuchal Translucency Measurement (Single or First Gestation)	Procedure	CPT-4
76814	Nuchal Translucency Measurement (Each Additional Gestation)	Procedure	CPT-4
81420	Fetal aneuploidy genomic sequence analysis, cell-free fetal DNA	Procedure	CPT-4
81507	Fetal aneuploidy (trisomy 21, 18, and 13) DNA sequence analysis of selected regions using maternal plasma algorithm reported as a risk score for each trisomy	Procedure	CPT-4
82106	Alpha-fetoprotein, amniotic	Procedure	CPT-4
82677	Assay of estriol	Procedure	CPT-4
82950	Glucose; post glucose dose (includes glucose)	Procedure	CPT-4
82951	Glucose; tolerance test (GTT), 3 specimens (includes glucose)	Procedure	CPT-4
82952	Glucose tolerance test, additional beyond 3 specimens	Procedure	CPT-4
84163	PAPP-A serum test	Procedure	CPT-4
86336	Inhibin A	Procedure	CPT-4
87081	Group B streptococcus screening (genital)	Procedure	CPT-4
00901	Supervision of pregnancy with history of infertility, first trimester	Diagnosis	ICD-10-CM
00902	Supervision of pregnancy with history of infertility, second trimester	Diagnosis	ICD-10-CM
00903	Supervision of pregnancy with history of infertility, third trimester	Diagnosis	ICD-10-CM
00911	Supervision of pregnancy with history of ectopic pregnancy, first trimester	Diagnosis	ICD-10-CM
00912	Supervision of pregnancy with history of ectopic pregnancy, second trimester	Diagnosis	ICD-10-CM
00913	Supervision of pregnancy with history of ectopic pregnancy, third trimester	Diagnosis	ICD-10-CM
009211	Supervision of pregnancy with history of pre-term labor, first trimester	Diagnosis	ICD-10-CM
009212	Supervision of pregnancy with history of pre-term labor, second trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
009213	Supervision of pregnancy with history of pre-term labor, third trimester	Diagnosis	ICD-10-CM
009291	Supervision of pregnancy with other poor reproductive or obstetric history, first trimester	Diagnosis	ICD-10-CM
009292	Supervision of pregnancy with other poor reproductive or obstetric history, second trimester	Diagnosis	ICD-10-CM
009293	Supervision of pregnancy with other poor reproductive or obstetric history, third trimester	Diagnosis	ICD-10-CM
00931	Supervision of pregnancy with insufficient antenatal care, first trimester	Diagnosis	ICD-10-CM
00932	Supervision of pregnancy with insufficient antenatal care, second trimester	Diagnosis	ICD-10-CM
00933	Supervision of pregnancy with insufficient antenatal care, third trimester	Diagnosis	ICD-10-CM
00941	Supervision of pregnancy with grand multiparity, first trimester	Diagnosis	ICD-10-CM
00942	Supervision of pregnancy with grand multiparity, second trimester	Diagnosis	ICD-10-CM
00943	Supervision of pregnancy with grand multiparity, third trimester	Diagnosis	ICD-10-CM
009511	Supervision of elderly primigravida, first trimester	Diagnosis	ICD-10-CM
009512	Supervision of elderly primigravida, second trimester	Diagnosis	ICD-10-CM
009513	Supervision of elderly primigravida, third trimester	Diagnosis	ICD-10-CM
009521	Supervision of elderly multigravida, first trimester	Diagnosis	ICD-10-CM
009522	Supervision of elderly multigravida, second trimester	Diagnosis	ICD-10-CM
009523	Supervision of elderly multigravida, third trimester	Diagnosis	ICD-10-CM
009611	Supervision of young primigravida, first trimester	Diagnosis	ICD-10-CM
009612	Supervision of young primigravida, second trimester	Diagnosis	ICD-10-CM
009613	Supervision of young primigravida, third trimester	Diagnosis	ICD-10-CM
009621	Supervision of young multigravida, first trimester	Diagnosis	ICD-10-CM
009622	Supervision of young multigravida, second trimester	Diagnosis	ICD-10-CM
009623	Supervision of young multigravida, third trimester	Diagnosis	ICD-10-CM
00971	Supervision of high risk pregnancy due to social problems, first trimester	Diagnosis	ICD-10-CM
00972	Supervision of high risk pregnancy due to social problems, second trimester	Diagnosis	ICD-10-CM
00973	Supervision of high risk pregnancy due to social problems, third trimester	Diagnosis	ICD-10-CM
009811	Supervision of pregnancy resulting from assisted reproductive technology, first trimester	Diagnosis	ICD-10-CM
009812	Supervision of pregnancy resulting from assisted reproductive technology, second trimester	Diagnosis	ICD-10-CM
009813	Supervision of pregnancy resulting from assisted reproductive technology, third trimester	Diagnosis	ICD-10-CM
009821	Supervision of pregnancy with history of in utero procedure during previous pregnancy, first trimester	Diagnosis	ICD-10-CM
009822	Supervision of pregnancy with history of in utero procedure during previous pregnancy, second trimester	Diagnosis	ICD-10-CM
009823	Supervision of pregnancy with history of in utero procedure during previous pregnancy, third trimester	Diagnosis	ICD-10-CM
009891	Supervision of other high risk pregnancies, first trimester	Diagnosis	ICD-10-CM
009892	Supervision of other high risk pregnancies, second trimester	Diagnosis	ICD-10-CM
009893	Supervision of other high risk pregnancies, third trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O0991	Supervision of high risk pregnancy, unspecified, first trimester	Diagnosis	ICD-10-CM
O0992	Supervision of high risk pregnancy, unspecified, second trimester	Diagnosis	ICD-10-CM
O0993	Supervision of high risk pregnancy, unspecified, third trimester	Diagnosis	ICD-10-CM
O09A1	Supervision of pregnancy with history of molar pregnancy, first trimester	Diagnosis	ICD-10-CM
O09A2	Supervision of pregnancy with history of molar pregnancy, second trimester	Diagnosis	ICD-10-CM
O09A3	Supervision of pregnancy with history of molar pregnancy, third trimester	Diagnosis	ICD-10-CM
O10011	Pre-existing essential hypertension complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O10012	Pre-existing essential hypertension complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O10013	Pre-existing essential hypertension complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O10111	Pre-existing hypertensive heart disease complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O10112	Pre-existing hypertensive heart disease complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O10113	Pre-existing hypertensive heart disease complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O10211	Pre-existing hypertensive chronic kidney disease complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O10212	Pre-existing hypertensive chronic kidney disease complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O10213	Pre-existing hypertensive chronic kidney disease complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O10311	Pre-existing hypertensive heart and chronic kidney disease complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O10312	Pre-existing hypertensive heart and chronic kidney disease complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O10313	Pre-existing hypertensive heart and chronic kidney disease complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O10411	Pre-existing secondary hypertension complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O10412	Pre-existing secondary hypertension complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O10413	Pre-existing secondary hypertension complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O10911	Unspecified pre-existing hypertension complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O10912	Unspecified pre-existing hypertension complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O10913	Unspecified pre-existing hypertension complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O111	Pre-existing hypertension with pre-eclampsia, first trimester	Diagnosis	ICD-10-CM
O112	Pre-existing hypertension with pre-eclampsia, second trimester	Diagnosis	ICD-10-CM
O113	Pre-existing hypertension with pre-eclampsia, third trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O1201	Gestational edema, first trimester	Diagnosis	ICD-10-CM
O1202	Gestational edema, second trimester	Diagnosis	ICD-10-CM
O1203	Gestational edema, third trimester	Diagnosis	ICD-10-CM
O1211	Gestational proteinuria, first trimester	Diagnosis	ICD-10-CM
O1212	Gestational proteinuria, second trimester	Diagnosis	ICD-10-CM
O1213	Gestational proteinuria, third trimester	Diagnosis	ICD-10-CM
O1221	Gestational edema with proteinuria, first trimester	Diagnosis	ICD-10-CM
O1222	Gestational edema with proteinuria, second trimester	Diagnosis	ICD-10-CM
O1223	Gestational edema with proteinuria, third trimester	Diagnosis	ICD-10-CM
O131	Gestational [pregnancy-induced] hypertension without significant proteinuria, first trimester	Diagnosis	ICD-10-CM
O132	Gestational [pregnancy-induced] hypertension without significant proteinuria, second trimester	Diagnosis	ICD-10-CM
O133	Gestational [pregnancy-induced] hypertension without significant proteinuria, third trimester	Diagnosis	ICD-10-CM
O1402	Mild to moderate pre-eclampsia, second trimester	Diagnosis	ICD-10-CM
O1403	Mild to moderate pre-eclampsia, third trimester	Diagnosis	ICD-10-CM
O1412	Severe pre-eclampsia, second trimester	Diagnosis	ICD-10-CM
O1413	Severe pre-eclampsia, third trimester	Diagnosis	ICD-10-CM
O1422	HELLP syndrome (HELLP), second trimester	Diagnosis	ICD-10-CM
O1423	HELLP syndrome (HELLP), third trimester	Diagnosis	ICD-10-CM
O1492	Unspecified pre-eclampsia, second trimester	Diagnosis	ICD-10-CM
O1493	Unspecified pre-eclampsia, third trimester	Diagnosis	ICD-10-CM
O1502	Eclampsia complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O1503	Eclampsia complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O161	Unspecified maternal hypertension, first trimester	Diagnosis	ICD-10-CM
O162	Unspecified maternal hypertension, second trimester	Diagnosis	ICD-10-CM
O163	Unspecified maternal hypertension, third trimester	Diagnosis	ICD-10-CM
O2201	Varicose veins of lower extremity in pregnancy, first trimester	Diagnosis	ICD-10-CM
O2202	Varicose veins of lower extremity in pregnancy, second trimester	Diagnosis	ICD-10-CM
O2203	Varicose veins of lower extremity in pregnancy, third trimester	Diagnosis	ICD-10-CM
O2211	Genital varices in pregnancy, first trimester	Diagnosis	ICD-10-CM
O2212	Genital varices in pregnancy, second trimester	Diagnosis	ICD-10-CM
O2213	Genital varices in pregnancy, third trimester	Diagnosis	ICD-10-CM
O2221	Superficial thrombophlebitis in pregnancy, first trimester	Diagnosis	ICD-10-CM
O2222	Superficial thrombophlebitis in pregnancy, second trimester	Diagnosis	ICD-10-CM
O2223	Superficial thrombophlebitis in pregnancy, third trimester	Diagnosis	ICD-10-CM
O2231	Deep phlebothrombosis in pregnancy, first trimester	Diagnosis	ICD-10-CM
O2232	Deep phlebothrombosis in pregnancy, second trimester	Diagnosis	ICD-10-CM
O2233	Deep phlebothrombosis in pregnancy, third trimester	Diagnosis	ICD-10-CM
O2241	Hemorrhoids in pregnancy, first trimester	Diagnosis	ICD-10-CM
O2242	Hemorrhoids in pregnancy, second trimester	Diagnosis	ICD-10-CM
O2243	Hemorrhoids in pregnancy, third trimester	Diagnosis	ICD-10-CM
O2251	Cerebral venous thrombosis in pregnancy, first trimester	Diagnosis	ICD-10-CM
O2252	Cerebral venous thrombosis in pregnancy, second trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O2253	Cerebral venous thrombosis in pregnancy, third trimester	Diagnosis	ICD-10-CM
O228X1	Other venous complications in pregnancy, first trimester	Diagnosis	ICD-10-CM
O228X2	Other venous complications in pregnancy, second trimester	Diagnosis	ICD-10-CM
O228X3	Other venous complications in pregnancy, third trimester	Diagnosis	ICD-10-CM
O2291	Venous complication in pregnancy, unspecified, first trimester	Diagnosis	ICD-10-CM
O2292	Venous complication in pregnancy, unspecified, second trimester	Diagnosis	ICD-10-CM
O2293	Venous complication in pregnancy, unspecified, third trimester	Diagnosis	ICD-10-CM
O2301	Infections of kidney in pregnancy, first trimester	Diagnosis	ICD-10-CM
O2302	Infections of kidney in pregnancy, second trimester	Diagnosis	ICD-10-CM
O2303	Infections of kidney in pregnancy, third trimester	Diagnosis	ICD-10-CM
O2311	Infections of bladder in pregnancy, first trimester	Diagnosis	ICD-10-CM
O2312	Infections of bladder in pregnancy, second trimester	Diagnosis	ICD-10-CM
O2313	Infections of bladder in pregnancy, third trimester	Diagnosis	ICD-10-CM
O2321	Infections of urethra in pregnancy, first trimester	Diagnosis	ICD-10-CM
O2322	Infections of urethra in pregnancy, second trimester	Diagnosis	ICD-10-CM
O2323	Infections of urethra in pregnancy, third trimester	Diagnosis	ICD-10-CM
O2331	Infections of other parts of urinary tract in pregnancy, first trimester	Diagnosis	ICD-10-CM
O2332	Infections of other parts of urinary tract in pregnancy, second trimester	Diagnosis	ICD-10-CM
O2333	Infections of other parts of urinary tract in pregnancy, third trimester	Diagnosis	ICD-10-CM
O2341	Unspecified infection of urinary tract in pregnancy, first trimester	Diagnosis	ICD-10-CM
O2342	Unspecified infection of urinary tract in pregnancy, second trimester	Diagnosis	ICD-10-CM
O2343	Unspecified infection of urinary tract in pregnancy, third trimester	Diagnosis	ICD-10-CM
O23511	Infections of cervix in pregnancy, first trimester	Diagnosis	ICD-10-CM
O23512	Infections of cervix in pregnancy, second trimester	Diagnosis	ICD-10-CM
O23513	Infections of cervix in pregnancy, third trimester	Diagnosis	ICD-10-CM
O23521	Salpingo-oophoritis in pregnancy, first trimester	Diagnosis	ICD-10-CM
O23522	Salpingo-oophoritis in pregnancy, second trimester	Diagnosis	ICD-10-CM
O23523	Salpingo-oophoritis in pregnancy, third trimester	Diagnosis	ICD-10-CM
O23591	Infection of other part of genital tract in pregnancy, first trimester	Diagnosis	ICD-10-CM
O23592	Infection of other part of genital tract in pregnancy, second trimester	Diagnosis	ICD-10-CM
O23593	Infection of other part of genital tract in pregnancy, third trimester	Diagnosis	ICD-10-CM
O2391	Unspecified genitourinary tract infection in pregnancy, first trimester	Diagnosis	ICD-10-CM
O2392	Unspecified genitourinary tract infection in pregnancy, second trimester	Diagnosis	ICD-10-CM
O2393	Unspecified genitourinary tract infection in pregnancy, third trimester	Diagnosis	ICD-10-CM
O24011	Pre-existing type 1 diabetes mellitus, in pregnancy, first trimester	Diagnosis	ICD-10-CM
O24012	Pre-existing type 1 diabetes mellitus, in pregnancy, second trimester	Diagnosis	ICD-10-CM
O24013	Pre-existing type 1 diabetes mellitus, in pregnancy, third trimester	Diagnosis	ICD-10-CM
O24111	Pre-existing type 2 diabetes mellitus, in pregnancy, first trimester	Diagnosis	ICD-10-CM
O24112	Pre-existing type 2 diabetes mellitus, in pregnancy, second trimester	Diagnosis	ICD-10-CM
O24113	Pre-existing type 2 diabetes mellitus, in pregnancy, third trimester	Diagnosis	ICD-10-CM
O24311	Unspecified pre-existing diabetes mellitus in pregnancy, first trimester	Diagnosis	ICD-10-CM
O24312	Unspecified pre-existing diabetes mellitus in pregnancy, second trimester	Diagnosis	ICD-10-CM
O24313	Unspecified pre-existing diabetes mellitus in pregnancy, third trimester	Diagnosis	ICD-10-CM
O24811	Other pre-existing diabetes mellitus in pregnancy, first trimester	Diagnosis	ICD-10-CM
O24812	Other pre-existing diabetes mellitus in pregnancy, second trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
024813	Other pre-existing diabetes mellitus in pregnancy, third trimester	Diagnosis	ICD-10-CM
024911	Unspecified diabetes mellitus in pregnancy, first trimester	Diagnosis	ICD-10-CM
024912	Unspecified diabetes mellitus in pregnancy, second trimester	Diagnosis	ICD-10-CM
024913	Unspecified diabetes mellitus in pregnancy, third trimester	Diagnosis	ICD-10-CM
02511	Malnutrition in pregnancy, first trimester	Diagnosis	ICD-10-CM
02512	Malnutrition in pregnancy, second trimester	Diagnosis	ICD-10-CM
02513	Malnutrition in pregnancy, third trimester	Diagnosis	ICD-10-CM
02601	Excessive weight gain in pregnancy, first trimester	Diagnosis	ICD-10-CM
02602	Excessive weight gain in pregnancy, second trimester	Diagnosis	ICD-10-CM
02603	Excessive weight gain in pregnancy, third trimester	Diagnosis	ICD-10-CM
02611	Low weight gain in pregnancy, first trimester	Diagnosis	ICD-10-CM
02612	Low weight gain in pregnancy, second trimester	Diagnosis	ICD-10-CM
02613	Low weight gain in pregnancy, third trimester	Diagnosis	ICD-10-CM
02621	Pregnancy care for patient with recurrent pregnancy loss, first trimester	Diagnosis	ICD-10-CM
02622	Pregnancy care for patient with recurrent pregnancy loss, second trimester	Diagnosis	ICD-10-CM
02623	Pregnancy care for patient with recurrent pregnancy loss, third trimester	Diagnosis	ICD-10-CM
02631	Retained intrauterine contraceptive device in pregnancy, first trimester	Diagnosis	ICD-10-CM
02632	Retained intrauterine contraceptive device in pregnancy, second trimester	Diagnosis	ICD-10-CM
02633	Retained intrauterine contraceptive device in pregnancy, third trimester	Diagnosis	ICD-10-CM
02641	Herpes gestationis, first trimester	Diagnosis	ICD-10-CM
02642	Herpes gestationis, second trimester	Diagnosis	ICD-10-CM
02643	Herpes gestationis, third trimester	Diagnosis	ICD-10-CM
02651	Maternal hypotension syndrome, first trimester	Diagnosis	ICD-10-CM
02652	Maternal hypotension syndrome, second trimester	Diagnosis	ICD-10-CM
02653	Maternal hypotension syndrome, third trimester	Diagnosis	ICD-10-CM
026611	Liver and biliary tract disorders in pregnancy, first trimester	Diagnosis	ICD-10-CM
026612	Liver and biliary tract disorders in pregnancy, second trimester	Diagnosis	ICD-10-CM
026613	Liver and biliary tract disorders in pregnancy, third trimester	Diagnosis	ICD-10-CM
026711	Subluxation of symphysis (pubis) in pregnancy, first trimester	Diagnosis	ICD-10-CM
026712	Subluxation of symphysis (pubis) in pregnancy, second trimester	Diagnosis	ICD-10-CM
026713	Subluxation of symphysis (pubis) in pregnancy, third trimester	Diagnosis	ICD-10-CM
026811	Pregnancy related exhaustion and fatigue, first trimester	Diagnosis	ICD-10-CM
026812	Pregnancy related exhaustion and fatigue, second trimester	Diagnosis	ICD-10-CM
026813	Pregnancy related exhaustion and fatigue, third trimester	Diagnosis	ICD-10-CM
026821	Pregnancy related peripheral neuritis, first trimester	Diagnosis	ICD-10-CM
026822	Pregnancy related peripheral neuritis, second trimester	Diagnosis	ICD-10-CM
026823	Pregnancy related peripheral neuritis, third trimester	Diagnosis	ICD-10-CM
026831	Pregnancy related renal disease, first trimester	Diagnosis	ICD-10-CM
026832	Pregnancy related renal disease, second trimester	Diagnosis	ICD-10-CM
026833	Pregnancy related renal disease, third trimester	Diagnosis	ICD-10-CM
026841	Uterine size-date discrepancy, first trimester	Diagnosis	ICD-10-CM
026842	Uterine size-date discrepancy, second trimester	Diagnosis	ICD-10-CM
026843	Uterine size-date discrepancy, third trimester	Diagnosis	ICD-10-CM
026851	Spotting complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
026852	Spotting complicating pregnancy, second trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O26853	Spotting complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O26872	Cervical shortening, second trimester	Diagnosis	ICD-10-CM
O26873	Cervical shortening, third trimester	Diagnosis	ICD-10-CM
O26891	Other specified pregnancy related conditions, first trimester	Diagnosis	ICD-10-CM
O26892	Other specified pregnancy related conditions, second trimester	Diagnosis	ICD-10-CM
O26893	Other specified pregnancy related conditions, third trimester	Diagnosis	ICD-10-CM
O2691	Pregnancy related conditions, unspecified, first trimester	Diagnosis	ICD-10-CM
O2692	Pregnancy related conditions, unspecified, second trimester	Diagnosis	ICD-10-CM
O2693	Pregnancy related conditions, unspecified, third trimester	Diagnosis	ICD-10-CM
O29011	Aspiration pneumonitis due to anesthesia during pregnancy, first trimester	Diagnosis	ICD-10-CM
O29012	Aspiration pneumonitis due to anesthesia during pregnancy, second trimester	Diagnosis	ICD-10-CM
O29013	Aspiration pneumonitis due to anesthesia during pregnancy, third trimester	Diagnosis	ICD-10-CM
O29021	Pressure collapse of lung due to anesthesia during pregnancy, first trimester	Diagnosis	ICD-10-CM
O29022	Pressure collapse of lung due to anesthesia during pregnancy, second trimester	Diagnosis	ICD-10-CM
O29023	Pressure collapse of lung due to anesthesia during pregnancy, third trimester	Diagnosis	ICD-10-CM
O29091	Other pulmonary complications of anesthesia during pregnancy, first trimester	Diagnosis	ICD-10-CM
O29092	Other pulmonary complications of anesthesia during pregnancy, second trimester	Diagnosis	ICD-10-CM
O29093	Other pulmonary complications of anesthesia during pregnancy, third trimester	Diagnosis	ICD-10-CM
O29111	Cardiac arrest due to anesthesia during pregnancy, first trimester	Diagnosis	ICD-10-CM
O29112	Cardiac arrest due to anesthesia during pregnancy, second trimester	Diagnosis	ICD-10-CM
O29113	Cardiac arrest due to anesthesia during pregnancy, third trimester	Diagnosis	ICD-10-CM
O29121	Cardiac failure due to anesthesia during pregnancy, first trimester	Diagnosis	ICD-10-CM
O29122	Cardiac failure due to anesthesia during pregnancy, second trimester	Diagnosis	ICD-10-CM
O29123	Cardiac failure due to anesthesia during pregnancy, third trimester	Diagnosis	ICD-10-CM
O29191	Other cardiac complications of anesthesia during pregnancy, first trimester	Diagnosis	ICD-10-CM
O29192	Other cardiac complications of anesthesia during pregnancy, second trimester	Diagnosis	ICD-10-CM
O29193	Other cardiac complications of anesthesia during pregnancy, third trimester	Diagnosis	ICD-10-CM
O29211	Cerebral anoxia due to anesthesia during pregnancy, first trimester	Diagnosis	ICD-10-CM
O29212	Cerebral anoxia due to anesthesia during pregnancy, second trimester	Diagnosis	ICD-10-CM
O29213	Cerebral anoxia due to anesthesia during pregnancy, third trimester	Diagnosis	ICD-10-CM
O29291	Other central nervous system complications of anesthesia during pregnancy, first trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O29292	Other central nervous system complications of anesthesia during pregnancy, second trimester	Diagnosis	ICD-10-CM
O29293	Other central nervous system complications of anesthesia during pregnancy, third trimester	Diagnosis	ICD-10-CM
O293X1	Toxic reaction to local anesthesia during pregnancy, first trimester	Diagnosis	ICD-10-CM
O293X2	Toxic reaction to local anesthesia during pregnancy, second trimester	Diagnosis	ICD-10-CM
O293X3	Toxic reaction to local anesthesia during pregnancy, third trimester	Diagnosis	ICD-10-CM
O2941	Spinal and epidural anesthesia induced headache during pregnancy, first trimester	Diagnosis	ICD-10-CM
O2942	Spinal and epidural anesthesia induced headache during pregnancy, second trimester	Diagnosis	ICD-10-CM
O2943	Spinal and epidural anesthesia induced headache during pregnancy, third trimester	Diagnosis	ICD-10-CM
O295X1	Other complications of spinal and epidural anesthesia during pregnancy, first trimester	Diagnosis	ICD-10-CM
O295X2	Other complications of spinal and epidural anesthesia during pregnancy, second trimester	Diagnosis	ICD-10-CM
O295X3	Other complications of spinal and epidural anesthesia during pregnancy, third trimester	Diagnosis	ICD-10-CM
O2961	Failed or difficult intubation for anesthesia during pregnancy, first trimester	Diagnosis	ICD-10-CM
O2962	Failed or difficult intubation for anesthesia during pregnancy, second trimester	Diagnosis	ICD-10-CM
O2963	Failed or difficult intubation for anesthesia during pregnancy, third trimester	Diagnosis	ICD-10-CM
O298X1	Other complications of anesthesia during pregnancy, first trimester	Diagnosis	ICD-10-CM
O298X2	Other complications of anesthesia during pregnancy, second trimester	Diagnosis	ICD-10-CM
O298X3	Other complications of anesthesia during pregnancy, third trimester	Diagnosis	ICD-10-CM
O2991	Unspecified complication of anesthesia during pregnancy, first trimester	Diagnosis	ICD-10-CM
O2992	Unspecified complication of anesthesia during pregnancy, second trimester	Diagnosis	ICD-10-CM
O2993	Unspecified complication of anesthesia during pregnancy, third trimester	Diagnosis	ICD-10-CM
O30001	Twin pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, first trimester	Diagnosis	ICD-10-CM
O30002	Twin pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, second trimester	Diagnosis	ICD-10-CM
O30003	Twin pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, third trimester	Diagnosis	ICD-10-CM
O30011	Twin pregnancy, monochorionic/monoamniotic, first trimester	Diagnosis	ICD-10-CM
O30012	Twin pregnancy, monochorionic/monoamniotic, second trimester	Diagnosis	ICD-10-CM
O30013	Twin pregnancy, monochorionic/monoamniotic, third trimester	Diagnosis	ICD-10-CM
O30021	Conjoined twin pregnancy, first trimester	Diagnosis	ICD-10-CM
O30022	Conjoined twin pregnancy, second trimester	Diagnosis	ICD-10-CM
O30023	Conjoined twin pregnancy, third trimester	Diagnosis	ICD-10-CM
O30031	Twin pregnancy, monochorionic/diamniotic, first trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O30032	Twin pregnancy, monochorionic/diamniotic, second trimester	Diagnosis	ICD-10-CM
O30033	Twin pregnancy, monochorionic/diamniotic, third trimester	Diagnosis	ICD-10-CM
O30041	Twin pregnancy, dichorionic/diamniotic, first trimester	Diagnosis	ICD-10-CM
O30042	Twin pregnancy, dichorionic/diamniotic, second trimester	Diagnosis	ICD-10-CM
O30043	Twin pregnancy, dichorionic/diamniotic, third trimester	Diagnosis	ICD-10-CM
O30091	Twin pregnancy, unable to determine number of placenta and number of amniotic sacs, first trimester	Diagnosis	ICD-10-CM
O30092	Twin pregnancy, unable to determine number of placenta and number of amniotic sacs, second trimester	Diagnosis	ICD-10-CM
O30093	Twin pregnancy, unable to determine number of placenta and number of amniotic sacs, third trimester	Diagnosis	ICD-10-CM
O30101	Triplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, first trimester	Diagnosis	ICD-10-CM
O30102	Triplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, second trimester	Diagnosis	ICD-10-CM
O30103	Triplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, third trimester	Diagnosis	ICD-10-CM
O30111	Triplet pregnancy with two or more monochorionic fetuses, first trimester	Diagnosis	ICD-10-CM
O30112	Triplet pregnancy with two or more monochorionic fetuses, second trimester	Diagnosis	ICD-10-CM
O30113	Triplet pregnancy with two or more monochorionic fetuses, third trimester	Diagnosis	ICD-10-CM
O30121	Triplet pregnancy with two or more monoamniotic fetuses, first trimester	Diagnosis	ICD-10-CM
O30122	Triplet pregnancy with two or more monoamniotic fetuses, second trimester	Diagnosis	ICD-10-CM
O30123	Triplet pregnancy with two or more monoamniotic fetuses, third trimester	Diagnosis	ICD-10-CM
O30131	Triplet pregnancy, trichorionic/triamniotic, first trimester	Diagnosis	ICD-10-CM
O30132	Triplet pregnancy, trichorionic/triamniotic, second trimester	Diagnosis	ICD-10-CM
O30133	Triplet pregnancy, trichorionic/triamniotic, third trimester	Diagnosis	ICD-10-CM
O30191	Triplet pregnancy, unable to determine number of placenta and number of amniotic sacs, first trimester	Diagnosis	ICD-10-CM
O30192	Triplet pregnancy, unable to determine number of placenta and number of amniotic sacs, second trimester	Diagnosis	ICD-10-CM
O30193	Triplet pregnancy, unable to determine number of placenta and number of amniotic sacs, third trimester	Diagnosis	ICD-10-CM
O30201	Quadruplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, first trimester	Diagnosis	ICD-10-CM
O30202	Quadruplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, second trimester	Diagnosis	ICD-10-CM
O30203	Quadruplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, third trimester	Diagnosis	ICD-10-CM
O30211	Quadruplet pregnancy with two or more monochorionic fetuses, first trimester	Diagnosis	ICD-10-CM
O30212	Quadruplet pregnancy with two or more monochorionic fetuses, second trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O30213	Quadruplet pregnancy with two or more monochorionic fetuses, third trimester	Diagnosis	ICD-10-CM
O30221	Quadruplet pregnancy with two or more monoamniotic fetuses, first trimester	Diagnosis	ICD-10-CM
O30222	Quadruplet pregnancy with two or more monoamniotic fetuses, second trimester	Diagnosis	ICD-10-CM
O30223	Quadruplet pregnancy with two or more monoamniotic fetuses, third trimester	Diagnosis	ICD-10-CM
O30231	Quadruplet pregnancy, quadrachorionic/quadra-amniotic, first trimester	Diagnosis	ICD-10-CM
O30232	Quadruplet pregnancy, quadrachorionic/quadra-amniotic, second trimester	Diagnosis	ICD-10-CM
O30233	Quadruplet pregnancy, quadrachorionic/quadra-amniotic, third trimester	Diagnosis	ICD-10-CM
O30291	Quadruplet pregnancy, unable to determine number of placenta and number of amniotic sacs, first trimester	Diagnosis	ICD-10-CM
O30292	Quadruplet pregnancy, unable to determine number of placenta and number of amniotic sacs, second trimester	Diagnosis	ICD-10-CM
O30293	Quadruplet pregnancy, unable to determine number of placenta and number of amniotic sacs, third trimester	Diagnosis	ICD-10-CM
O30801	Other specified multiple gestation, unspecified number of placenta and unspecified number of amniotic sacs, first trimester	Diagnosis	ICD-10-CM
O30802	Other specified multiple gestation, unspecified number of placenta and unspecified number of amniotic sacs, second trimester	Diagnosis	ICD-10-CM
O30803	Other specified multiple gestation, unspecified number of placenta and unspecified number of amniotic sacs, third trimester	Diagnosis	ICD-10-CM
O30811	Other specified multiple gestation with two or more monochorionic fetuses, first trimester	Diagnosis	ICD-10-CM
O30812	Other specified multiple gestation with two or more monochorionic fetuses, second trimester	Diagnosis	ICD-10-CM
O30813	Other specified multiple gestation with two or more monochorionic fetuses, third trimester	Diagnosis	ICD-10-CM
O30821	Other specified multiple gestation with two or more monoamniotic fetuses, first trimester	Diagnosis	ICD-10-CM
O30822	Other specified multiple gestation with two or more monoamniotic fetuses, second trimester	Diagnosis	ICD-10-CM
O30823	Other specified multiple gestation with two or more monoamniotic fetuses, third trimester	Diagnosis	ICD-10-CM
O30831	Other specified multiple gestation, number of chorions and amnions are both equal to the number of fetuses, first trimester	Diagnosis	ICD-10-CM
O30832	Other specified multiple gestation, number of chorions and amnions are both equal to the number of fetuses, second trimester	Diagnosis	ICD-10-CM
O30833	Other specified multiple gestation, number of chorions and amnions are both equal to the number of fetuses, third trimester	Diagnosis	ICD-10-CM
O30891	Other specified multiple gestation, unable to determine number of placenta and number of amniotic sacs, first trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O30892	Other specified multiple gestation, unable to determine number of placenta and number of amniotic sacs, second trimester	Diagnosis	ICD-10-CM
O30893	Other specified multiple gestation, unable to determine number of placenta and number of amniotic sacs, third trimester	Diagnosis	ICD-10-CM
O3091	Multiple gestation, unspecified, first trimester	Diagnosis	ICD-10-CM
O3092	Multiple gestation, unspecified, second trimester	Diagnosis	ICD-10-CM
O3093	Multiple gestation, unspecified, third trimester	Diagnosis	ICD-10-CM
O3101X0	Papyraceous fetus, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3101X1	Papyraceous fetus, first trimester, fetus 1	Diagnosis	ICD-10-CM
O3101X2	Papyraceous fetus, first trimester, fetus 2	Diagnosis	ICD-10-CM
O3101X3	Papyraceous fetus, first trimester, fetus 3	Diagnosis	ICD-10-CM
O3101X4	Papyraceous fetus, first trimester, fetus 4	Diagnosis	ICD-10-CM
O3101X5	Papyraceous fetus, first trimester, fetus 5	Diagnosis	ICD-10-CM
O3101X9	Papyraceous fetus, first trimester, other fetus	Diagnosis	ICD-10-CM
O3102X0	Papyraceous fetus, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3102X1	Papyraceous fetus, second trimester, fetus 1	Diagnosis	ICD-10-CM
O3102X2	Papyraceous fetus, second trimester, fetus 2	Diagnosis	ICD-10-CM
O3102X3	Papyraceous fetus, second trimester, fetus 3	Diagnosis	ICD-10-CM
O3102X4	Papyraceous fetus, second trimester, fetus 4	Diagnosis	ICD-10-CM
O3102X5	Papyraceous fetus, second trimester, fetus 5	Diagnosis	ICD-10-CM
O3102X9	Papyraceous fetus, second trimester, other fetus	Diagnosis	ICD-10-CM
O3103X0	Papyraceous fetus, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3103X1	Papyraceous fetus, third trimester, fetus 1	Diagnosis	ICD-10-CM
O3103X2	Papyraceous fetus, third trimester, fetus 2	Diagnosis	ICD-10-CM
O3103X3	Papyraceous fetus, third trimester, fetus 3	Diagnosis	ICD-10-CM
O3103X4	Papyraceous fetus, third trimester, fetus 4	Diagnosis	ICD-10-CM
O3103X5	Papyraceous fetus, third trimester, fetus 5	Diagnosis	ICD-10-CM
O3103X9	Papyraceous fetus, third trimester, other fetus	Diagnosis	ICD-10-CM
O3111X0	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3111X1	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 1	Diagnosis	ICD-10-CM
O3111X2	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 2	Diagnosis	ICD-10-CM
O3111X3	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 3	Diagnosis	ICD-10-CM
O3111X4	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 4	Diagnosis	ICD-10-CM
O3111X5	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 5	Diagnosis	ICD-10-CM
O3111X9	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, other fetus	Diagnosis	ICD-10-CM
O3112X0	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O3112X1	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 1	Diagnosis	ICD-10-CM
O3112X2	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 2	Diagnosis	ICD-10-CM
O3112X3	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 3	Diagnosis	ICD-10-CM
O3112X4	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 4	Diagnosis	ICD-10-CM
O3112X5	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 5	Diagnosis	ICD-10-CM
O3112X9	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, other fetus	Diagnosis	ICD-10-CM
O3113X0	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3113X1	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 1	Diagnosis	ICD-10-CM
O3113X2	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 2	Diagnosis	ICD-10-CM
O3113X3	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 3	Diagnosis	ICD-10-CM
O3113X4	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 4	Diagnosis	ICD-10-CM
O3113X5	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 5	Diagnosis	ICD-10-CM
O3113X9	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, other fetus	Diagnosis	ICD-10-CM
O3121X0	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3121X1	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, fetus 1	Diagnosis	ICD-10-CM
O3121X2	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, fetus 2	Diagnosis	ICD-10-CM
O3121X3	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, fetus 3	Diagnosis	ICD-10-CM
O3121X4	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, fetus 4	Diagnosis	ICD-10-CM
O3121X5	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, fetus 5	Diagnosis	ICD-10-CM
O3121X9	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, other fetus	Diagnosis	ICD-10-CM
O3122X0	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3122X1	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 1	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O3122X2	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 2	Diagnosis	ICD-10-CM
O3122X3	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 3	Diagnosis	ICD-10-CM
O3122X4	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 4	Diagnosis	ICD-10-CM
O3122X5	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 5	Diagnosis	ICD-10-CM
O3122X9	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, other fetus	Diagnosis	ICD-10-CM
O3123X0	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3123X1	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 1	Diagnosis	ICD-10-CM
O3123X2	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 2	Diagnosis	ICD-10-CM
O3123X3	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 3	Diagnosis	ICD-10-CM
O3123X4	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 4	Diagnosis	ICD-10-CM
O3123X5	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 5	Diagnosis	ICD-10-CM
O3123X9	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, other fetus	Diagnosis	ICD-10-CM
O3131X0	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3131X1	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, fetus 1	Diagnosis	ICD-10-CM
O3131X2	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, fetus 2	Diagnosis	ICD-10-CM
O3131X3	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, fetus 3	Diagnosis	ICD-10-CM
O3131X4	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, fetus 4	Diagnosis	ICD-10-CM
O3131X5	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, fetus 5	Diagnosis	ICD-10-CM
O3131X9	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, other fetus	Diagnosis	ICD-10-CM
O3132X0	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3132X1	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, fetus 1	Diagnosis	ICD-10-CM
O3132X2	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, fetus 2	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O3132X3	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, fetus 3	Diagnosis	ICD-10-CM
O3132X4	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, fetus 4	Diagnosis	ICD-10-CM
O3132X5	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, fetus 5	Diagnosis	ICD-10-CM
O3132X9	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, other fetus	Diagnosis	ICD-10-CM
O3133X0	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3133X1	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, fetus 1	Diagnosis	ICD-10-CM
O3133X2	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, fetus 2	Diagnosis	ICD-10-CM
O3133X3	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, fetus 3	Diagnosis	ICD-10-CM
O3133X4	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, fetus 4	Diagnosis	ICD-10-CM
O3133X5	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, fetus 5	Diagnosis	ICD-10-CM
O3133X9	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, other fetus	Diagnosis	ICD-10-CM
O318X10	Other complications specific to multiple gestation, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O318X11	Other complications specific to multiple gestation, first trimester, fetus 1	Diagnosis	ICD-10-CM
O318X12	Other complications specific to multiple gestation, first trimester, fetus 2	Diagnosis	ICD-10-CM
O318X13	Other complications specific to multiple gestation, first trimester, fetus 3	Diagnosis	ICD-10-CM
O318X14	Other complications specific to multiple gestation, first trimester, fetus 4	Diagnosis	ICD-10-CM
O318X15	Other complications specific to multiple gestation, first trimester, fetus 5	Diagnosis	ICD-10-CM
O318X19	Other complications specific to multiple gestation, first trimester, other fetus	Diagnosis	ICD-10-CM
O318X20	Other complications specific to multiple gestation, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O318X21	Other complications specific to multiple gestation, second trimester, fetus 1	Diagnosis	ICD-10-CM
O318X22	Other complications specific to multiple gestation, second trimester, fetus 2	Diagnosis	ICD-10-CM
O318X23	Other complications specific to multiple gestation, second trimester, fetus 3	Diagnosis	ICD-10-CM
O318X24	Other complications specific to multiple gestation, second trimester, fetus 4	Diagnosis	ICD-10-CM
O318X25	Other complications specific to multiple gestation, second trimester, fetus 5	Diagnosis	ICD-10-CM
O318X29	Other complications specific to multiple gestation, second trimester, other fetus	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O318X30	Other complications specific to multiple gestation, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O318X31	Other complications specific to multiple gestation, third trimester, fetus 1	Diagnosis	ICD-10-CM
O318X32	Other complications specific to multiple gestation, third trimester, fetus 2	Diagnosis	ICD-10-CM
O318X33	Other complications specific to multiple gestation, third trimester, fetus 3	Diagnosis	ICD-10-CM
O318X34	Other complications specific to multiple gestation, third trimester, fetus 4	Diagnosis	ICD-10-CM
O318X35	Other complications specific to multiple gestation, third trimester, fetus 5	Diagnosis	ICD-10-CM
O318X39	Other complications specific to multiple gestation, third trimester, other fetus	Diagnosis	ICD-10-CM
O3401	Maternal care for unspecified congenital malformation of uterus, first trimester	Diagnosis	ICD-10-CM
O3402	Maternal care for unspecified congenital malformation of uterus, second trimester	Diagnosis	ICD-10-CM
O3403	Maternal care for unspecified congenital malformation of uterus, third trimester	Diagnosis	ICD-10-CM
O3411	Maternal care for benign tumor of corpus uteri, first trimester	Diagnosis	ICD-10-CM
O3412	Maternal care for benign tumor of corpus uteri, second trimester	Diagnosis	ICD-10-CM
O3413	Maternal care for benign tumor of corpus uteri, third trimester	Diagnosis	ICD-10-CM
O3431	Maternal care for cervical incompetence, first trimester	Diagnosis	ICD-10-CM
O3432	Maternal care for cervical incompetence, second trimester	Diagnosis	ICD-10-CM
O3433	Maternal care for cervical incompetence, third trimester	Diagnosis	ICD-10-CM
O3441	Maternal care for other abnormalities of cervix, first trimester	Diagnosis	ICD-10-CM
O3442	Maternal care for other abnormalities of cervix, second trimester	Diagnosis	ICD-10-CM
O3443	Maternal care for other abnormalities of cervix, third trimester	Diagnosis	ICD-10-CM
O34511	Maternal care for incarceration of gravid uterus, first trimester	Diagnosis	ICD-10-CM
O34512	Maternal care for incarceration of gravid uterus, second trimester	Diagnosis	ICD-10-CM
O34513	Maternal care for incarceration of gravid uterus, third trimester	Diagnosis	ICD-10-CM
O34521	Maternal care for prolapse of gravid uterus, first trimester	Diagnosis	ICD-10-CM
O34522	Maternal care for prolapse of gravid uterus, second trimester	Diagnosis	ICD-10-CM
O34523	Maternal care for prolapse of gravid uterus, third trimester	Diagnosis	ICD-10-CM
O34531	Maternal care for retroversion of gravid uterus, first trimester	Diagnosis	ICD-10-CM
O34532	Maternal care for retroversion of gravid uterus, second trimester	Diagnosis	ICD-10-CM
O34533	Maternal care for retroversion of gravid uterus, third trimester	Diagnosis	ICD-10-CM
O34591	Maternal care for other abnormalities of gravid uterus, first trimester	Diagnosis	ICD-10-CM
O34592	Maternal care for other abnormalities of gravid uterus, second trimester	Diagnosis	ICD-10-CM
O34593	Maternal care for other abnormalities of gravid uterus, third trimester	Diagnosis	ICD-10-CM
O3461	Maternal care for abnormality of vagina, first trimester	Diagnosis	ICD-10-CM
O3462	Maternal care for abnormality of vagina, second trimester	Diagnosis	ICD-10-CM
O3463	Maternal care for abnormality of vagina, third trimester	Diagnosis	ICD-10-CM
O3471	Maternal care for abnormality of vulva and perineum, first trimester	Diagnosis	ICD-10-CM
O3472	Maternal care for abnormality of vulva and perineum, second trimester	Diagnosis	ICD-10-CM
O3473	Maternal care for abnormality of vulva and perineum, third trimester	Diagnosis	ICD-10-CM
O3481	Maternal care for other abnormalities of pelvic organs, first trimester	Diagnosis	ICD-10-CM
O3482	Maternal care for other abnormalities of pelvic organs, second trimester	Diagnosis	ICD-10-CM
O3483	Maternal care for other abnormalities of pelvic organs, third trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O3491	Maternal care for abnormality of pelvic organ, unspecified, first trimester	Diagnosis	ICD-10-CM
O3492	Maternal care for abnormality of pelvic organ, unspecified, second trimester	Diagnosis	ICD-10-CM
O3493	Maternal care for abnormality of pelvic organ, unspecified, third trimester	Diagnosis	ICD-10-CM
O360110	Maternal care for anti-D [Rh] antibodies, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O360111	Maternal care for anti-D [Rh] antibodies, first trimester, fetus 1	Diagnosis	ICD-10-CM
O360112	Maternal care for anti-D [Rh] antibodies, first trimester, fetus 2	Diagnosis	ICD-10-CM
O360113	Maternal care for anti-D [Rh] antibodies, first trimester, fetus 3	Diagnosis	ICD-10-CM
O360114	Maternal care for anti-D [Rh] antibodies, first trimester, fetus 4	Diagnosis	ICD-10-CM
O360115	Maternal care for anti-D [Rh] antibodies, first trimester, fetus 5	Diagnosis	ICD-10-CM
O360119	Maternal care for anti-D [Rh] antibodies, first trimester, other fetus	Diagnosis	ICD-10-CM
O360120	Maternal care for anti-D [Rh] antibodies, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O360121	Maternal care for anti-D [Rh] antibodies, second trimester, fetus 1	Diagnosis	ICD-10-CM
O360122	Maternal care for anti-D [Rh] antibodies, second trimester, fetus 2	Diagnosis	ICD-10-CM
O360123	Maternal care for anti-D [Rh] antibodies, second trimester, fetus 3	Diagnosis	ICD-10-CM
O360124	Maternal care for anti-D [Rh] antibodies, second trimester, fetus 4	Diagnosis	ICD-10-CM
O360125	Maternal care for anti-D [Rh] antibodies, second trimester, fetus 5	Diagnosis	ICD-10-CM
O360129	Maternal care for anti-D [Rh] antibodies, second trimester, other fetus	Diagnosis	ICD-10-CM
O360130	Maternal care for anti-D [Rh] antibodies, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O360131	Maternal care for anti-D [Rh] antibodies, third trimester, fetus 1	Diagnosis	ICD-10-CM
O360132	Maternal care for anti-D [Rh] antibodies, third trimester, fetus 2	Diagnosis	ICD-10-CM
O360133	Maternal care for anti-D [Rh] antibodies, third trimester, fetus 3	Diagnosis	ICD-10-CM
O360134	Maternal care for anti-D [Rh] antibodies, third trimester, fetus 4	Diagnosis	ICD-10-CM
O360135	Maternal care for anti-D [Rh] antibodies, third trimester, fetus 5	Diagnosis	ICD-10-CM
O360139	Maternal care for anti-D [Rh] antibodies, third trimester, other fetus	Diagnosis	ICD-10-CM
O360910	Maternal care for other rhesus isoimmunization, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O360911	Maternal care for other rhesus isoimmunization, first trimester, fetus 1	Diagnosis	ICD-10-CM
O360912	Maternal care for other rhesus isoimmunization, first trimester, fetus 2	Diagnosis	ICD-10-CM
O360913	Maternal care for other rhesus isoimmunization, first trimester, fetus 3	Diagnosis	ICD-10-CM
O360914	Maternal care for other rhesus isoimmunization, first trimester, fetus 4	Diagnosis	ICD-10-CM
O360915	Maternal care for other rhesus isoimmunization, first trimester, fetus 5	Diagnosis	ICD-10-CM
O360919	Maternal care for other rhesus isoimmunization, first trimester, other fetus	Diagnosis	ICD-10-CM
O360920	Maternal care for other rhesus isoimmunization, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O360921	Maternal care for other rhesus isoimmunization, second trimester, fetus 1	Diagnosis	ICD-10-CM
O360922	Maternal care for other rhesus isoimmunization, second trimester, fetus 2	Diagnosis	ICD-10-CM
O360923	Maternal care for other rhesus isoimmunization, second trimester, fetus 3	Diagnosis	ICD-10-CM
O360924	Maternal care for other rhesus isoimmunization, second trimester, fetus 4	Diagnosis	ICD-10-CM
O360925	Maternal care for other rhesus isoimmunization, second trimester, fetus 5	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
0360929	Maternal care for other rhesus isoimmunization, second trimester, other fetus	Diagnosis	ICD-10-CM
0360930	Maternal care for other rhesus isoimmunization, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
0360931	Maternal care for other rhesus isoimmunization, third trimester, fetus 1	Diagnosis	ICD-10-CM
0360932	Maternal care for other rhesus isoimmunization, third trimester, fetus 2	Diagnosis	ICD-10-CM
0360933	Maternal care for other rhesus isoimmunization, third trimester, fetus 3	Diagnosis	ICD-10-CM
0360934	Maternal care for other rhesus isoimmunization, third trimester, fetus 4	Diagnosis	ICD-10-CM
0360935	Maternal care for other rhesus isoimmunization, third trimester, fetus 5	Diagnosis	ICD-10-CM
0360939	Maternal care for other rhesus isoimmunization, third trimester, other fetus	Diagnosis	ICD-10-CM
0361110	Maternal care for Anti-A sensitization, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
0361111	Maternal care for Anti-A sensitization, first trimester, fetus 1	Diagnosis	ICD-10-CM
0361112	Maternal care for Anti-A sensitization, first trimester, fetus 2	Diagnosis	ICD-10-CM
0361113	Maternal care for Anti-A sensitization, first trimester, fetus 3	Diagnosis	ICD-10-CM
0361114	Maternal care for Anti-A sensitization, first trimester, fetus 4	Diagnosis	ICD-10-CM
0361115	Maternal care for Anti-A sensitization, first trimester, fetus 5	Diagnosis	ICD-10-CM
0361119	Maternal care for Anti-A sensitization, first trimester, other fetus	Diagnosis	ICD-10-CM
0361120	Maternal care for Anti-A sensitization, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
0361121	Maternal care for Anti-A sensitization, second trimester, fetus 1	Diagnosis	ICD-10-CM
0361122	Maternal care for Anti-A sensitization, second trimester, fetus 2	Diagnosis	ICD-10-CM
0361123	Maternal care for Anti-A sensitization, second trimester, fetus 3	Diagnosis	ICD-10-CM
0361124	Maternal care for Anti-A sensitization, second trimester, fetus 4	Diagnosis	ICD-10-CM
0361125	Maternal care for Anti-A sensitization, second trimester, fetus 5	Diagnosis	ICD-10-CM
0361129	Maternal care for Anti-A sensitization, second trimester, other fetus	Diagnosis	ICD-10-CM
0361130	Maternal care for Anti-A sensitization, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
0361131	Maternal care for Anti-A sensitization, third trimester, fetus 1	Diagnosis	ICD-10-CM
0361132	Maternal care for Anti-A sensitization, third trimester, fetus 2	Diagnosis	ICD-10-CM
0361133	Maternal care for Anti-A sensitization, third trimester, fetus 3	Diagnosis	ICD-10-CM
0361134	Maternal care for Anti-A sensitization, third trimester, fetus 4	Diagnosis	ICD-10-CM
0361135	Maternal care for Anti-A sensitization, third trimester, fetus 5	Diagnosis	ICD-10-CM
0361139	Maternal care for Anti-A sensitization, third trimester, other fetus	Diagnosis	ICD-10-CM
0361910	Maternal care for other isoimmunization, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
0361911	Maternal care for other isoimmunization, first trimester, fetus 1	Diagnosis	ICD-10-CM
0361912	Maternal care for other isoimmunization, first trimester, fetus 2	Diagnosis	ICD-10-CM
0361913	Maternal care for other isoimmunization, first trimester, fetus 3	Diagnosis	ICD-10-CM
0361914	Maternal care for other isoimmunization, first trimester, fetus 4	Diagnosis	ICD-10-CM
0361915	Maternal care for other isoimmunization, first trimester, fetus 5	Diagnosis	ICD-10-CM
0361919	Maternal care for other isoimmunization, first trimester, other fetus	Diagnosis	ICD-10-CM
0361920	Maternal care for other isoimmunization, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O361921	Maternal care for other isoimmunization, second trimester, fetus 1	Diagnosis	ICD-10-CM
O361922	Maternal care for other isoimmunization, second trimester, fetus 2	Diagnosis	ICD-10-CM
O361923	Maternal care for other isoimmunization, second trimester, fetus 3	Diagnosis	ICD-10-CM
O361924	Maternal care for other isoimmunization, second trimester, fetus 4	Diagnosis	ICD-10-CM
O361925	Maternal care for other isoimmunization, second trimester, fetus 5	Diagnosis	ICD-10-CM
O361929	Maternal care for other isoimmunization, second trimester, other fetus	Diagnosis	ICD-10-CM
O361930	Maternal care for other isoimmunization, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O361931	Maternal care for other isoimmunization, third trimester, fetus 1	Diagnosis	ICD-10-CM
O361932	Maternal care for other isoimmunization, third trimester, fetus 2	Diagnosis	ICD-10-CM
O361933	Maternal care for other isoimmunization, third trimester, fetus 3	Diagnosis	ICD-10-CM
O361934	Maternal care for other isoimmunization, third trimester, fetus 4	Diagnosis	ICD-10-CM
O361935	Maternal care for other isoimmunization, third trimester, fetus 5	Diagnosis	ICD-10-CM
O361939	Maternal care for other isoimmunization, third trimester, other fetus	Diagnosis	ICD-10-CM
O3621X0	Maternal care for hydrops fetalis, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3621X1	Maternal care for hydrops fetalis, first trimester, fetus 1	Diagnosis	ICD-10-CM
O3621X2	Maternal care for hydrops fetalis, first trimester, fetus 2	Diagnosis	ICD-10-CM
O3621X3	Maternal care for hydrops fetalis, first trimester, fetus 3	Diagnosis	ICD-10-CM
O3621X4	Maternal care for hydrops fetalis, first trimester, fetus 4	Diagnosis	ICD-10-CM
O3621X5	Maternal care for hydrops fetalis, first trimester, fetus 5	Diagnosis	ICD-10-CM
O3621X9	Maternal care for hydrops fetalis, first trimester, other fetus	Diagnosis	ICD-10-CM
O3622X0	Maternal care for hydrops fetalis, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3622X1	Maternal care for hydrops fetalis, second trimester, fetus 1	Diagnosis	ICD-10-CM
O3622X2	Maternal care for hydrops fetalis, second trimester, fetus 2	Diagnosis	ICD-10-CM
O3622X3	Maternal care for hydrops fetalis, second trimester, fetus 3	Diagnosis	ICD-10-CM
O3622X4	Maternal care for hydrops fetalis, second trimester, fetus 4	Diagnosis	ICD-10-CM
O3622X5	Maternal care for hydrops fetalis, second trimester, fetus 5	Diagnosis	ICD-10-CM
O3622X9	Maternal care for hydrops fetalis, second trimester, other fetus	Diagnosis	ICD-10-CM
O3623X0	Maternal care for hydrops fetalis, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3623X1	Maternal care for hydrops fetalis, third trimester, fetus 1	Diagnosis	ICD-10-CM
O3623X2	Maternal care for hydrops fetalis, third trimester, fetus 2	Diagnosis	ICD-10-CM
O3623X3	Maternal care for hydrops fetalis, third trimester, fetus 3	Diagnosis	ICD-10-CM
O3623X4	Maternal care for hydrops fetalis, third trimester, fetus 4	Diagnosis	ICD-10-CM
O3623X5	Maternal care for hydrops fetalis, third trimester, fetus 5	Diagnosis	ICD-10-CM
O3623X9	Maternal care for hydrops fetalis, third trimester, other fetus	Diagnosis	ICD-10-CM
O365110	Maternal care for known or suspected placental insufficiency, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O365111	Maternal care for known or suspected placental insufficiency, first trimester, fetus 1	Diagnosis	ICD-10-CM
O365112	Maternal care for known or suspected placental insufficiency, first trimester, fetus 2	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O365113	Maternal care for known or suspected placental insufficiency, first trimester, fetus 3	Diagnosis	ICD-10-CM
O365114	Maternal care for known or suspected placental insufficiency, first trimester, fetus 4	Diagnosis	ICD-10-CM
O365115	Maternal care for known or suspected placental insufficiency, first trimester, fetus 5	Diagnosis	ICD-10-CM
O365119	Maternal care for known or suspected placental insufficiency, first trimester, other fetus	Diagnosis	ICD-10-CM
O365120	Maternal care for known or suspected placental insufficiency, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O365121	Maternal care for known or suspected placental insufficiency, second trimester, fetus 1	Diagnosis	ICD-10-CM
O365122	Maternal care for known or suspected placental insufficiency, second trimester, fetus 2	Diagnosis	ICD-10-CM
O365123	Maternal care for known or suspected placental insufficiency, second trimester, fetus 3	Diagnosis	ICD-10-CM
O365124	Maternal care for known or suspected placental insufficiency, second trimester, fetus 4	Diagnosis	ICD-10-CM
O365125	Maternal care for known or suspected placental insufficiency, second trimester, fetus 5	Diagnosis	ICD-10-CM
O365129	Maternal care for known or suspected placental insufficiency, second trimester, other fetus	Diagnosis	ICD-10-CM
O365130	Maternal care for known or suspected placental insufficiency, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O365131	Maternal care for known or suspected placental insufficiency, third trimester, fetus 1	Diagnosis	ICD-10-CM
O365132	Maternal care for known or suspected placental insufficiency, third trimester, fetus 2	Diagnosis	ICD-10-CM
O365133	Maternal care for known or suspected placental insufficiency, third trimester, fetus 3	Diagnosis	ICD-10-CM
O365134	Maternal care for known or suspected placental insufficiency, third trimester, fetus 4	Diagnosis	ICD-10-CM
O365135	Maternal care for known or suspected placental insufficiency, third trimester, fetus 5	Diagnosis	ICD-10-CM
O365139	Maternal care for known or suspected placental insufficiency, third trimester, other fetus	Diagnosis	ICD-10-CM
O365910	Maternal care for other known or suspected poor fetal growth, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O365911	Maternal care for other known or suspected poor fetal growth, first trimester, fetus 1	Diagnosis	ICD-10-CM
O365912	Maternal care for other known or suspected poor fetal growth, first trimester, fetus 2	Diagnosis	ICD-10-CM
O365913	Maternal care for other known or suspected poor fetal growth, first trimester, fetus 3	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O365914	Maternal care for other known or suspected poor fetal growth, first trimester, fetus 4	Diagnosis	ICD-10-CM
O365915	Maternal care for other known or suspected poor fetal growth, first trimester, fetus 5	Diagnosis	ICD-10-CM
O365919	Maternal care for other known or suspected poor fetal growth, first trimester, other fetus	Diagnosis	ICD-10-CM
O365920	Maternal care for other known or suspected poor fetal growth, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O365921	Maternal care for other known or suspected poor fetal growth, second trimester, fetus 1	Diagnosis	ICD-10-CM
O365922	Maternal care for other known or suspected poor fetal growth, second trimester, fetus 2	Diagnosis	ICD-10-CM
O365923	Maternal care for other known or suspected poor fetal growth, second trimester, fetus 3	Diagnosis	ICD-10-CM
O365924	Maternal care for other known or suspected poor fetal growth, second trimester, fetus 4	Diagnosis	ICD-10-CM
O365925	Maternal care for other known or suspected poor fetal growth, second trimester, fetus 5	Diagnosis	ICD-10-CM
O365929	Maternal care for other known or suspected poor fetal growth, second trimester, other fetus	Diagnosis	ICD-10-CM
O365930	Maternal care for other known or suspected poor fetal growth, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O365931	Maternal care for other known or suspected poor fetal growth, third trimester, fetus 1	Diagnosis	ICD-10-CM
O365932	Maternal care for other known or suspected poor fetal growth, third trimester, fetus 2	Diagnosis	ICD-10-CM
O365933	Maternal care for other known or suspected poor fetal growth, third trimester, fetus 3	Diagnosis	ICD-10-CM
O365934	Maternal care for other known or suspected poor fetal growth, third trimester, fetus 4	Diagnosis	ICD-10-CM
O365935	Maternal care for other known or suspected poor fetal growth, third trimester, fetus 5	Diagnosis	ICD-10-CM
O365939	Maternal care for other known or suspected poor fetal growth, third trimester, other fetus	Diagnosis	ICD-10-CM
O3661X0	Maternal care for excessive fetal growth, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3661X1	Maternal care for excessive fetal growth, first trimester, fetus 1	Diagnosis	ICD-10-CM
O3661X2	Maternal care for excessive fetal growth, first trimester, fetus 2	Diagnosis	ICD-10-CM
O3661X3	Maternal care for excessive fetal growth, first trimester, fetus 3	Diagnosis	ICD-10-CM
O3661X4	Maternal care for excessive fetal growth, first trimester, fetus 4	Diagnosis	ICD-10-CM
O3661X5	Maternal care for excessive fetal growth, first trimester, fetus 5	Diagnosis	ICD-10-CM
O3661X9	Maternal care for excessive fetal growth, first trimester, other fetus	Diagnosis	ICD-10-CM
O3662X0	Maternal care for excessive fetal growth, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3662X1	Maternal care for excessive fetal growth, second trimester, fetus 1	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O3662X2	Maternal care for excessive fetal growth, second trimester, fetus 2	Diagnosis	ICD-10-CM
O3662X3	Maternal care for excessive fetal growth, second trimester, fetus 3	Diagnosis	ICD-10-CM
O3662X4	Maternal care for excessive fetal growth, second trimester, fetus 4	Diagnosis	ICD-10-CM
O3662X5	Maternal care for excessive fetal growth, second trimester, fetus 5	Diagnosis	ICD-10-CM
O3662X9	Maternal care for excessive fetal growth, second trimester, other fetus	Diagnosis	ICD-10-CM
O3663X0	Maternal care for excessive fetal growth, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3663X1	Maternal care for excessive fetal growth, third trimester, fetus 1	Diagnosis	ICD-10-CM
O3663X2	Maternal care for excessive fetal growth, third trimester, fetus 2	Diagnosis	ICD-10-CM
O3663X3	Maternal care for excessive fetal growth, third trimester, fetus 3	Diagnosis	ICD-10-CM
O3663X4	Maternal care for excessive fetal growth, third trimester, fetus 4	Diagnosis	ICD-10-CM
O3663X5	Maternal care for excessive fetal growth, third trimester, fetus 5	Diagnosis	ICD-10-CM
O3663X9	Maternal care for excessive fetal growth, third trimester, other fetus	Diagnosis	ICD-10-CM
O3671X0	Maternal care for viable fetus in abdominal pregnancy, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3671X1	Maternal care for viable fetus in abdominal pregnancy, first trimester, fetus 1	Diagnosis	ICD-10-CM
O3671X2	Maternal care for viable fetus in abdominal pregnancy, first trimester, fetus 2	Diagnosis	ICD-10-CM
O3671X3	Maternal care for viable fetus in abdominal pregnancy, first trimester, fetus 3	Diagnosis	ICD-10-CM
O3671X4	Maternal care for viable fetus in abdominal pregnancy, first trimester, fetus 4	Diagnosis	ICD-10-CM
O3671X5	Maternal care for viable fetus in abdominal pregnancy, first trimester, fetus 5	Diagnosis	ICD-10-CM
O3671X9	Maternal care for viable fetus in abdominal pregnancy, first trimester, other fetus	Diagnosis	ICD-10-CM
O3672X0	Maternal care for viable fetus in abdominal pregnancy, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3672X1	Maternal care for viable fetus in abdominal pregnancy, second trimester, fetus 1	Diagnosis	ICD-10-CM
O3672X2	Maternal care for viable fetus in abdominal pregnancy, second trimester, fetus 2	Diagnosis	ICD-10-CM
O3672X3	Maternal care for viable fetus in abdominal pregnancy, second trimester, fetus 3	Diagnosis	ICD-10-CM
O3672X4	Maternal care for viable fetus in abdominal pregnancy, second trimester, fetus 4	Diagnosis	ICD-10-CM
O3672X5	Maternal care for viable fetus in abdominal pregnancy, second trimester, fetus 5	Diagnosis	ICD-10-CM
O3672X9	Maternal care for viable fetus in abdominal pregnancy, second trimester, other fetus	Diagnosis	ICD-10-CM
O3673X0	Maternal care for viable fetus in abdominal pregnancy, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3673X1	Maternal care for viable fetus in abdominal pregnancy, third trimester, fetus 1	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O3673X2	Maternal care for viable fetus in abdominal pregnancy, third trimester, fetus 2	Diagnosis	ICD-10-CM
O3673X3	Maternal care for viable fetus in abdominal pregnancy, third trimester, fetus 3	Diagnosis	ICD-10-CM
O3673X4	Maternal care for viable fetus in abdominal pregnancy, third trimester, fetus 4	Diagnosis	ICD-10-CM
O3673X5	Maternal care for viable fetus in abdominal pregnancy, third trimester, fetus 5	Diagnosis	ICD-10-CM
O3673X9	Maternal care for viable fetus in abdominal pregnancy, third trimester, other fetus	Diagnosis	ICD-10-CM
O368120	Decreased fetal movements, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O368121	Decreased fetal movements, second trimester, fetus 1	Diagnosis	ICD-10-CM
O368122	Decreased fetal movements, second trimester, fetus 2	Diagnosis	ICD-10-CM
O368123	Decreased fetal movements, second trimester, fetus 3	Diagnosis	ICD-10-CM
O368124	Decreased fetal movements, second trimester, fetus 4	Diagnosis	ICD-10-CM
O368125	Decreased fetal movements, second trimester, fetus 5	Diagnosis	ICD-10-CM
O368129	Decreased fetal movements, second trimester, other fetus	Diagnosis	ICD-10-CM
O368130	Decreased fetal movements, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O368131	Decreased fetal movements, third trimester, fetus 1	Diagnosis	ICD-10-CM
O368132	Decreased fetal movements, third trimester, fetus 2	Diagnosis	ICD-10-CM
O368133	Decreased fetal movements, third trimester, fetus 3	Diagnosis	ICD-10-CM
O368134	Decreased fetal movements, third trimester, fetus 4	Diagnosis	ICD-10-CM
O368135	Decreased fetal movements, third trimester, fetus 5	Diagnosis	ICD-10-CM
O368139	Decreased fetal movements, third trimester, other fetus	Diagnosis	ICD-10-CM
O368210	Fetal anemia and thrombocytopenia, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O368211	Fetal anemia and thrombocytopenia, first trimester, fetus 1	Diagnosis	ICD-10-CM
O368212	Fetal anemia and thrombocytopenia, first trimester, fetus 2	Diagnosis	ICD-10-CM
O368213	Fetal anemia and thrombocytopenia, first trimester, fetus 3	Diagnosis	ICD-10-CM
O368214	Fetal anemia and thrombocytopenia, first trimester, fetus 4	Diagnosis	ICD-10-CM
O368215	Fetal anemia and thrombocytopenia, first trimester, fetus 5	Diagnosis	ICD-10-CM
O368219	Fetal anemia and thrombocytopenia, first trimester, other fetus	Diagnosis	ICD-10-CM
O368220	Fetal anemia and thrombocytopenia, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O368221	Fetal anemia and thrombocytopenia, second trimester, fetus 1	Diagnosis	ICD-10-CM
O368222	Fetal anemia and thrombocytopenia, second trimester, fetus 2	Diagnosis	ICD-10-CM
O368223	Fetal anemia and thrombocytopenia, second trimester, fetus 3	Diagnosis	ICD-10-CM
O368224	Fetal anemia and thrombocytopenia, second trimester, fetus 4	Diagnosis	ICD-10-CM
O368225	Fetal anemia and thrombocytopenia, second trimester, fetus 5	Diagnosis	ICD-10-CM
O368229	Fetal anemia and thrombocytopenia, second trimester, other fetus	Diagnosis	ICD-10-CM
O368230	Fetal anemia and thrombocytopenia, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O368231	Fetal anemia and thrombocytopenia, third trimester, fetus 1	Diagnosis	ICD-10-CM
O368232	Fetal anemia and thrombocytopenia, third trimester, fetus 2	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O368233	Fetal anemia and thrombocytopenia, third trimester, fetus 3	Diagnosis	ICD-10-CM
O368234	Fetal anemia and thrombocytopenia, third trimester, fetus 4	Diagnosis	ICD-10-CM
O368235	Fetal anemia and thrombocytopenia, third trimester, fetus 5	Diagnosis	ICD-10-CM
O368239	Fetal anemia and thrombocytopenia, third trimester, other fetus	Diagnosis	ICD-10-CM
O368310	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O368311	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, fetus 1	Diagnosis	ICD-10-CM
O368312	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, fetus 2	Diagnosis	ICD-10-CM
O368313	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, fetus 3	Diagnosis	ICD-10-CM
O368314	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, fetus 4	Diagnosis	ICD-10-CM
O368315	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, fetus 5	Diagnosis	ICD-10-CM
O368320	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O368321	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, fetus 1	Diagnosis	ICD-10-CM
O368322	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, fetus 2	Diagnosis	ICD-10-CM
O368323	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, fetus 3	Diagnosis	ICD-10-CM
O368324	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, fetus 4	Diagnosis	ICD-10-CM
O368325	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, fetus 5	Diagnosis	ICD-10-CM
O368329	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, other fetus	Diagnosis	ICD-10-CM
O368330	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O368331	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, fetus 1	Diagnosis	ICD-10-CM
O368332	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, fetus 2	Diagnosis	ICD-10-CM
O368333	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, fetus 3	Diagnosis	ICD-10-CM
O368334	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, fetus 4	Diagnosis	ICD-10-CM
O368335	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, fetus 5	Diagnosis	ICD-10-CM
O368339	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, other fetus	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O368910	Maternal care for other specified fetal problems, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O368911	Maternal care for other specified fetal problems, first trimester, fetus 1	Diagnosis	ICD-10-CM
O368912	Maternal care for other specified fetal problems, first trimester, fetus 2	Diagnosis	ICD-10-CM
O368913	Maternal care for other specified fetal problems, first trimester, fetus 3	Diagnosis	ICD-10-CM
O368914	Maternal care for other specified fetal problems, first trimester, fetus 4	Diagnosis	ICD-10-CM
O368915	Maternal care for other specified fetal problems, first trimester, fetus 5	Diagnosis	ICD-10-CM
O368919	Maternal care for other specified fetal problems, first trimester, other fetus	Diagnosis	ICD-10-CM
O368920	Maternal care for other specified fetal problems, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O368921	Maternal care for other specified fetal problems, second trimester, fetus 1	Diagnosis	ICD-10-CM
O368922	Maternal care for other specified fetal problems, second trimester, fetus 2	Diagnosis	ICD-10-CM
O368923	Maternal care for other specified fetal problems, second trimester, fetus 3	Diagnosis	ICD-10-CM
O368924	Maternal care for other specified fetal problems, second trimester, fetus 4	Diagnosis	ICD-10-CM
O368925	Maternal care for other specified fetal problems, second trimester, fetus 5	Diagnosis	ICD-10-CM
O368929	Maternal care for other specified fetal problems, second trimester, other fetus	Diagnosis	ICD-10-CM
O368930	Maternal care for other specified fetal problems, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O368931	Maternal care for other specified fetal problems, third trimester, fetus 1	Diagnosis	ICD-10-CM
O368932	Maternal care for other specified fetal problems, third trimester, fetus 2	Diagnosis	ICD-10-CM
O368933	Maternal care for other specified fetal problems, third trimester, fetus 3	Diagnosis	ICD-10-CM
O368934	Maternal care for other specified fetal problems, third trimester, fetus 4	Diagnosis	ICD-10-CM
O368935	Maternal care for other specified fetal problems, third trimester, fetus 5	Diagnosis	ICD-10-CM
O368939	Maternal care for other specified fetal problems, third trimester, other fetus	Diagnosis	ICD-10-CM
O3691X0	Maternal care for fetal problem, unspecified, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3691X1	Maternal care for fetal problem, unspecified, first trimester, fetus 1	Diagnosis	ICD-10-CM
O3691X2	Maternal care for fetal problem, unspecified, first trimester, fetus 2	Diagnosis	ICD-10-CM
O3691X3	Maternal care for fetal problem, unspecified, first trimester, fetus 3	Diagnosis	ICD-10-CM
O3691X4	Maternal care for fetal problem, unspecified, first trimester, fetus 4	Diagnosis	ICD-10-CM
O3691X5	Maternal care for fetal problem, unspecified, first trimester, fetus 5	Diagnosis	ICD-10-CM
O3691X9	Maternal care for fetal problem, unspecified, first trimester, other fetus	Diagnosis	ICD-10-CM
O3692X0	Maternal care for fetal problem, unspecified, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O3692X1	Maternal care for fetal problem, unspecified, second trimester, fetus 1	Diagnosis	ICD-10-CM
O3692X2	Maternal care for fetal problem, unspecified, second trimester, fetus 2	Diagnosis	ICD-10-CM
O3692X3	Maternal care for fetal problem, unspecified, second trimester, fetus 3	Diagnosis	ICD-10-CM
O3692X4	Maternal care for fetal problem, unspecified, second trimester, fetus 4	Diagnosis	ICD-10-CM
O3692X5	Maternal care for fetal problem, unspecified, second trimester, fetus 5	Diagnosis	ICD-10-CM
O3692X9	Maternal care for fetal problem, unspecified, second trimester, other fetus	Diagnosis	ICD-10-CM
O3693X0	Maternal care for fetal problem, unspecified, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O3693X1	Maternal care for fetal problem, unspecified, third trimester, fetus 1	Diagnosis	ICD-10-CM
O3693X2	Maternal care for fetal problem, unspecified, third trimester, fetus 2	Diagnosis	ICD-10-CM
O3693X3	Maternal care for fetal problem, unspecified, third trimester, fetus 3	Diagnosis	ICD-10-CM
O3693X4	Maternal care for fetal problem, unspecified, third trimester, fetus 4	Diagnosis	ICD-10-CM
O3693X5	Maternal care for fetal problem, unspecified, third trimester, fetus 5	Diagnosis	ICD-10-CM
O3693X9	Maternal care for fetal problem, unspecified, third trimester, other fetus	Diagnosis	ICD-10-CM
O401XX0	Polyhydramnios, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O401XX1	Polyhydramnios, first trimester, fetus 1	Diagnosis	ICD-10-CM
O401XX2	Polyhydramnios, first trimester, fetus 2	Diagnosis	ICD-10-CM
O401XX3	Polyhydramnios, first trimester, fetus 3	Diagnosis	ICD-10-CM
O401XX4	Polyhydramnios, first trimester, fetus 4	Diagnosis	ICD-10-CM
O401XX5	Polyhydramnios, first trimester, fetus 5	Diagnosis	ICD-10-CM
O401XX9	Polyhydramnios, first trimester, other fetus	Diagnosis	ICD-10-CM
O402XX0	Polyhydramnios, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O402XX1	Polyhydramnios, second trimester, fetus 1	Diagnosis	ICD-10-CM
O402XX2	Polyhydramnios, second trimester, fetus 2	Diagnosis	ICD-10-CM
O402XX3	Polyhydramnios, second trimester, fetus 3	Diagnosis	ICD-10-CM
O402XX4	Polyhydramnios, second trimester, fetus 4	Diagnosis	ICD-10-CM
O402XX5	Polyhydramnios, second trimester, fetus 5	Diagnosis	ICD-10-CM
O402XX9	Polyhydramnios, second trimester, other fetus	Diagnosis	ICD-10-CM
O403XX0	Polyhydramnios, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O403XX1	Polyhydramnios, third trimester, fetus 1	Diagnosis	ICD-10-CM
O403XX2	Polyhydramnios, third trimester, fetus 2	Diagnosis	ICD-10-CM
O403XX3	Polyhydramnios, third trimester, fetus 3	Diagnosis	ICD-10-CM
O403XX4	Polyhydramnios, third trimester, fetus 4	Diagnosis	ICD-10-CM
O403XX5	Polyhydramnios, third trimester, fetus 5	Diagnosis	ICD-10-CM
O403XX9	Polyhydramnios, third trimester, other fetus	Diagnosis	ICD-10-CM
O4101X0	Oligohydramnios, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O4101X1	Oligohydramnios, first trimester, fetus 1	Diagnosis	ICD-10-CM
O4101X2	Oligohydramnios, first trimester, fetus 2	Diagnosis	ICD-10-CM
O4101X3	Oligohydramnios, first trimester, fetus 3	Diagnosis	ICD-10-CM
O4101X4	Oligohydramnios, first trimester, fetus 4	Diagnosis	ICD-10-CM
O4101X5	Oligohydramnios, first trimester, fetus 5	Diagnosis	ICD-10-CM
O4101X9	Oligohydramnios, first trimester, other fetus	Diagnosis	ICD-10-CM
O4102X0	Oligohydramnios, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O4102X1	Oligohydramnios, second trimester, fetus 1	Diagnosis	ICD-10-CM
O4102X2	Oligohydramnios, second trimester, fetus 2	Diagnosis	ICD-10-CM
O4102X3	Oligohydramnios, second trimester, fetus 3	Diagnosis	ICD-10-CM
O4102X4	Oligohydramnios, second trimester, fetus 4	Diagnosis	ICD-10-CM
O4102X5	Oligohydramnios, second trimester, fetus 5	Diagnosis	ICD-10-CM
O4102X9	Oligohydramnios, second trimester, other fetus	Diagnosis	ICD-10-CM
O4103X0	Oligohydramnios, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O4103X1	Oligohydramnios, third trimester, fetus 1	Diagnosis	ICD-10-CM
O4103X2	Oligohydramnios, third trimester, fetus 2	Diagnosis	ICD-10-CM
O4103X3	Oligohydramnios, third trimester, fetus 3	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O4103X4	Oligohydramnios, third trimester, fetus 4	Diagnosis	ICD-10-CM
O4103X5	Oligohydramnios, third trimester, fetus 5	Diagnosis	ICD-10-CM
O4103X9	Oligohydramnios, third trimester, other fetus	Diagnosis	ICD-10-CM
O411010	Infection of amniotic sac and membranes, unspecified, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O411011	Infection of amniotic sac and membranes, unspecified, first trimester, fetus 1	Diagnosis	ICD-10-CM
O411012	Infection of amniotic sac and membranes, unspecified, first trimester, fetus 2	Diagnosis	ICD-10-CM
O411013	Infection of amniotic sac and membranes, unspecified, first trimester, fetus 3	Diagnosis	ICD-10-CM
O411014	Infection of amniotic sac and membranes, unspecified, first trimester, fetus 4	Diagnosis	ICD-10-CM
O411015	Infection of amniotic sac and membranes, unspecified, first trimester, fetus 5	Diagnosis	ICD-10-CM
O411019	Infection of amniotic sac and membranes, unspecified, first trimester, other fetus	Diagnosis	ICD-10-CM
O411020	Infection of amniotic sac and membranes, unspecified, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O411021	Infection of amniotic sac and membranes, unspecified, second trimester, fetus 1	Diagnosis	ICD-10-CM
O411022	Infection of amniotic sac and membranes, unspecified, second trimester, fetus 2	Diagnosis	ICD-10-CM
O411023	Infection of amniotic sac and membranes, unspecified, second trimester, fetus 3	Diagnosis	ICD-10-CM
O411024	Infection of amniotic sac and membranes, unspecified, second trimester, fetus 4	Diagnosis	ICD-10-CM
O411025	Infection of amniotic sac and membranes, unspecified, second trimester, fetus 5	Diagnosis	ICD-10-CM
O411029	Infection of amniotic sac and membranes, unspecified, second trimester, other fetus	Diagnosis	ICD-10-CM
O411030	Infection of amniotic sac and membranes, unspecified, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O411031	Infection of amniotic sac and membranes, unspecified, third trimester, fetus 1	Diagnosis	ICD-10-CM
O411032	Infection of amniotic sac and membranes, unspecified, third trimester, fetus 2	Diagnosis	ICD-10-CM
O411033	Infection of amniotic sac and membranes, unspecified, third trimester, fetus 3	Diagnosis	ICD-10-CM
O411034	Infection of amniotic sac and membranes, unspecified, third trimester, fetus 4	Diagnosis	ICD-10-CM
O411035	Infection of amniotic sac and membranes, unspecified, third trimester, fetus 5	Diagnosis	ICD-10-CM
O411039	Infection of amniotic sac and membranes, unspecified, third trimester, other fetus	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O411210	Chorioamnionitis, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O411211	Chorioamnionitis, first trimester, fetus 1	Diagnosis	ICD-10-CM
O411212	Chorioamnionitis, first trimester, fetus 2	Diagnosis	ICD-10-CM
O411213	Chorioamnionitis, first trimester, fetus 3	Diagnosis	ICD-10-CM
O411214	Chorioamnionitis, first trimester, fetus 4	Diagnosis	ICD-10-CM
O411215	Chorioamnionitis, first trimester, fetus 5	Diagnosis	ICD-10-CM
O411219	Chorioamnionitis, first trimester, other fetus	Diagnosis	ICD-10-CM
O411220	Chorioamnionitis, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O411221	Chorioamnionitis, second trimester, fetus 1	Diagnosis	ICD-10-CM
O411222	Chorioamnionitis, second trimester, fetus 2	Diagnosis	ICD-10-CM
O411223	Chorioamnionitis, second trimester, fetus 3	Diagnosis	ICD-10-CM
O411224	Chorioamnionitis, second trimester, fetus 4	Diagnosis	ICD-10-CM
O411225	Chorioamnionitis, second trimester, fetus 5	Diagnosis	ICD-10-CM
O411229	Chorioamnionitis, second trimester, other fetus	Diagnosis	ICD-10-CM
O411230	Chorioamnionitis, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O411231	Chorioamnionitis, third trimester, fetus 1	Diagnosis	ICD-10-CM
O411232	Chorioamnionitis, third trimester, fetus 2	Diagnosis	ICD-10-CM
O411233	Chorioamnionitis, third trimester, fetus 3	Diagnosis	ICD-10-CM
O411234	Chorioamnionitis, third trimester, fetus 4	Diagnosis	ICD-10-CM
O411235	Chorioamnionitis, third trimester, fetus 5	Diagnosis	ICD-10-CM
O411239	Chorioamnionitis, third trimester, other fetus	Diagnosis	ICD-10-CM
O411410	Placentitis, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O411411	Placentitis, first trimester, fetus 1	Diagnosis	ICD-10-CM
O411412	Placentitis, first trimester, fetus 2	Diagnosis	ICD-10-CM
O411413	Placentitis, first trimester, fetus 3	Diagnosis	ICD-10-CM
O411414	Placentitis, first trimester, fetus 4	Diagnosis	ICD-10-CM
O411415	Placentitis, first trimester, fetus 5	Diagnosis	ICD-10-CM
O411419	Placentitis, first trimester, other fetus	Diagnosis	ICD-10-CM
O411420	Placentitis, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O411421	Placentitis, second trimester, fetus 1	Diagnosis	ICD-10-CM
O411422	Placentitis, second trimester, fetus 2	Diagnosis	ICD-10-CM
O411423	Placentitis, second trimester, fetus 3	Diagnosis	ICD-10-CM
O411424	Placentitis, second trimester, fetus 4	Diagnosis	ICD-10-CM
O411425	Placentitis, second trimester, fetus 5	Diagnosis	ICD-10-CM
O411429	Placentitis, second trimester, other fetus	Diagnosis	ICD-10-CM
O411430	Placentitis, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O411431	Placentitis, third trimester, fetus 1	Diagnosis	ICD-10-CM
O411432	Placentitis, third trimester, fetus 2	Diagnosis	ICD-10-CM
O411433	Placentitis, third trimester, fetus 3	Diagnosis	ICD-10-CM
O411434	Placentitis, third trimester, fetus 4	Diagnosis	ICD-10-CM
O411435	Placentitis, third trimester, fetus 5	Diagnosis	ICD-10-CM
O411439	Placentitis, third trimester, other fetus	Diagnosis	ICD-10-CM
O418X10	Other specified disorders of amniotic fluid and membranes, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O418X11	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 1	Diagnosis	ICD-10-CM
O418X12	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 2	Diagnosis	ICD-10-CM
O418X13	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 3	Diagnosis	ICD-10-CM
O418X14	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 4	Diagnosis	ICD-10-CM
O418X15	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 5	Diagnosis	ICD-10-CM
O418X19	Other specified disorders of amniotic fluid and membranes, first trimester, other fetus	Diagnosis	ICD-10-CM
O418X20	Other specified disorders of amniotic fluid and membranes, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O418X21	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 1	Diagnosis	ICD-10-CM
O418X22	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 2	Diagnosis	ICD-10-CM
O418X23	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 3	Diagnosis	ICD-10-CM
O418X24	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 4	Diagnosis	ICD-10-CM
O418X25	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 5	Diagnosis	ICD-10-CM
O418X29	Other specified disorders of amniotic fluid and membranes, second trimester, other fetus	Diagnosis	ICD-10-CM
O418X30	Other specified disorders of amniotic fluid and membranes, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O418X31	Other specified disorders of amniotic fluid and membranes, third trimester, fetus 1	Diagnosis	ICD-10-CM
O418X32	Other specified disorders of amniotic fluid and membranes, third trimester, fetus 2	Diagnosis	ICD-10-CM
O418X33	Other specified disorders of amniotic fluid and membranes, third trimester, fetus 3	Diagnosis	ICD-10-CM
O418X34	Other specified disorders of amniotic fluid and membranes, third trimester, fetus 4	Diagnosis	ICD-10-CM
O418X35	Other specified disorders of amniotic fluid and membranes, third trimester, fetus 5	Diagnosis	ICD-10-CM
O418X39	Other specified disorders of amniotic fluid and membranes, third trimester, other fetus	Diagnosis	ICD-10-CM
O4191X0	Disorder of amniotic fluid and membranes, unspecified, first trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O4191X1	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 1	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O4191X2	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 2	Diagnosis	ICD-10-CM
O4191X3	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 3	Diagnosis	ICD-10-CM
O4191X4	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 4	Diagnosis	ICD-10-CM
O4191X5	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 5	Diagnosis	ICD-10-CM
O4191X9	Disorder of amniotic fluid and membranes, unspecified, first trimester, other fetus	Diagnosis	ICD-10-CM
O4192X0	Disorder of amniotic fluid and membranes, unspecified, second trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O4192X1	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 1	Diagnosis	ICD-10-CM
O4192X2	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 2	Diagnosis	ICD-10-CM
O4192X3	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 3	Diagnosis	ICD-10-CM
O4192X4	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 4	Diagnosis	ICD-10-CM
O4192X5	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 5	Diagnosis	ICD-10-CM
O4192X9	Disorder of amniotic fluid and membranes, unspecified, second trimester, other fetus	Diagnosis	ICD-10-CM
O4193X0	Disorder of amniotic fluid and membranes, unspecified, third trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O4193X1	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 1	Diagnosis	ICD-10-CM
O4193X2	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 2	Diagnosis	ICD-10-CM
O4193X3	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 3	Diagnosis	ICD-10-CM
O4193X4	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 4	Diagnosis	ICD-10-CM
O4193X5	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 5	Diagnosis	ICD-10-CM
O4193X9	Disorder of amniotic fluid and membranes, unspecified, third trimester, other fetus	Diagnosis	ICD-10-CM
O42011	Preterm premature rupture of membranes, onset of labor within 24 hours of rupture, first trimester	Diagnosis	ICD-10-CM
O42012	Preterm premature rupture of membranes, onset of labor within 24 hours of rupture, second trimester	Diagnosis	ICD-10-CM
O42013	Preterm premature rupture of membranes, onset of labor within 24 hours of rupture, third trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O42019	Preterm premature rupture of membranes, onset of labor within 24 hours of rupture, unspecified trimester	Diagnosis	ICD-10-CM
O4202	Full-term premature rupture of membranes, onset of labor within 24 hours of rupture	Diagnosis	ICD-10-CM
O42111	Preterm premature rupture of membranes, onset of labor more than 24 hours following rupture, first trimester	Diagnosis	ICD-10-CM
O42112	Preterm premature rupture of membranes, onset of labor more than 24 hours following rupture, second trimester	Diagnosis	ICD-10-CM
O42113	Preterm premature rupture of membranes, onset of labor more than 24 hours following rupture, third trimester	Diagnosis	ICD-10-CM
O42119	Preterm premature rupture of membranes, onset of labor more than 24 hours following rupture, unspecified trimester	Diagnosis	ICD-10-CM
O4212	Full-term premature rupture of membranes, onset of labor more than 24 hours following rupture	Diagnosis	ICD-10-CM
O42911	Preterm premature rupture of membranes, unspecified as to length of time between rupture and onset of labor, first trimester	Diagnosis	ICD-10-CM
O42912	Preterm premature rupture of membranes, unspecified as to length of time between rupture and onset of labor, second trimester	Diagnosis	ICD-10-CM
O42913	Preterm premature rupture of membranes, unspecified as to length of time between rupture and onset of labor, third trimester	Diagnosis	ICD-10-CM
O42919	Preterm premature rupture of membranes, unspecified as to length of time between rupture and onset of labor, unspecified trimester	Diagnosis	ICD-10-CM
O4292	Full-term premature rupture of membranes, unspecified as to length of time between rupture and onset of labor	Diagnosis	ICD-10-CM
O43011	Fetomaternal placental transfusion syndrome, first trimester	Diagnosis	ICD-10-CM
O43012	Fetomaternal placental transfusion syndrome, second trimester	Diagnosis	ICD-10-CM
O43013	Fetomaternal placental transfusion syndrome, third trimester	Diagnosis	ICD-10-CM
O43021	Fetus-to-fetus placental transfusion syndrome, first trimester	Diagnosis	ICD-10-CM
O43022	Fetus-to-fetus placental transfusion syndrome, second trimester	Diagnosis	ICD-10-CM
O43023	Fetus-to-fetus placental transfusion syndrome, third trimester	Diagnosis	ICD-10-CM
O43101	Malformation of placenta, unspecified, first trimester	Diagnosis	ICD-10-CM
O43102	Malformation of placenta, unspecified, second trimester	Diagnosis	ICD-10-CM
O43103	Malformation of placenta, unspecified, third trimester	Diagnosis	ICD-10-CM
O43111	Circumvallate placenta, first trimester	Diagnosis	ICD-10-CM
O43112	Circumvallate placenta, second trimester	Diagnosis	ICD-10-CM
O43113	Circumvallate placenta, third trimester	Diagnosis	ICD-10-CM
O43121	Velamentous insertion of umbilical cord, first trimester	Diagnosis	ICD-10-CM
O43122	Velamentous insertion of umbilical cord, second trimester	Diagnosis	ICD-10-CM
O43123	Velamentous insertion of umbilical cord, third trimester	Diagnosis	ICD-10-CM
O43191	Other malformation of placenta, first trimester	Diagnosis	ICD-10-CM
O43192	Other malformation of placenta, second trimester	Diagnosis	ICD-10-CM
O43193	Other malformation of placenta, third trimester	Diagnosis	ICD-10-CM
O43211	Placenta accreta, first trimester	Diagnosis	ICD-10-CM
O43212	Placenta accreta, second trimester	Diagnosis	ICD-10-CM
O43213	Placenta accreta, third trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O43221	Placenta increta, first trimester	Diagnosis	ICD-10-CM
O43222	Placenta increta, second trimester	Diagnosis	ICD-10-CM
O43223	Placenta increta, third trimester	Diagnosis	ICD-10-CM
O43231	Placenta percreta, first trimester	Diagnosis	ICD-10-CM
O43232	Placenta percreta, second trimester	Diagnosis	ICD-10-CM
O43233	Placenta percreta, third trimester	Diagnosis	ICD-10-CM
O43811	Placental infarction, first trimester	Diagnosis	ICD-10-CM
O43812	Placental infarction, second trimester	Diagnosis	ICD-10-CM
O43813	Placental infarction, third trimester	Diagnosis	ICD-10-CM
O43891	Other placental disorders, first trimester	Diagnosis	ICD-10-CM
O43892	Other placental disorders, second trimester	Diagnosis	ICD-10-CM
O43893	Other placental disorders, third trimester	Diagnosis	ICD-10-CM
O4391	Unspecified placental disorder, first trimester	Diagnosis	ICD-10-CM
O4392	Unspecified placental disorder, second trimester	Diagnosis	ICD-10-CM
O4393	Unspecified placental disorder, third trimester	Diagnosis	ICD-10-CM
O4401	Complete placenta previa NOS or without hemorrhage, first trimester	Diagnosis	ICD-10-CM
O4402	Complete placenta previa NOS or without hemorrhage, second trimester	Diagnosis	ICD-10-CM
O4403	Complete placenta previa NOS or without hemorrhage, third trimester	Diagnosis	ICD-10-CM
O4411	Complete placenta previa with hemorrhage, first trimester	Diagnosis	ICD-10-CM
O4412	Complete placenta previa with hemorrhage, second trimester	Diagnosis	ICD-10-CM
O4413	Complete placenta previa with hemorrhage, third trimester	Diagnosis	ICD-10-CM
O4421	Partial placenta previa NOS or without hemorrhage, first trimester	Diagnosis	ICD-10-CM
O4422	Partial placenta previa NOS or without hemorrhage, second trimester	Diagnosis	ICD-10-CM
O4423	Partial placenta previa NOS or without hemorrhage, third trimester	Diagnosis	ICD-10-CM
O4431	Partial placenta previa with hemorrhage, first trimester	Diagnosis	ICD-10-CM
O4432	Partial placenta previa with hemorrhage, second trimester	Diagnosis	ICD-10-CM
O4433	Partial placenta previa with hemorrhage, third trimester	Diagnosis	ICD-10-CM
O4441	Low lying placenta NOS or without hemorrhage, first trimester	Diagnosis	ICD-10-CM
O4442	Low lying placenta NOS or without hemorrhage, second trimester	Diagnosis	ICD-10-CM
O4443	Low lying placenta NOS or without hemorrhage, third trimester	Diagnosis	ICD-10-CM
O4451	Low lying placenta with hemorrhage, first trimester	Diagnosis	ICD-10-CM
O4452	Low lying placenta with hemorrhage, second trimester	Diagnosis	ICD-10-CM
O4453	Low lying placenta with hemorrhage, third trimester	Diagnosis	ICD-10-CM
O45001	Premature separation of placenta with coagulation defect, unspecified, first trimester	Diagnosis	ICD-10-CM
O45002	Premature separation of placenta with coagulation defect, unspecified, second trimester	Diagnosis	ICD-10-CM
O45003	Premature separation of placenta with coagulation defect, unspecified, third trimester	Diagnosis	ICD-10-CM
O45011	Premature separation of placenta with afibrinogenemia, first trimester	Diagnosis	ICD-10-CM
O45012	Premature separation of placenta with afibrinogenemia, second trimester	Diagnosis	ICD-10-CM
O45013	Premature separation of placenta with afibrinogenemia, third trimester	Diagnosis	ICD-10-CM
O45021	Premature separation of placenta with disseminated intravascular coagulation, first trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O45022	Premature separation of placenta with disseminated intravascular coagulation, second trimester	Diagnosis	ICD-10-CM
O45023	Premature separation of placenta with disseminated intravascular coagulation, third trimester	Diagnosis	ICD-10-CM
O45091	Premature separation of placenta with other coagulation defect, first trimester	Diagnosis	ICD-10-CM
O45092	Premature separation of placenta with other coagulation defect, second trimester	Diagnosis	ICD-10-CM
O45093	Premature separation of placenta with other coagulation defect, third trimester	Diagnosis	ICD-10-CM
O458X1	Other premature separation of placenta, first trimester	Diagnosis	ICD-10-CM
O458X2	Other premature separation of placenta, second trimester	Diagnosis	ICD-10-CM
O458X3	Other premature separation of placenta, third trimester	Diagnosis	ICD-10-CM
O4591	Premature separation of placenta, unspecified, first trimester	Diagnosis	ICD-10-CM
O4592	Premature separation of placenta, unspecified, second trimester	Diagnosis	ICD-10-CM
O4593	Premature separation of placenta, unspecified, third trimester	Diagnosis	ICD-10-CM
O46001	Antepartum hemorrhage with coagulation defect, unspecified, first trimester	Diagnosis	ICD-10-CM
O46002	Antepartum hemorrhage with coagulation defect, unspecified, second trimester	Diagnosis	ICD-10-CM
O46003	Antepartum hemorrhage with coagulation defect, unspecified, third trimester	Diagnosis	ICD-10-CM
O46011	Antepartum hemorrhage with afibrinogenemia, first trimester	Diagnosis	ICD-10-CM
O46012	Antepartum hemorrhage with afibrinogenemia, second trimester	Diagnosis	ICD-10-CM
O46013	Antepartum hemorrhage with afibrinogenemia, third trimester	Diagnosis	ICD-10-CM
O46021	Antepartum hemorrhage with disseminated intravascular coagulation, first trimester	Diagnosis	ICD-10-CM
O46022	Antepartum hemorrhage with disseminated intravascular coagulation, second trimester	Diagnosis	ICD-10-CM
O46023	Antepartum hemorrhage with disseminated intravascular coagulation, third trimester	Diagnosis	ICD-10-CM
O46091	Antepartum hemorrhage with other coagulation defect, first trimester	Diagnosis	ICD-10-CM
O46092	Antepartum hemorrhage with other coagulation defect, second trimester	Diagnosis	ICD-10-CM
O46093	Antepartum hemorrhage with other coagulation defect, third trimester	Diagnosis	ICD-10-CM
O468X1	Other antepartum hemorrhage, first trimester	Diagnosis	ICD-10-CM
O468X2	Other antepartum hemorrhage, second trimester	Diagnosis	ICD-10-CM
O468X3	Other antepartum hemorrhage, third trimester	Diagnosis	ICD-10-CM
O4691	Antepartum hemorrhage, unspecified, first trimester	Diagnosis	ICD-10-CM
O4692	Antepartum hemorrhage, unspecified, second trimester	Diagnosis	ICD-10-CM
O4693	Antepartum hemorrhage, unspecified, third trimester	Diagnosis	ICD-10-CM
O4702	False labor before 37 completed weeks of gestation, second trimester	Diagnosis	ICD-10-CM
O4703	False labor before 37 completed weeks of gestation, third trimester	Diagnosis	ICD-10-CM
O471	False labor at or after 37 completed weeks of gestation	Diagnosis	ICD-10-CM
O480	Post-term pregnancy	Diagnosis	ICD-10-CM
O481	Prolonged pregnancy	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O6002	Preterm labor without delivery, second trimester	Diagnosis	ICD-10-CM
O6003	Preterm labor without delivery, third trimester	Diagnosis	ICD-10-CM
O6010X0	Preterm labor with preterm delivery, unspecified trimester, not applicable or unspecified	Diagnosis	ICD-10-CM
O7102	Rupture of uterus before onset of labor, second trimester	Diagnosis	ICD-10-CM
O7103	Rupture of uterus before onset of labor, third trimester	Diagnosis	ICD-10-CM
O7582	Onset (spontaneous) of labor after 37 completed weeks of gestation but before 39 completed weeks gestation, with delivery by (planned) cesarean section	Diagnosis	ICD-10-CM
O88011	Air embolism in pregnancy, first trimester	Diagnosis	ICD-10-CM
O88012	Air embolism in pregnancy, second trimester	Diagnosis	ICD-10-CM
O88013	Air embolism in pregnancy, third trimester	Diagnosis	ICD-10-CM
O88111	Amniotic fluid embolism in pregnancy, first trimester	Diagnosis	ICD-10-CM
O88112	Amniotic fluid embolism in pregnancy, second trimester	Diagnosis	ICD-10-CM
O88113	Amniotic fluid embolism in pregnancy, third trimester	Diagnosis	ICD-10-CM
O88211	Thromboembolism in pregnancy, first trimester	Diagnosis	ICD-10-CM
O88212	Thromboembolism in pregnancy, second trimester	Diagnosis	ICD-10-CM
O88213	Thromboembolism in pregnancy, third trimester	Diagnosis	ICD-10-CM
O88311	Pyemic and septic embolism in pregnancy, first trimester	Diagnosis	ICD-10-CM
O88312	Pyemic and septic embolism in pregnancy, second trimester	Diagnosis	ICD-10-CM
O88313	Pyemic and septic embolism in pregnancy, third trimester	Diagnosis	ICD-10-CM
O88811	Other embolism in pregnancy, first trimester	Diagnosis	ICD-10-CM
O88812	Other embolism in pregnancy, second trimester	Diagnosis	ICD-10-CM
O88813	Other embolism in pregnancy, third trimester	Diagnosis	ICD-10-CM
O91011	Infection of nipple associated with pregnancy, first trimester	Diagnosis	ICD-10-CM
O91012	Infection of nipple associated with pregnancy, second trimester	Diagnosis	ICD-10-CM
O91013	Infection of nipple associated with pregnancy, third trimester	Diagnosis	ICD-10-CM
O91111	Abscess of breast associated with pregnancy, first trimester	Diagnosis	ICD-10-CM
O91112	Abscess of breast associated with pregnancy, second trimester	Diagnosis	ICD-10-CM
O91113	Abscess of breast associated with pregnancy, third trimester	Diagnosis	ICD-10-CM
O91211	Nonpurulent mastitis associated with pregnancy, first trimester	Diagnosis	ICD-10-CM
O91212	Nonpurulent mastitis associated with pregnancy, second trimester	Diagnosis	ICD-10-CM
O91213	Nonpurulent mastitis associated with pregnancy, third trimester	Diagnosis	ICD-10-CM
O92011	Retracted nipple associated with pregnancy, first trimester	Diagnosis	ICD-10-CM
O92012	Retracted nipple associated with pregnancy, second trimester	Diagnosis	ICD-10-CM
O92013	Retracted nipple associated with pregnancy, third trimester	Diagnosis	ICD-10-CM
O92111	Cracked nipple associated with pregnancy, first trimester	Diagnosis	ICD-10-CM
O92112	Cracked nipple associated with pregnancy, second trimester	Diagnosis	ICD-10-CM
O92113	Cracked nipple associated with pregnancy, third trimester	Diagnosis	ICD-10-CM
O98011	Tuberculosis complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O98012	Tuberculosis complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O98013	Tuberculosis complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O98111	Syphilis complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O98112	Syphilis complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O98113	Syphilis complicating pregnancy, third trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
098211	Gonorrhea complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
098212	Gonorrhea complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
098213	Gonorrhea complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
098311	Other infections with a predominantly sexual mode of transmission complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
098312	Other infections with a predominantly sexual mode of transmission complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
098313	Other infections with a predominantly sexual mode of transmission complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
098411	Viral hepatitis complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
098412	Viral hepatitis complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
098413	Viral hepatitis complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
098511	Other viral diseases complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
098512	Other viral diseases complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
098513	Other viral diseases complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
098611	Protozoal diseases complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
098612	Protozoal diseases complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
098613	Protozoal diseases complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
098711	Human immunodeficiency virus [HIV] disease complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
098712	Human immunodeficiency virus [HIV] disease complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
098713	Human immunodeficiency virus [HIV] disease complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
098811	Other maternal infectious and parasitic diseases complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
098812	Other maternal infectious and parasitic diseases complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
098813	Other maternal infectious and parasitic diseases complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
098911	Unspecified maternal infectious and parasitic disease complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
098912	Unspecified maternal infectious and parasitic disease complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
098913	Unspecified maternal infectious and parasitic disease complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099011	Anemia complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
099012	Anemia complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
099013	Anemia complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099111	Other diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
099112	Other diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism complicating pregnancy, second trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
099113	Other diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099211	Obesity complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
099212	Obesity complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
099213	Obesity complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099281	Endocrine, nutritional and metabolic diseases complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
099282	Endocrine, nutritional and metabolic diseases complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
099283	Endocrine, nutritional and metabolic diseases complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099311	Alcohol use complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
099312	Alcohol use complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
099313	Alcohol use complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099321	Drug use complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
099322	Drug use complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
099323	Drug use complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099331	Smoking (tobacco) complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
099332	Smoking (tobacco) complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
099333	Smoking (tobacco) complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099341	Other mental disorders complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
099342	Other mental disorders complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
099343	Other mental disorders complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099351	Diseases of the nervous system complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
099352	Diseases of the nervous system complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
099353	Diseases of the nervous system complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099411	Diseases of the circulatory system complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
099412	Diseases of the circulatory system complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
099413	Diseases of the circulatory system complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099511	Diseases of the respiratory system complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
099512	Diseases of the respiratory system complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
099513	Diseases of the respiratory system complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099611	Diseases of the digestive system complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
099612	Diseases of the digestive system complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
099613	Diseases of the digestive system complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099711	Diseases of the skin and subcutaneous tissue complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
099712	Diseases of the skin and subcutaneous tissue complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
099713	Diseases of the skin and subcutaneous tissue complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
099841	Bariatric surgery status complicating pregnancy, first trimester	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
O99842	Bariatric surgery status complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O99843	Bariatric surgery status complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O9A111	Malignant neoplasm complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O9A112	Malignant neoplasm complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O9A113	Malignant neoplasm complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O9A211	Injury, poisoning and certain other consequences of external causes complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O9A212	Injury, poisoning and certain other consequences of external causes complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O9A213	Injury, poisoning and certain other consequences of external causes complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O9A311	Physical abuse complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O9A312	Physical abuse complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O9A313	Physical abuse complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O9A411	Sexual abuse complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O9A412	Sexual abuse complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O9A413	Sexual abuse complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O9A511	Psychological abuse complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O9A512	Psychological abuse complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O9A513	Psychological abuse complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
P0700	Extremely low birth weight newborn, unspecified weight	Diagnosis	ICD-10-CM
P0701	Extremely low birth weight newborn, less than 500 grams	Diagnosis	ICD-10-CM
P0702	Extremely low birth weight newborn, 500-749 grams	Diagnosis	ICD-10-CM
P0703	Extremely low birth weight newborn, 750-999 grams	Diagnosis	ICD-10-CM
P0710	Other low birth weight newborn, unspecified weight	Diagnosis	ICD-10-CM
P0714	Other low birth weight newborn, 1000-1249 grams	Diagnosis	ICD-10-CM
P0715	Other low birth weight newborn, 1250-1499 grams	Diagnosis	ICD-10-CM
P0716	Other low birth weight newborn, 1500-1749 grams	Diagnosis	ICD-10-CM
P0717	Other low birth weight newborn, 1750-1999 grams	Diagnosis	ICD-10-CM
P0718	Other low birth weight newborn, 2000-2499 grams	Diagnosis	ICD-10-CM
P0720	Extreme immaturity of newborn, unspecified weeks of gestation	Diagnosis	ICD-10-CM
P0721	Extreme immaturity of newborn, gestational age less than 23 completed weeks	Diagnosis	ICD-10-CM
P0722	Extreme immaturity of newborn, gestational age 23 completed weeks	Diagnosis	ICD-10-CM
P0723	Extreme immaturity of newborn, gestational age 24 completed weeks	Diagnosis	ICD-10-CM
P0724	Extreme immaturity of newborn, gestational age 25 completed weeks	Diagnosis	ICD-10-CM
P0725	Extreme immaturity of newborn, gestational age 26 completed weeks	Diagnosis	ICD-10-CM
P0726	Extreme immaturity of newborn, gestational age 27 completed weeks	Diagnosis	ICD-10-CM
P0730	Preterm newborn, unspecified weeks of gestation	Diagnosis	ICD-10-CM
P0731	Preterm newborn, gestational age 28 completed weeks	Diagnosis	ICD-10-CM
P0732	Preterm newborn, gestational age 29 completed weeks	Diagnosis	ICD-10-CM
P0733	Preterm newborn, gestational age 30 completed weeks	Diagnosis	ICD-10-CM
P0734	Preterm newborn, gestational age 31 completed weeks	Diagnosis	ICD-10-CM
P0735	Preterm newborn, gestational age 32 completed weeks	Diagnosis	ICD-10-CM
P0736	Preterm newborn, gestational age 33 completed weeks	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
P0737	Preterm newborn, gestational age 34 completed weeks	Diagnosis	ICD-10-CM
P0738	Preterm newborn, gestational age 35 completed weeks	Diagnosis	ICD-10-CM
P0739	Preterm newborn, gestational age 36 completed weeks	Diagnosis	ICD-10-CM
P0822	Prolonged gestation of newborn	Diagnosis	ICD-10-CM
S4011	IN VITRO FERTILIZATION;	Procedure	HCPCS
S4013	COMPLETE CYCLE GIFT CASE RATE	Procedure	HCPCS
S4014	COMPLETE CYCLE ZIFT CASE RATE	Procedure	HCPCS
S4015	COMPLETE IVF CYCLE CASE RATE NOS	Procedure	HCPCS
S4016	FROZEN IVF CYCLE CASE RATE	Procedure	HCPCS
S4035	STIMULATED INTRAUTERINE INSEMINATION (IUI), CASE RATE	Procedure	HCPCS
S4037	Cryopreserved embryo transfer, case rate	Procedure	HCPCS
Z3401	Encounter for supervision of normal first pregnancy, first trimester	Diagnosis	ICD-10-CM
Z3402	Encounter for supervision of normal first pregnancy, second trimester	Diagnosis	ICD-10-CM
Z3403	Encounter for supervision of normal first pregnancy, third trimester	Diagnosis	ICD-10-CM
Z3481	Encounter for supervision of other normal pregnancy, first trimester	Diagnosis	ICD-10-CM
Z3482	Encounter for supervision of other normal pregnancy, second trimester	Diagnosis	ICD-10-CM
Z3483	Encounter for supervision of other normal pregnancy, third trimester	Diagnosis	ICD-10-CM
Z3491	Encounter for supervision of normal pregnancy, unspecified, first trimester	Diagnosis	ICD-10-CM
Z3492	Encounter for supervision of normal pregnancy, unspecified, second trimester	Diagnosis	ICD-10-CM
Z3493	Encounter for supervision of normal pregnancy, unspecified, third trimester	Diagnosis	ICD-10-CM
Z3A01	Less than 8 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A08	8 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A09	9 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A10	10 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A11	11 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A12	12 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A13	13 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A14	14 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A15	15 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A16	16 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A17	17 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A18	18 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A19	19 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A20	20 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A21	21 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A22	22 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A23	23 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A24	24 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A25	25 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A26	26 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A27	27 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A28	28 weeks gestation of pregnancy	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
Z3A29	29 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A30	30 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A31	31 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A32	32 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A33	33 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A34	34 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A35	35 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A36	36 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A37	37 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A38	38 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A39	39 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A40	40 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A41	41 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A42	42 weeks gestation of pregnancy	Diagnosis	ICD-10-CM
Z3A49	Greater than 42 weeks gestation of pregnancy	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
Plaque Psoriasis			
L40.0	Psoriasis vulgaris	Diagnosis	ICD-10-CM
L40.1	Generalized pustular psoriasis	Diagnosis	ICD-10-CM
L40.2	Acrodermatitis continua	Diagnosis	ICD-10-CM
L40.3	Pustulosis palmaris et plantaris	Diagnosis	ICD-10-CM
L40.4	Guttate psoriasis	Diagnosis	ICD-10-CM
L40.8	Other psoriasis	Diagnosis	ICD-10-CM
L40.9	Psoriasis, unspecified	Diagnosis	ICD-10-CM
Psoriatic Arthritis			
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
Crohn's Disease			
K50.0	Crohn's disease of small intestine	Diagnosis	ICD-10-CM
K50.00	Crohn's disease of small intestine without complications	Diagnosis	ICD-10-CM
K50.01	Crohn's disease of small intestine with 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
K50.1	Crohn's disease of large intestine	Diagnosis	ICD-10-CM
K50.10	Crohn's disease of large intestine without complications	Diagnosis	ICD-10-CM
K50.11	Crohn's disease of large intestine with 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
K50.8	Crohn's disease of both small and large intestine	Diagnosis	ICD-10-CM
K50.80	Crohn's disease of both small and large intestine without complications	Diagnosis	ICD-10-CM
K50.81	Crohn's disease of both small and large intestine with 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
K50.9	Crohn's disease, unspecified	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
K50.90	Crohn's disease, unspecified, without complications	Diagnosis	ICD-10-CM
K50.91	Crohn's disease, unspecified, with 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
Immunocompromised			
0182T	High dose rate electronic brachytherapy, per fraction	Procedure	CPT-3
0190T	Placement of intraocular radiation source applicator (List separately in addition to primary procedure)	Procedure	CPT-3
02Y	Heart and Great Vessels, Transplantation	Procedure	ICD-10-PCS
02YA	Transplantation / Heart	Procedure	ICD-10-PCS
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, Zooplasic, Open Approach	Procedure	ICD-10-PCS
0394T	High dose rate electronic brachytherapy, skin surface application, per fraction, includes basic dosimetry, when performed	Procedure	CPT-3
0395T	High dose rate electronic brachytherapy, interstitial or intracavitary treatment, per fraction, includes basic dosimetry, when performed	Procedure	CPT-3
07Y	Lymphatic and Hemic Systems, Transplantation	Procedure	ICD-10-PCS
07YP	Transplantation / Spleen	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, Zooplasic, Open Approach	Procedure	ICD-10-PCS
0BH001Z	Insertion of Radioactive Element into Tracheobronchial Tree, Open Approach	Procedure	ICD-10-PCS
0BH031Z	Insertion of Radioactive Element into Tracheobronchial Tree, Percutaneous Approach	Procedure	ICD-10-PCS
0BH041Z	Insertion of Radioactive Element into Tracheobronchial Tree, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0BH071Z	Insertion of Radioactive Element into Tracheobronchial Tree, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0BH081Z	Insertion of Radioactive Element into Tracheobronchial Tree, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0BHK01Z	Insertion of Radioactive Element into Right Lung, Open Approach	Procedure	ICD-10-PCS
0BHK31Z	Insertion of Radioactive Element into Right Lung, Percutaneous Approach	Procedure	ICD-10-PCS
0BHK41Z	Insertion of Radioactive Element into Right Lung, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0BHK71Z	Insertion of Radioactive Element into Right Lung, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0BHK81Z	Insertion of Radioactive Element into Right Lung, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0BHL01Z	Insertion of Radioactive Element into Left Lung, Open Approach	Procedure	ICD-10-PCS
0BHL31Z	Insertion of Radioactive Element into Left Lung, Percutaneous Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
OBHL41Z	Insertion of Radioactive Element into Left Lung, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OBHL71Z	Insertion of Radioactive Element into Left Lung, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
	Insertion of Radioactive Element into Left Lung, Via Natural or Artificial Opening		
OBHL81Z	Endoscopic	Procedure	ICD-10-PCS
OBY	Respiratory System, Transplantation	Procedure	ICD-10-PCS
OBYC	Transplantation / Upper Lung Lobe, Right	Procedure	ICD-10-PCS
OBYC0Z0	Transplantation of Right Upper Lung Lobe, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OBYC0Z1	Transplantation of Right Upper Lung Lobe, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OBYC0Z2	Transplantation of Right Upper Lung Lobe, Zooplasic, Open Approach	Procedure	ICD-10-PCS
OBYD	Transplantation / Middle Lung Lobe, Right	Procedure	ICD-10-PCS
OBYD0Z0	Transplantation of Right Middle Lung Lobe, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OBYD0Z1	Transplantation of Right Middle Lung Lobe, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OBYD0Z2	Transplantation of Right Middle Lung Lobe, Zooplasic, Open Approach	Procedure	ICD-10-PCS
OBYF	Transplantation / Lower Lung Lobe, Right	Procedure	ICD-10-PCS
OBYF0Z0	Transplantation of Right Lower Lung Lobe, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OBYF0Z1	Transplantation of Right Lower Lung Lobe, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OBYF0Z2	Transplantation of Right Lower Lung Lobe, Zooplasic, Open Approach	Procedure	ICD-10-PCS
OBYG	Transplantation / Upper Lung Lobe, Left	Procedure	ICD-10-PCS
OBYG0Z0	Transplantation of Left Upper Lung Lobe, Allogeneic, Open Approach	Procedure	ICD-10-PCS
OBYG0Z1	Transplantation of Left Upper Lung Lobe, Syngeneic, Open Approach	Procedure	ICD-10-PCS
OBYG0Z2	Transplantation of Left Upper Lung Lobe, Zooplasic, Open Approach	Procedure	ICD-10-PCS
OBYH	Transplantation / Lung Lingula	Procedure	ICD-10-PCS
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, Zooplasic, Open Approach	Procedure	ICD-10-PCS
OBYJ	Transplantation / Lower Lung Lobe, Left	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, Zooplasic, Open Approach	Procedure	ICD-10-PCS
OBYK	Transplantation / Lung, Right	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, Zooplasic, Open Approach	Procedure	ICD-10-PCS
OBYL	Transplantation / Lung, Left	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, Zooplasic, Open Approach	Procedure	ICD-10-PCS
OBYM	Transplantation / Lungs, Bilateral	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, Zooplasic, Open Approach	Procedure	ICD-10-PCS
OCH701Z	Insertion of Radioactive Element into Tongue, Open Approach	Procedure	ICD-10-PCS
OCH731Z	Insertion of Radioactive Element into Tongue, Percutaneous Approach	Procedure	ICD-10-PCS
OCH7X1Z	Insertion of Radioactive Element into Tongue, External Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
ODH501Z	Insertion of Radioactive Element into Esophagus, Open Approach	Procedure	ICD-10-PCS
ODH531Z	Insertion of Radioactive Element into Esophagus, Percutaneous Approach	Procedure	ICD-10-PCS
ODH541Z	Insertion of Radioactive Element into Esophagus, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
ODH571Z	Insertion of Radioactive Element into Esophagus, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
ODH581Z	Insertion of Radioactive Element into Esophagus, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
ODHP01Z	Insertion of Radioactive Element into Rectum, Open Approach	Procedure	ICD-10-PCS
ODHP31Z	Insertion of Radioactive Element into Rectum, Percutaneous Approach	Procedure	ICD-10-PCS
ODHP41Z	Insertion of Radioactive Element into Rectum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
ODHP71Z	Insertion of Radioactive Element into Rectum, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
ODHP81Z	Insertion of Radioactive Element into Rectum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
ODY	Gastrointestinal System, Transplantation	Procedure	ICD-10-PCS
ODY5	Transplantation / Esophagus	Procedure	ICD-10-PCS
ODY50Z0	Transplantation of Esophagus, Allogeneic, Open Approach	Procedure	ICD-10-PCS
ODY50Z1	Transplantation of Esophagus, Syngeneic, Open Approach	Procedure	ICD-10-PCS
ODY50Z2	Transplantation of Esophagus, Zooplastic, Open Approach	Procedure	ICD-10-PCS
ODY6	Transplantation / Stomach	Procedure	ICD-10-PCS
ODY60Z0	Transplantation of Stomach, Allogeneic, Open Approach	Procedure	ICD-10-PCS
ODY60Z1	Transplantation of Stomach, Syngeneic, Open Approach	Procedure	ICD-10-PCS
ODY60Z2	Transplantation of Stomach, Zooplastic, Open Approach	Procedure	ICD-10-PCS
ODY8	Transplantation / Small Intestine	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
ODYE	Transplantation / Large Intestine	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
OFHB01Z	Insertion of Radioactive Element into Hepatobiliary Duct, Open Approach	Procedure	ICD-10-PCS
OFHB31Z	Insertion of Radioactive Element into Hepatobiliary Duct, Percutaneous Approach	Procedure	ICD-10-PCS
OFHB41Z	Insertion of Radioactive Element into Hepatobiliary Duct, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OFHB71Z	Insertion of Radioactive Element into Hepatobiliary Duct, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
OFHB81Z	Insertion of Radioactive Element into Hepatobiliary Duct, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
OFHD01Z	Insertion of Radioactive Element into Pancreatic Duct, Open Approach	Procedure	ICD-10-PCS
OFHD31Z	Insertion of Radioactive Element into Pancreatic Duct, Percutaneous Approach	Procedure	ICD-10-PCS
OFHD41Z	Insertion of Radioactive Element into Pancreatic Duct, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OFHD71Z	Insertion of Radioactive Element into Pancreatic Duct, Via Natural or Artificial Opening	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
	Insertion of Radioactive Element into Pancreatic Duct, Via Natural or Artificial		
0FHD81Z	Opening Endoscopic	Procedure	ICD-10-PCS
0FY	Hepatobiliary System and Pancreas, Transplantation	Procedure	ICD-10-PCS
0FY0	Transplantation / Liver	Procedure	ICD-10-PCS
0FY00Z0	Transplantation of Liver, Allogeneic, Open Approach	Procedure	ICD-10-PCS
0FY00Z1	Transplantation of Liver, Syngeneic, Open Approach	Procedure	ICD-10-PCS
0FY00Z2	Transplantation of Liver, Zooplastic, Open Approach	Procedure	ICD-10-PCS
0FYG	Transplantation / Pancreas	Procedure	ICD-10-PCS
0FYG0Z0	Transplantation of Pancreas, Allogeneic, Open Approach	Procedure	ICD-10-PCS
0FYG0Z1	Transplantation of Pancreas, Syngeneic, Open Approach	Procedure	ICD-10-PCS
0FYG0Z2	Transplantation of Pancreas, Zooplastic, Open Approach	Procedure	ICD-10-PCS
0HHT01Z	Insertion of Radioactive Element into Right Breast, Open Approach	Procedure	ICD-10-PCS
0HHT31Z	Insertion of Radioactive Element into Right Breast, Percutaneous Approach	Procedure	ICD-10-PCS
0HHT71Z	Insertion of Radioactive Element into Right Breast, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
	Insertion of Radioactive Element into Right Breast, Via Natural or Artificial Opening		
0HHT81Z	Endoscopic	Procedure	ICD-10-PCS
0HHTX1Z	Insertion of Radioactive Element into Right Breast, External Approach	Procedure	ICD-10-PCS
0HHU01Z	Insertion of Radioactive Element into Left Breast, Open Approach	Procedure	ICD-10-PCS
0HHU31Z	Insertion of Radioactive Element into Left Breast, Percutaneous Approach	Procedure	ICD-10-PCS
0HHU71Z	Insertion of Radioactive Element into Left Breast, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
	Insertion of Radioactive Element into Left Breast, Via Natural or Artificial Opening		
0HHU81Z	Endoscopic	Procedure	ICD-10-PCS
0HHUX1Z	Insertion of Radioactive Element into Left Breast, External Approach	Procedure	ICD-10-PCS
0HHV01Z	Insertion of Radioactive Element into Bilateral Breast, Open Approach	Procedure	ICD-10-PCS
0HHV31Z	Insertion of Radioactive Element into Bilateral Breast, Percutaneous Approach	Procedure	ICD-10-PCS
	Insertion of Radioactive Element into Bilateral Breast, Via Natural or Artificial		
0HHV71Z	Opening	Procedure	ICD-10-PCS
	Insertion of Radioactive Element into Bilateral Breast, Via Natural or Artificial		
0HHV81Z	Opening Endoscopic	Procedure	ICD-10-PCS
0HHVX1Z	Insertion of Radioactive Element into Bilateral Breast, External Approach	Procedure	ICD-10-PCS
0HHW01Z	Insertion of Radioactive Element into Right Nipple, Open Approach	Procedure	ICD-10-PCS
0HHW31Z	Insertion of Radioactive Element into Right Nipple, Percutaneous Approach	Procedure	ICD-10-PCS
0HHW71Z	Insertion of Radioactive Element into Right Nipple, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
	Insertion of Radioactive Element into Right Nipple, Via Natural or Artificial Opening		
0HHW81Z	Endoscopic	Procedure	ICD-10-PCS
0HHWX1Z	Insertion of Radioactive Element into Right Nipple, External Approach	Procedure	ICD-10-PCS
0HHX01Z	Insertion of Radioactive Element into Left Nipple, Open Approach	Procedure	ICD-10-PCS
0HHX31Z	Insertion of Radioactive Element into Left Nipple, Percutaneous Approach	Procedure	ICD-10-PCS
0HHX71Z	Insertion of Radioactive Element into Left Nipple, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
	Insertion of Radioactive Element into Left Nipple, Via Natural or Artificial Opening		
0HHX81Z	Endoscopic	Procedure	ICD-10-PCS
0HHXX1Z	Insertion of Radioactive Element into Left Nipple, External Approach	Procedure	ICD-10-PCS
	Insertion of Radioactive Element into Head and Neck Subcutaneous Tissue and		
0JHS01Z	Fascia, Open Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
0JHS31Z	Insertion of Radioactive Element into Head and Neck Subcutaneous Tissue and Fascia, Percutaneous Approach	Procedure	ICD-10-PCS
0JHT01Z	Insertion of Radioactive Element into Trunk Subcutaneous Tissue and Fascia, Open Approach	Procedure	ICD-10-PCS
0JHT31Z	Insertion of Radioactive Element into Trunk Subcutaneous Tissue and Fascia, Percutaneous Approach	Procedure	ICD-10-PCS
0JHV01Z	Insertion of Radioactive Element into Upper Extremity Subcutaneous Tissue and Fascia, Open Approach	Procedure	ICD-10-PCS
0JHV31Z	Insertion of Radioactive Element into Upper Extremity Subcutaneous Tissue and Fascia, Percutaneous Approach	Procedure	ICD-10-PCS
0JHW01Z	Insertion of Radioactive Element into Lower Extremity Subcutaneous Tissue and Fascia, Open Approach	Procedure	ICD-10-PCS
0JHW31Z	Insertion of Radioactive Element into Lower Extremity Subcutaneous Tissue and Fascia, Percutaneous Approach	Procedure	ICD-10-PCS
0TY	Urinary System, Transplantation	Procedure	ICD-10-PCS
0TY0	Transplantation / Kidney, Right	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, Zooplasmic, Open Approach	Procedure	ICD-10-PCS
0TY1	Transplantation / Kidney, Left	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, Zooplasmic, Open Approach	Procedure	ICD-10-PCS
0UHC01Z	Insertion of Radioactive Element into Cervix, Open Approach	Procedure	ICD-10-PCS
0UHC31Z	Insertion of Radioactive Element into Cervix, Percutaneous Approach	Procedure	ICD-10-PCS
0UHC41Z	Insertion of Radioactive Element into Cervix, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0UHC71Z	Insertion of Radioactive Element into Cervix, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0UHC81Z	Insertion of Radioactive Element into Cervix, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0UHG01Z	Insertion of Radioactive Element into Vagina, Open Approach	Procedure	ICD-10-PCS
0UHG31Z	Insertion of Radioactive Element into Vagina, Percutaneous Approach	Procedure	ICD-10-PCS
0UHG41Z	Insertion of Radioactive Element into Vagina, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0UHG71Z	Insertion of Radioactive Element into Vagina, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0UHG81Z	Insertion of Radioactive Element into Vagina, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0UHGX1Z	Insertion of Radioactive Element into Vagina, External Approach	Procedure	ICD-10-PCS
0VH001Z	Insertion of Radioactive Element into Prostate, Open Approach	Procedure	ICD-10-PCS
0VH031Z	Insertion of Radioactive Element into Prostate, Percutaneous Approach	Procedure	ICD-10-PCS
0VH041Z	Insertion of Radioactive Element into Prostate, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0VH071Z	Insertion of Radioactive Element into Prostate, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0VH081Z	Insertion of Radioactive Element into Prostate, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0WH001Z	Insertion of Radioactive Element into Head, Open Approach	Procedure	ICD-10-PCS
0WH031Z	Insertion of Radioactive Element into Head, Percutaneous Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
0WH041Z	Insertion of Radioactive Element into Head, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WH101Z	Insertion of Radioactive Element into Cranial Cavity, Open Approach	Procedure	ICD-10-PCS
0WH131Z	Insertion of Radioactive Element into Cranial Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
0WH141Z	Insertion of Radioactive Element into Cranial Cavity, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WH201Z	Insertion of Radioactive Element into Face, Open Approach	Procedure	ICD-10-PCS
0WH231Z	Insertion of Radioactive Element into Face, Percutaneous Approach	Procedure	ICD-10-PCS
0WH241Z	Insertion of Radioactive Element into Face, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WH301Z	Insertion of Radioactive Element into Oral Cavity and Throat, Open Approach	Procedure	ICD-10-PCS
0WH331Z	Insertion of Radioactive Element into Oral Cavity and Throat, Percutaneous Approach	Procedure	ICD-10-PCS
0WH341Z	Insertion of Radioactive Element into Oral Cavity and Throat, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WH401Z	Insertion of Radioactive Element into Upper Jaw, Open Approach	Procedure	ICD-10-PCS
0WH431Z	Insertion of Radioactive Element into Upper Jaw, Percutaneous Approach	Procedure	ICD-10-PCS
0WH441Z	Insertion of Radioactive Element into Upper Jaw, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WH501Z	Insertion of Radioactive Element into Lower Jaw, Open Approach	Procedure	ICD-10-PCS
0WH531Z	Insertion of Radioactive Element into Lower Jaw, Percutaneous Approach	Procedure	ICD-10-PCS
0WH541Z	Insertion of Radioactive Element into Lower Jaw, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WH601Z	Insertion of Radioactive Element into Neck, Open Approach	Procedure	ICD-10-PCS
0WH631Z	Insertion of Radioactive Element into Neck, Percutaneous Approach	Procedure	ICD-10-PCS
0WH641Z	Insertion of Radioactive Element into Neck, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WH801Z	Insertion of Radioactive Element into Chest Wall, Open Approach	Procedure	ICD-10-PCS
0WH831Z	Insertion of Radioactive Element into Chest Wall, Percutaneous Approach	Procedure	ICD-10-PCS
0WH841Z	Insertion of Radioactive Element into Chest Wall, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WH901Z	Insertion of Radioactive Element into Right Pleural Cavity, Open Approach	Procedure	ICD-10-PCS
0WH931Z	Insertion of Radioactive Element into Right Pleural Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
0WH941Z	Insertion of Radioactive Element into Right Pleural Cavity, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WHB01Z	Insertion of Radioactive Element into Left Pleural Cavity, Open Approach	Procedure	ICD-10-PCS
0WHB31Z	Insertion of Radioactive Element into Left Pleural Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
0WHB41Z	Insertion of Radioactive Element into Left Pleural Cavity, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WHC01Z	Insertion of Radioactive Element into Mediastinum, Open Approach	Procedure	ICD-10-PCS
0WHC31Z	Insertion of Radioactive Element into Mediastinum, Percutaneous Approach	Procedure	ICD-10-PCS
0WHC41Z	Insertion of Radioactive Element into Mediastinum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WHD01Z	Insertion of Radioactive Element into Pericardial Cavity, Open Approach	Procedure	ICD-10-PCS
0WHD31Z	Insertion of Radioactive Element into Pericardial Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
0WHD41Z	Insertion of Radioactive Element into Pericardial Cavity, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
0WHF01Z	Insertion of Radioactive Element into Abdominal Wall, Open Approach	Procedure	ICD-10-PCS
0WHF31Z	Insertion of Radioactive Element into Abdominal Wall, Percutaneous Approach	Procedure	ICD-10-PCS
0WHF41Z	Insertion of Radioactive Element into Abdominal Wall, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WHG01Z	Insertion of Radioactive Element into Peritoneal Cavity, Open Approach	Procedure	ICD-10-PCS
0WHG31Z	Insertion of Radioactive Element into Peritoneal Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
0WHG41Z	Insertion of Radioactive Element into Peritoneal Cavity, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WHH01Z	Insertion of Radioactive Element into Retroperitoneum, Open Approach	Procedure	ICD-10-PCS
0WHH31Z	Insertion of Radioactive Element into Retroperitoneum, Percutaneous Approach	Procedure	ICD-10-PCS
0WHH41Z	Insertion of Radioactive Element into Retroperitoneum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WHJ01Z	Insertion of Radioactive Element into Pelvic Cavity, Open Approach	Procedure	ICD-10-PCS
0WHJ31Z	Insertion of Radioactive Element into Pelvic Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
0WHJ41Z	Insertion of Radioactive Element into Pelvic Cavity, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WHK01Z	Insertion of Radioactive Element into Upper Back, Open Approach	Procedure	ICD-10-PCS
0WHK31Z	Insertion of Radioactive Element into Upper Back, Percutaneous Approach	Procedure	ICD-10-PCS
0WHK41Z	Insertion of Radioactive Element into Upper Back, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WHL01Z	Insertion of Radioactive Element into Lower Back, Open Approach	Procedure	ICD-10-PCS
0WHL31Z	Insertion of Radioactive Element into Lower Back, Percutaneous Approach	Procedure	ICD-10-PCS
0WHL41Z	Insertion of Radioactive Element into Lower Back, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WHM01Z	Insertion of Radioactive Element into Male Perineum, Open Approach	Procedure	ICD-10-PCS
0WHM31Z	Insertion of Radioactive Element into Male Perineum, Percutaneous Approach	Procedure	ICD-10-PCS
0WHM41Z	Insertion of Radioactive Element into Male Perineum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WHN01Z	Insertion of Radioactive Element into Female Perineum, Open Approach	Procedure	ICD-10-PCS
0WHN31Z	Insertion of Radioactive Element into Female Perineum, Percutaneous Approach	Procedure	ICD-10-PCS
0WHN41Z	Insertion of Radioactive Element into Female Perineum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WHP01Z	Insertion of Radioactive Element into Gastrointestinal Tract, Open Approach	Procedure	ICD-10-PCS
0WHP31Z	Insertion of Radioactive Element into Gastrointestinal Tract, Percutaneous Approach	Procedure	ICD-10-PCS
0WHP41Z	Insertion of Radioactive Element into Gastrointestinal Tract, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WHP71Z	Insertion of Radioactive Element into Gastrointestinal Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0WHP81Z	Insertion of Radioactive Element into Gastrointestinal Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0WHQ01Z	Insertion of Radioactive Element into Respiratory Tract, Open Approach	Procedure	ICD-10-PCS
0WHQ31Z	Insertion of Radioactive Element into Respiratory Tract, Percutaneous Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
0WHQ41Z	Insertion of Radioactive Element into Respiratory Tract, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0WHQ71Z	Insertion of Radioactive Element into Respiratory Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0WHQ81Z	Insertion of Radioactive Element into Respiratory Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
OWHR01Z	Insertion of Radioactive Element into Genitourinary Tract, Open Approach	Procedure	ICD-10-PCS
OWHR31Z	Insertion of Radioactive Element into Genitourinary Tract, Percutaneous Approach	Procedure	ICD-10-PCS
OWHR41Z	Insertion of Radioactive Element into Genitourinary Tract, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OWHR71Z	Insertion of Radioactive Element into Genitourinary Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
OWHR81Z	Insertion of Radioactive Element into Genitourinary Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0XH201Z	Insertion of Radioactive Element into Right Shoulder Region, Open Approach	Procedure	ICD-10-PCS
0XH231Z	Insertion of Radioactive Element into Right Shoulder Region, Percutaneous Approach	Procedure	ICD-10-PCS
0XH241Z	Insertion of Radioactive Element into Right Shoulder Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XH301Z	Insertion of Radioactive Element into Left Shoulder Region, Open Approach	Procedure	ICD-10-PCS
0XH331Z	Insertion of Radioactive Element into Left Shoulder Region, Percutaneous Approach	Procedure	ICD-10-PCS
0XH341Z	Insertion of Radioactive Element into Left Shoulder Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XH401Z	Insertion of Radioactive Element into Right Axilla, Open Approach	Procedure	ICD-10-PCS
0XH431Z	Insertion of Radioactive Element into Right Axilla, Percutaneous Approach	Procedure	ICD-10-PCS
0XH441Z	Insertion of Radioactive Element into Right Axilla, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XH501Z	Insertion of Radioactive Element into Left Axilla, Open Approach	Procedure	ICD-10-PCS
0XH531Z	Insertion of Radioactive Element into Left Axilla, Percutaneous Approach	Procedure	ICD-10-PCS
0XH541Z	Insertion of Radioactive Element into Left Axilla, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XH601Z	Insertion of Radioactive Element into Right Upper Extremity, Open Approach	Procedure	ICD-10-PCS
0XH631Z	Insertion of Radioactive Element into Right Upper Extremity, Percutaneous Approach	Procedure	ICD-10-PCS
0XH641Z	Insertion of Radioactive Element into Right Upper Extremity, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XH701Z	Insertion of Radioactive Element into Left Upper Extremity, Open Approach	Procedure	ICD-10-PCS
0XH731Z	Insertion of Radioactive Element into Left Upper Extremity, Percutaneous Approach	Procedure	ICD-10-PCS
0XH741Z	Insertion of Radioactive Element into Left Upper Extremity, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XH801Z	Insertion of Radioactive Element into Right Upper Arm, Open Approach	Procedure	ICD-10-PCS
0XH831Z	Insertion of Radioactive Element into Right Upper Arm, Percutaneous Approach	Procedure	ICD-10-PCS
0XH841Z	Insertion of Radioactive Element into Right Upper Arm, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
0XH901Z	Insertion of Radioactive Element into Left Upper Arm, Open Approach	Procedure	ICD-10-PCS
0XH931Z	Insertion of Radioactive Element into Left Upper Arm, Percutaneous Approach	Procedure	ICD-10-PCS
0XH941Z	Insertion of Radioactive Element into Left Upper Arm, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XHB01Z	Insertion of Radioactive Element into Right Elbow Region, Open Approach	Procedure	ICD-10-PCS
0XHB31Z	Insertion of Radioactive Element into Right Elbow Region, Percutaneous Approach	Procedure	ICD-10-PCS
0XHB41Z	Insertion of Radioactive Element into Right Elbow Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XHC01Z	Insertion of Radioactive Element into Left Elbow Region, Open Approach	Procedure	ICD-10-PCS
0XHC31Z	Insertion of Radioactive Element into Left Elbow Region, Percutaneous Approach	Procedure	ICD-10-PCS
0XHC41Z	Insertion of Radioactive Element into Left Elbow Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XHD01Z	Insertion of Radioactive Element into Right Lower Arm, Open Approach	Procedure	ICD-10-PCS
0XHD31Z	Insertion of Radioactive Element into Right Lower Arm, Percutaneous Approach	Procedure	ICD-10-PCS
0XHD41Z	Insertion of Radioactive Element into Right Lower Arm, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XHF01Z	Insertion of Radioactive Element into Left Lower Arm, Open Approach	Procedure	ICD-10-PCS
0XHF31Z	Insertion of Radioactive Element into Left Lower Arm, Percutaneous Approach	Procedure	ICD-10-PCS
0XHF41Z	Insertion of Radioactive Element into Left Lower Arm, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XHG01Z	Insertion of Radioactive Element into Right Wrist Region, Open Approach	Procedure	ICD-10-PCS
0XHG31Z	Insertion of Radioactive Element into Right Wrist Region, Percutaneous Approach	Procedure	ICD-10-PCS
0XHG41Z	Insertion of Radioactive Element into Right Wrist Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XHH01Z	Insertion of Radioactive Element into Left Wrist Region, Open Approach	Procedure	ICD-10-PCS
0XHH31Z	Insertion of Radioactive Element into Left Wrist Region, Percutaneous Approach	Procedure	ICD-10-PCS
0XHH41Z	Insertion of Radioactive Element into Left Wrist Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XHJ01Z	Insertion of Radioactive Element into Right Hand, Open Approach	Procedure	ICD-10-PCS
0XHJ31Z	Insertion of Radioactive Element into Right Hand, Percutaneous Approach	Procedure	ICD-10-PCS
0XHJ41Z	Insertion of Radioactive Element into Right Hand, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0XHK01Z	Insertion of Radioactive Element into Left Hand, Open Approach	Procedure	ICD-10-PCS
0XHK31Z	Insertion of Radioactive Element into Left Hand, Percutaneous Approach	Procedure	ICD-10-PCS
0XHK41Z	Insertion of Radioactive Element into Left Hand, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0YH001Z	Insertion of Radioactive Element into Right Buttock, Open Approach	Procedure	ICD-10-PCS
0YH031Z	Insertion of Radioactive Element into Right Buttock, Percutaneous Approach	Procedure	ICD-10-PCS
0YH041Z	Insertion of Radioactive Element into Right Buttock, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0YH101Z	Insertion of Radioactive Element into Left Buttock, Open Approach	Procedure	ICD-10-PCS
0YH131Z	Insertion of Radioactive Element into Left Buttock, Percutaneous Approach	Procedure	ICD-10-PCS
0YH141Z	Insertion of Radioactive Element into Left Buttock, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
OYH501Z	Insertion of Radioactive Element into Right Inguinal Region, Open Approach	Procedure	ICD-10-PCS
OYH531Z	Insertion of Radioactive Element into Right Inguinal Region, Percutaneous Approach	Procedure	ICD-10-PCS
OYH541Z	Insertion of Radioactive Element into Right Inguinal Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OYH601Z	Insertion of Radioactive Element into Left Inguinal Region, Open Approach	Procedure	ICD-10-PCS
OYH631Z	Insertion of Radioactive Element into Left Inguinal Region, Percutaneous Approach	Procedure	ICD-10-PCS
OYH641Z	Insertion of Radioactive Element into Left Inguinal Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OYH701Z	Insertion of Radioactive Element into Right Femoral Region, Open Approach	Procedure	ICD-10-PCS
OYH731Z	Insertion of Radioactive Element into Right Femoral Region, Percutaneous Approach	Procedure	ICD-10-PCS
OYH741Z	Insertion of Radioactive Element into Right Femoral Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OYH801Z	Insertion of Radioactive Element into Left Femoral Region, Open Approach	Procedure	ICD-10-PCS
OYH831Z	Insertion of Radioactive Element into Left Femoral Region, Percutaneous Approach	Procedure	ICD-10-PCS
OYH841Z	Insertion of Radioactive Element into Left Femoral Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OYH901Z	Insertion of Radioactive Element into Right Lower Extremity, Open Approach	Procedure	ICD-10-PCS
OYH931Z	Insertion of Radioactive Element into Right Lower Extremity, Percutaneous Approach	Procedure	ICD-10-PCS
OYH941Z	Insertion of Radioactive Element into Right Lower Extremity, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OYHB01Z	Insertion of Radioactive Element into Left Lower Extremity, Open Approach	Procedure	ICD-10-PCS
OYHB31Z	Insertion of Radioactive Element into Left Lower Extremity, Percutaneous Approach	Procedure	ICD-10-PCS
OYHB41Z	Insertion of Radioactive Element into Left Lower Extremity, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OYHC01Z	Insertion of Radioactive Element into Right Upper Leg, Open Approach	Procedure	ICD-10-PCS
OYHC31Z	Insertion of Radioactive Element into Right Upper Leg, Percutaneous Approach	Procedure	ICD-10-PCS
OYHC41Z	Insertion of Radioactive Element into Right Upper Leg, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OYHD01Z	Insertion of Radioactive Element into Left Upper Leg, Open Approach	Procedure	ICD-10-PCS
OYHD31Z	Insertion of Radioactive Element into Left Upper Leg, Percutaneous Approach	Procedure	ICD-10-PCS
OYHD41Z	Insertion of Radioactive Element into Left Upper Leg, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OYHF01Z	Insertion of Radioactive Element into Right Knee Region, Open Approach	Procedure	ICD-10-PCS
OYHF31Z	Insertion of Radioactive Element into Right Knee Region, Percutaneous Approach	Procedure	ICD-10-PCS
OYHF41Z	Insertion of Radioactive Element into Right Knee Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OYHG01Z	Insertion of Radioactive Element into Left Knee Region, Open Approach	Procedure	ICD-10-PCS
OYHG31Z	Insertion of Radioactive Element into Left Knee Region, Percutaneous Approach	Procedure	ICD-10-PCS
OYHG41Z	Insertion of Radioactive Element into Left Knee Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
OYHH01Z	Insertion of Radioactive Element into Right Lower Leg, Open Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
0YHH31Z	Insertion of Radioactive Element into Right Lower Leg, Percutaneous Approach	Procedure	ICD-10-PCS
0YHH41Z	Insertion of Radioactive Element into Right Lower Leg, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0YHJ01Z	Insertion of Radioactive Element into Left Lower Leg, Open Approach	Procedure	ICD-10-PCS
0YHJ31Z	Insertion of Radioactive Element into Left Lower Leg, Percutaneous Approach	Procedure	ICD-10-PCS
0YHJ41Z	Insertion of Radioactive Element into Left Lower Leg, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0YHK01Z	Insertion of Radioactive Element into Right Ankle Region, Open Approach	Procedure	ICD-10-PCS
0YHK31Z	Insertion of Radioactive Element into Right Ankle Region, Percutaneous Approach	Procedure	ICD-10-PCS
0YHK41Z	Insertion of Radioactive Element into Right Ankle Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0YHL01Z	Insertion of Radioactive Element into Left Ankle Region, Open Approach	Procedure	ICD-10-PCS
0YHL31Z	Insertion of Radioactive Element into Left Ankle Region, Percutaneous Approach	Procedure	ICD-10-PCS
0YHL41Z	Insertion of Radioactive Element into Left Ankle Region, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0YHM01Z	Insertion of Radioactive Element into Right Foot, Open Approach	Procedure	ICD-10-PCS
0YHM31Z	Insertion of Radioactive Element into Right Foot, Percutaneous Approach	Procedure	ICD-10-PCS
0YHM41Z	Insertion of Radioactive Element into Right Foot, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0YHN01Z	Insertion of Radioactive Element into Left Foot, Open Approach	Procedure	ICD-10-PCS
0YHN31Z	Insertion of Radioactive Element into Left Foot, Percutaneous Approach	Procedure	ICD-10-PCS
0YHN41Z	Insertion of Radioactive Element into Left Foot, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
19294	Preparation of tumor cavity, with placement of a radiation therapy applicator for intraoperative radiation therapy (IORT) concurrent with partial mastectomy (List separately in addition to code for primary procedure)	Procedure	CPT-4
19296	Placement of radiotherapy afterloading expandable catheter (single or multichannel) into the breast for interstitial radioelement application following partial mastectomy, includes imaging guidance; on date separate from partial mastectomy	Procedure	CPT-4
19297	Placement of radiotherapy afterloading expandable catheter (single or multichannel) into the breast for interstitial radioelement application following partial mastectomy, includes imaging guidance; concurrent with partial mastectomy (List separately in addition to code for primary procedure)	Procedure	CPT-4
19298	Placement of radiotherapy after loading brachytherapy catheters (multiple tube and button type) into the breast for interstitial radioelement application following (at the time of or subsequent to) partial mastectomy, includes imaging guidance	Procedure	CPT-4
20555	Placement of needles or catheters into muscle and/or soft tissue for subsequent interstitial radioelement application (at the time of or subsequent to the procedure)	Procedure	CPT-4
30230AZ	Transfusion of Embryonic Stem Cells into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
30230G1	Transfusion of Nonautologous 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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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
30230X1	Transfusion of Nonautologous 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
30230Y1	Transfusion of Nonautologous 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
30233G1	Transfusion of Nonautologous 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
30233X1	Transfusion of Nonautologous 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
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
30233Y1	Transfusion of Nonautologous 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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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
30240G1	Transfusion of Nonautologous Bone Marrow into Central Vein, Open Approach	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
30240X1	Transfusion of Nonautologous 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
30240Y1	Transfusion of Nonautologous 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
30243G1	Transfusion of Nonautologous 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
30243G4	Transfusion of Allogeneic Unspecified Bone Marrow into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
30243X1	Transfusion of Nonautologous 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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
30243Y1	Transfusion of Nonautologous 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
30250G1	Transfusion of Nonautologous Bone Marrow 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
30250Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
30253G1	Transfusion of Nonautologous Bone Marrow 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
30253Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
30260G1	Transfusion of Nonautologous Bone Marrow 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
30260Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Central Artery, Open Approach	Procedure	ICD-10-PCS
30263G1	Transfusion of Nonautologous Bone Marrow 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
30263Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
31643	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with placement of catheter(s) for intracavitary radioelement application	Procedure	CPT-4
32701	Thoracic target(s) delineation for stereotactic body radiation therapy (SRS/SBRT), (photon or particle beam), entire course of treatment	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
33935	Heart-lung transplant with recipient cardiectomy-pneumonectomy	Procedure	CPT-4
33945	Heart transplant, with or without recipient cardiectomy	Procedure	CPT-4
3490F	History of AIDS-defining condition (HIV)	Procedure	CPT-2
38240	Hematopoietic progenitor cell (HPC); allogeneic transplantation per donor	Procedure	CPT-4

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
38242	Allogeneic lymphocyte infusions	Procedure	CPT-4
38243	Hematopoietic progenitor cell (HPC); HPC boost	Procedure	CPT-4
3E00X05	Introduction of Other Antineoplastic into Skin and Mucous Membranes, External Approach	Procedure	ICD-10-PCS
3E00X0M	Introduction of Antineoplastic, Monoclonal Antibody, into Skin and Mucous Membranes, External Approach	Procedure	ICD-10-PCS
3E01305	Introduction of Other Antineoplastic into Subcutaneous Tissue, Percutaneous Approach	Procedure	ICD-10-PCS
3E0130M	Introduction of Antineoplastic, Monoclonal Antibody, into Subcutaneous Tissue, Percutaneous Approach	Procedure	ICD-10-PCS
3E02305	Introduction of Other Antineoplastic into Muscle, Percutaneous Approach	Procedure	ICD-10-PCS
3E0230M	Introduction of Antineoplastic, Monoclonal Antibody, into Muscle, Percutaneous Approach	Procedure	ICD-10-PCS
3E03002	Introduction of High-dose Interleukin-2 into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
3E03003	Introduction of Low-dose Interleukin-2 into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
3E03005	Introduction of Other Antineoplastic into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
3E0300M	Introduction of Antineoplastic, Monoclonal Antibody, into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
3E0300P	Introduction of Clofarabine into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
3E030WL	Introduction of Immunosuppressive into Peripheral Vein, Open Approach	Procedure	ICD-10-PCS
3E03302	Introduction of High-dose Interleukin-2 into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E03303	Introduction of Low-dose Interleukin-2 into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E03305	Introduction of Other Antineoplastic into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E0330M	Introduction of Antineoplastic, Monoclonal Antibody, into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E0330P	Introduction of Clofarabine into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E033WL	Introduction of Immunosuppressive into Peripheral Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E04002	Introduction of High-dose Interleukin-2 into Central Vein, Open Approach	Procedure	ICD-10-PCS
3E04003	Introduction of Low-dose Interleukin-2 into Central Vein, Open Approach	Procedure	ICD-10-PCS
3E04005	Introduction of Other Antineoplastic into Central Vein, Open Approach	Procedure	ICD-10-PCS
3E0400M	Introduction of Antineoplastic, Monoclonal Antibody, into Central Vein, Open Approach	Procedure	ICD-10-PCS
3E0400P	Introduction of Clofarabine into Central Vein, Open Approach	Procedure	ICD-10-PCS
3E040WL	Introduction of Immunosuppressive into Central Vein, Open Approach	Procedure	ICD-10-PCS
3E04302	Introduction of High-dose Interleukin-2 into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E04303	Introduction of Low-dose Interleukin-2 into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E04305	Introduction of Other Antineoplastic into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E0430M	Introduction of Antineoplastic, Monoclonal Antibody, into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E0430P	Introduction of Clofarabine into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E043WL	Introduction of Immunosuppressive into Central Vein, Percutaneous Approach	Procedure	ICD-10-PCS
3E05002	Introduction of High-dose Interleukin-2 into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
3E05003	Introduction of Low-dose Interleukin-2 into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
3E05005	Introduction of Other Antineoplastic into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
3E0500M	Introduction of Antineoplastic, Monoclonal Antibody, into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
3E0500P	Introduction of Clofarabine into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
3E050WL	Introduction of Immunosuppressive into Peripheral Artery, Open Approach	Procedure	ICD-10-PCS
3E05302	Introduction of High-dose Interleukin-2 into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E05303	Introduction of Low-dose Interleukin-2 into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E05305	Introduction of Other Antineoplastic into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E0530M	Introduction of Antineoplastic, Monoclonal Antibody, into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E0530P	Introduction of Clofarabine into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E053WL	Introduction of Immunosuppressive into Peripheral Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E06002	Introduction of High-dose Interleukin-2 into Central Artery, Open Approach	Procedure	ICD-10-PCS
3E06003	Introduction of Low-dose Interleukin-2 into Central Artery, Open Approach	Procedure	ICD-10-PCS
3E06005	Introduction of Other Antineoplastic into Central Artery, Open Approach	Procedure	ICD-10-PCS
3E0600M	Introduction of Antineoplastic, Monoclonal Antibody, into Central Artery, Open Approach	Procedure	ICD-10-PCS
3E0600P	Introduction of Clofarabine into Central Artery, Open Approach	Procedure	ICD-10-PCS
3E060WL	Introduction of Immunosuppressive into Central Artery, Open Approach	Procedure	ICD-10-PCS
3E06302	Introduction of High-dose Interleukin-2 into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E06303	Introduction of Low-dose Interleukin-2 into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E06305	Introduction of Other Antineoplastic into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E0630M	Introduction of Antineoplastic, Monoclonal Antibody, into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E0630P	Introduction of Clofarabine into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E063WL	Introduction of Immunosuppressive into Central Artery, Percutaneous Approach	Procedure	ICD-10-PCS
3E09305	Introduction of Other Antineoplastic into Nose, Percutaneous Approach	Procedure	ICD-10-PCS
3E0930M	Introduction of Antineoplastic, Monoclonal Antibody, into Nose, Percutaneous Approach	Procedure	ICD-10-PCS
3E09705	Introduction of Other Antineoplastic into Nose, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0970M	Introduction of Antineoplastic, Monoclonal Antibody, into Nose, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E09X05	Introduction of Other Antineoplastic into Nose, External Approach	Procedure	ICD-10-PCS
3E09X0M	Introduction of Antineoplastic, Monoclonal Antibody, into Nose, External Approach	Procedure	ICD-10-PCS
3E0A305	Introduction of Other Antineoplastic into Bone Marrow, Percutaneous Approach	Procedure	ICD-10-PCS
3E0A30M	Introduction of Antineoplastic, Monoclonal Antibody, into Bone Marrow, Percutaneous Approach	Procedure	ICD-10-PCS
3E0B304	Introduction of Liquid Brachytherapy Radioisotope into Ear, Percutaneous Approach	Procedure	ICD-10-PCS
3E0B305	Introduction of Other Antineoplastic into Ear, Percutaneous Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
3E0B30M	Introduction of Antineoplastic, Monoclonal Antibody, into Ear, Percutaneous Approach	Procedure	ICD-10-PCS
3E0B704	Introduction of Liquid Brachytherapy Radioisotope into Ear, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0B705	Introduction of Other Antineoplastic into Ear, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0B70M	Introduction of Antineoplastic, Monoclonal Antibody, into Ear, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0BX04	Introduction of Liquid Brachytherapy Radioisotope into Ear, External Approach	Procedure	ICD-10-PCS
3E0BX05	Introduction of Other Antineoplastic into Ear, External Approach	Procedure	ICD-10-PCS
3E0BX0M	Introduction of Antineoplastic, Monoclonal Antibody, into Ear, External Approach	Procedure	ICD-10-PCS
3E0C304	Introduction of Liquid Brachytherapy Radioisotope into Eye, Percutaneous Approach	Procedure	ICD-10-PCS
3E0C305	Introduction of Other Antineoplastic into Eye, Percutaneous Approach	Procedure	ICD-10-PCS
3E0C30M	Introduction of Antineoplastic, Monoclonal Antibody, into Eye, Percutaneous Approach	Procedure	ICD-10-PCS
3E0C704	Introduction of Liquid Brachytherapy Radioisotope into Eye, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0C705	Introduction of Other Antineoplastic into Eye, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0C70M	Introduction of Antineoplastic, Monoclonal Antibody, into Eye, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0CX04	Introduction of Liquid Brachytherapy Radioisotope into Eye, External Approach	Procedure	ICD-10-PCS
3E0CX05	Introduction of Other Antineoplastic into Eye, External Approach	Procedure	ICD-10-PCS
3E0CX0M	Introduction of Antineoplastic, Monoclonal Antibody, into Eye, External Approach	Procedure	ICD-10-PCS
3E0D304	Introduction of Liquid Brachytherapy Radioisotope into Mouth and Pharynx, Percutaneous Approach	Procedure	ICD-10-PCS
3E0D305	Introduction of Other Antineoplastic into Mouth and Pharynx, Percutaneous Approach	Procedure	ICD-10-PCS
3E0D30M	Introduction of Antineoplastic, Monoclonal Antibody, into Mouth and Pharynx, Percutaneous Approach	Procedure	ICD-10-PCS
3E0D704	Introduction of Liquid Brachytherapy Radioisotope into Mouth and Pharynx, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0D705	Introduction of Other Antineoplastic into Mouth and Pharynx, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0D70M	Introduction of Antineoplastic, Monoclonal Antibody, into Mouth and Pharynx, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0DX04	Introduction of Liquid Brachytherapy Radioisotope into Mouth and Pharynx, External Approach	Procedure	ICD-10-PCS
3E0DX05	Introduction of Other Antineoplastic into Mouth and Pharynx, External Approach	Procedure	ICD-10-PCS
3E0DX0M	Introduction of Antineoplastic, Monoclonal Antibody, into Mouth and Pharynx, External Approach	Procedure	ICD-10-PCS
3E0E304	Introduction of Liquid Brachytherapy Radioisotope into Products of Conception, Percutaneous Approach	Procedure	ICD-10-PCS
3E0E305	Introduction of Other Antineoplastic into Products of Conception, Percutaneous Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
3E0E30M	Introduction of Antineoplastic, Monoclonal Antibody, into Products of Conception, Percutaneous Approach	Procedure	ICD-10-PCS
3E0E704	Introduction of Liquid Brachytherapy Radioisotope into Products of Conception, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0E705	Introduction of Other Antineoplastic into Products of Conception, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0E70M	Introduction of Antineoplastic, Monoclonal Antibody, into Products of Conception, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0E804	Introduction of Liquid Brachytherapy Radioisotope into Products of Conception, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0E805	Introduction of Other Antineoplastic into Products of Conception, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0E80M	Introduction of Antineoplastic, Monoclonal Antibody, into Products of Conception, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0F304	Introduction of Liquid Brachytherapy Radioisotope into Respiratory Tract, Percutaneous Approach	Procedure	ICD-10-PCS
3E0F305	Introduction of Other Antineoplastic into Respiratory Tract, Percutaneous Approach	Procedure	ICD-10-PCS
3E0F30M	Introduction of Antineoplastic, Monoclonal Antibody, into Respiratory Tract, Percutaneous Approach	Procedure	ICD-10-PCS
3E0F704	Introduction of Liquid Brachytherapy Radioisotope into Respiratory Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0F705	Introduction of Other Antineoplastic into Respiratory Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0F70M	Introduction of Antineoplastic, Monoclonal Antibody, into Respiratory Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0F804	Introduction of Liquid Brachytherapy Radioisotope into Respiratory Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0F805	Introduction of Other Antineoplastic into Respiratory Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0F80M	Introduction of Antineoplastic, Monoclonal Antibody, into Respiratory Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0G304	Introduction of Liquid Brachytherapy Radioisotope into Upper GI, Percutaneous Approach	Procedure	ICD-10-PCS
3E0G305	Introduction of Other Antineoplastic into Upper GI, Percutaneous Approach	Procedure	ICD-10-PCS
3E0G30M	Introduction of Antineoplastic, Monoclonal Antibody, into Upper GI, Percutaneous Approach	Procedure	ICD-10-PCS
3E0G704	Introduction of Liquid Brachytherapy Radioisotope into Upper GI, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0G705	Introduction of Other Antineoplastic into Upper GI, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0G70M	Introduction of Antineoplastic, Monoclonal Antibody, into Upper GI, Via Natural or Artificial Opening	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
3EOG804	Introduction of Liquid Brachytherapy Radioisotope into Upper GI, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3EOG805	Introduction of Other Antineoplastic into Upper GI, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3EOG80M	Introduction of Antineoplastic, Monoclonal Antibody, into Upper GI, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3EOH304	Introduction of Liquid Brachytherapy Radioisotope into Lower GI, Percutaneous Approach	Procedure	ICD-10-PCS
3EOH305	Introduction of Other Antineoplastic into Lower GI, Percutaneous Approach	Procedure	ICD-10-PCS
3EOH30M	Introduction of Antineoplastic, Monoclonal Antibody, into Lower GI, Percutaneous Approach	Procedure	ICD-10-PCS
3EOH704	Introduction of Liquid Brachytherapy Radioisotope into Lower GI, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3EOH705	Introduction of Other Antineoplastic into Lower GI, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3EOH70M	Introduction of Antineoplastic, Monoclonal Antibody, into Lower GI, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3EOH804	Introduction of Liquid Brachytherapy Radioisotope into Lower GI, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3EOH805	Introduction of Other Antineoplastic into Lower GI, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3EOH80M	Introduction of Antineoplastic, Monoclonal Antibody, into Lower GI, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3EOJ304	Introduction of Liquid Brachytherapy Radioisotope into Biliary and Pancreatic Tract, Percutaneous Approach	Procedure	ICD-10-PCS
3EOJ305	Introduction of Other Antineoplastic into Biliary and Pancreatic Tract, Percutaneous Approach	Procedure	ICD-10-PCS
3EOJ30M	Introduction of Antineoplastic, Monoclonal Antibody, into Biliary and Pancreatic Tract, Percutaneous Approach	Procedure	ICD-10-PCS
3EOJ704	Introduction of Liquid Brachytherapy Radioisotope into Biliary and Pancreatic Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3EOJ705	Introduction of Other Antineoplastic into Biliary and Pancreatic Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3EOJ70M	Introduction of Antineoplastic, Monoclonal Antibody, into Biliary and Pancreatic Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3EOJ804	Introduction of Liquid Brachytherapy Radioisotope into Biliary and Pancreatic Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3EOJ805	Introduction of Other Antineoplastic into Biliary and Pancreatic Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3EOJ80M	Introduction of Antineoplastic, Monoclonal Antibody, into Biliary and Pancreatic Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3EOK304	Introduction of Liquid Brachytherapy Radioisotope into Genitourinary Tract, Percutaneous Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
3E0K305	Introduction of Other Antineoplastic into Genitourinary Tract, Percutaneous Approach	Procedure	ICD-10-PCS
3E0K30M	Introduction of Antineoplastic, Monoclonal Antibody, into Genitourinary Tract, Percutaneous Approach	Procedure	ICD-10-PCS
3E0K704	Introduction of Liquid Brachytherapy Radioisotope into Genitourinary Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0K705	Introduction of Other Antineoplastic into Genitourinary Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0K70M	Introduction of Antineoplastic, Monoclonal Antibody, into Genitourinary Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0K804	Introduction of Liquid Brachytherapy Radioisotope into Genitourinary Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0K805	Introduction of Other Antineoplastic into Genitourinary Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0K80M	Introduction of Antineoplastic, Monoclonal Antibody, into Genitourinary Tract, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0L304	Introduction of Liquid Brachytherapy Radioisotope into Pleural Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
3E0L305	Introduction of Other Antineoplastic into Pleural Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
3E0L30M	Introduction of Antineoplastic, Monoclonal Antibody, into Pleural Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
3E0L704	Introduction of Liquid Brachytherapy Radioisotope into Pleural Cavity, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0L705	Introduction of Other Antineoplastic into Pleural Cavity, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0L70M	Introduction of Antineoplastic, Monoclonal Antibody, into Pleural Cavity, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0M304	Introduction of Liquid Brachytherapy Radioisotope into Peritoneal Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
3E0M305	Introduction of Other Antineoplastic into Peritoneal Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
3E0M30M	Introduction of Antineoplastic, Monoclonal Antibody, into Peritoneal Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
3E0M704	Introduction of Liquid Brachytherapy Radioisotope into Peritoneal Cavity, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0M705	Introduction of Other Antineoplastic into Peritoneal Cavity, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0M70M	Introduction of Antineoplastic, Monoclonal Antibody, into Peritoneal Cavity, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0N304	Introduction of Liquid Brachytherapy Radioisotope into Male Reproductive, Percutaneous Approach	Procedure	ICD-10-PCS
3E0N305	Introduction of Other Antineoplastic into Male Reproductive, Percutaneous Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
3E0N30M	Introduction of Antineoplastic, Monoclonal Antibody, into Male Reproductive, Percutaneous Approach	Procedure	ICD-10-PCS
3E0N704	Introduction of Liquid Brachytherapy Radioisotope into Male Reproductive, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0N705	Introduction of Other Antineoplastic into Male Reproductive, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0N70M	Introduction of Antineoplastic, Monoclonal Antibody, into Male Reproductive, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0N804	Introduction of Liquid Brachytherapy Radioisotope into Male Reproductive, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0N805	Introduction of Other Antineoplastic into Male Reproductive, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0N80M	Introduction of Antineoplastic, Monoclonal Antibody, into Male Reproductive, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0P304	Introduction of Liquid Brachytherapy Radioisotope into Female Reproductive, Percutaneous Approach	Procedure	ICD-10-PCS
3E0P305	Introduction of Other Antineoplastic into Female Reproductive, Percutaneous Approach	Procedure	ICD-10-PCS
3E0P30M	Introduction of Antineoplastic, Monoclonal Antibody, into Female Reproductive, Percutaneous Approach	Procedure	ICD-10-PCS
3E0P704	Introduction of Liquid Brachytherapy Radioisotope into Female Reproductive, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0P705	Introduction of Other Antineoplastic into Female Reproductive, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0P70M	Introduction of Antineoplastic, Monoclonal Antibody, into Female Reproductive, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0P804	Introduction of Liquid Brachytherapy Radioisotope into Female Reproductive, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0P805	Introduction of Other Antineoplastic into Female Reproductive, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0P80M	Introduction of Antineoplastic, Monoclonal Antibody, into Female Reproductive, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
3E0Q004	Introduction of Liquid Brachytherapy Radioisotope into Cranial Cavity and Brain, Open Approach	Procedure	ICD-10-PCS
3E0Q005	Introduction of Other Antineoplastic into Cranial Cavity and Brain, Open Approach	Procedure	ICD-10-PCS
3E0Q00M	Introduction of Antineoplastic, Monoclonal Antibody, into Cranial Cavity and Brain, Open Approach	Procedure	ICD-10-PCS
3E0Q304	Introduction of Liquid Brachytherapy Radioisotope into Cranial Cavity and Brain, Percutaneous Approach	Procedure	ICD-10-PCS
3E0Q305	Introduction of Other Antineoplastic into Cranial Cavity and Brain, Percutaneous Approach	Procedure	ICD-10-PCS
3E0Q30M	Introduction of Antineoplastic, Monoclonal Antibody, into Cranial Cavity and Brain, Percutaneous Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
3E0Q704	Introduction of Liquid Brachytherapy Radioisotope into Cranial Cavity and Brain, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0Q705	Introduction of Other Antineoplastic into Cranial Cavity and Brain, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0Q70M	Introduction of Antineoplastic, Monoclonal Antibody, into Cranial Cavity and Brain, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0R302	Introduction of High-dose Interleukin-2 into Spinal Canal, Percutaneous Approach	Procedure	ICD-10-PCS
3E0R303	Introduction of Low-dose Interleukin-2 into Spinal Canal, Percutaneous Approach	Procedure	ICD-10-PCS
3E0R304	Introduction of Liquid Brachytherapy Radioisotope into Spinal Canal, Percutaneous Approach	Procedure	ICD-10-PCS
3E0R305	Introduction of Other Antineoplastic into Spinal Canal, Percutaneous Approach	Procedure	ICD-10-PCS
3E0R30M	Introduction of Antineoplastic, Monoclonal Antibody, into Spinal Canal, Percutaneous Approach	Procedure	ICD-10-PCS
3E0S302	Introduction of High-dose Interleukin-2 into Epidural Space, Percutaneous Approach	Procedure	ICD-10-PCS
3E0S303	Introduction of Low-dose Interleukin-2 into Epidural Space, Percutaneous Approach	Procedure	ICD-10-PCS
3E0S304	Introduction of Liquid Brachytherapy Radioisotope into Epidural Space, Percutaneous Approach	Procedure	ICD-10-PCS
3E0S305	Introduction of Other Antineoplastic into Epidural Space, Percutaneous Approach	Procedure	ICD-10-PCS
3E0S30M	Introduction of Antineoplastic, Monoclonal Antibody, into Epidural Space, Percutaneous Approach	Procedure	ICD-10-PCS
3E0U304	Introduction of Liquid Brachytherapy Radioisotope into Joints, Percutaneous Approach	Procedure	ICD-10-PCS
3E0U305	Introduction of Other Antineoplastic into Joints, Percutaneous Approach	Procedure	ICD-10-PCS
3E0U30M	Introduction of Antineoplastic, Monoclonal Antibody, into Joints, Percutaneous Approach	Procedure	ICD-10-PCS
3E0V305	Introduction of Other Antineoplastic into Bones, Percutaneous Approach	Procedure	ICD-10-PCS
3E0V30M	Introduction of Antineoplastic, Monoclonal Antibody, into Bones, Percutaneous Approach	Procedure	ICD-10-PCS
3E0W305	Introduction of Other Antineoplastic into Lymphatics, Percutaneous Approach	Procedure	ICD-10-PCS
3E0W30M	Introduction of Antineoplastic, Monoclonal Antibody, into Lymphatics, Percutaneous Approach	Procedure	ICD-10-PCS
3E0Y304	Introduction of Liquid Brachytherapy Radioisotope into Pericardial Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
3E0Y305	Introduction of Other Antineoplastic into Pericardial Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
3E0Y30M	Introduction of Antineoplastic, Monoclonal Antibody, into Pericardial Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
3E0Y704	Introduction of Liquid Brachytherapy Radioisotope into Pericardial Cavity, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0Y705	Introduction of Other Antineoplastic into Pericardial Cavity, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E0Y70M	Introduction of Antineoplastic, Monoclonal Antibody, into Pericardial Cavity, Via Natural or Artificial Opening	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
3E1M39Z	Irrigation of Peritoneal Cavity using Dialysate, Percutaneous Approach Placement of needles, catheters, or other device(s) into the head and/or neck region (percutaneous, transoral, or transnasal) for subsequent interstitial	Procedure	ICD-10-PCS
41019	radioelement application	Procedure	CPT-4
4153F	Combination peginterferon and ribavirin therapy prescribed (HEP-C)	Procedure	CPT-2
44135	Intestinal allotransplantation; from cadaver donor	Procedure	CPT-4
44136	Intestinal allotransplantation; from living donor	Procedure	CPT-4
47135	Liver allotransplantation, orthotopic, partial or whole, from cadaver or living donor, any age Liver allotransplantation; heterotopic, partial or whole, from cadaver or living	Procedure	CPT-4
47136	donor, any age	Procedure	CPT-4
48554	Transplantation of pancreatic allograft Placement of interstitial device(s) for radiation therapy guidance (eg, fiducial markers, dosimeter), percutaneous, intra-abdominal, intra-pelvic (except prostate),	Procedure	CPT-4
49411	and/or retroperitoneum, single or multiple Placement of interstitial device(s) for radiation therapy guidance (eg, fiducial markers, dosimeter), open, intra-abdominal, intrapelvic, and/or retroperitoneum, including image guidance, if performed, single or multiple (List separately in	Procedure	CPT-4
49412	addition to code for primary 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
50366	Renal Homotransplantation, Implantation Of Graft	Procedure	CPT-4
50370	Removal of transplanted renal allograft Transperineal placement of needles or catheters into prostate for interstitial	Procedure	CPT-4
55859	radioelement application, with or without cystoscopy	Procedure	CPT-4
55860	Exposure of prostate, any approach, for insertion of radioactive substance; Exposure of prostate, any approach, for insertion of radioactive substance; with	Procedure	CPT-4
55862	lymph node biopsy(s) (limited pelvic lymphadenectomy) Exposure of prostate, any approach, for insertion of radioactive substance; with	Procedure	CPT-4
55865	bilateral pelvic lymphadenectomy, including external iliac, hypogastric and obturator nodes Transperineal placement of needles or catheters into prostate for interstitial	Procedure	CPT-4
55875	radioelement application, with or without cystoscopy Placement of needles or catheters into pelvic organs and/or genitalia (except	Procedure	CPT-4
55920	prostate) for subsequent interstitial radioelement application	Procedure	CPT-4
57155	Insertion of uterine tandem and/or vaginal ovoids for clinical brachytherapy	Procedure	CPT-4
57156	Insertion of a vaginal radiation afterloading apparatus for clinical brachytherapy	Procedure	CPT-4
58346	Insertion of Heyman capsules for clinical brachytherapy	Procedure	CPT-4
5A1D00Z	Performance of Urinary Filtration, Single	Procedure	ICD-10-PCS
5A1D70Z	Performance of Urinary Filtration, Intermittent, Less than 6 Hours Per Day	Procedure	ICD-10-PCS
5A1D80Z	Performance of Urinary Filtration, Prolonged Intermittent, 6-18 hours Per Day	Procedure	ICD-10-PCS
5A1D90Z	Performance of Urinary Filtration, Continuous, Greater than 18 hours Per Day Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of	Procedure	ICD-10-PCS
77371	treatment of cranial lesion(s) consisting of 1 session; multi-source Cobalt 60 based	Procedure	CPT-4

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
77372	Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cranial lesion(s) consisting of 1 session; linear accelerator based	Procedure	CPT-4
77373	Stereotactic body radiation therapy, treatment delivery, per fraction to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions	Procedure	CPT-4
77385	Intensity modulated radiation treatment delivery (IMRT), includes guidance and tracking, when performed; simple	Procedure	CPT-4
77386	Intensity modulated radiation treatment delivery (IMRT), includes guidance and tracking, when performed; complex	Procedure	CPT-4
77401	Radiation treatment delivery, superficial and/or ortho voltage, per day	Procedure	CPT-4
77402	Radiation treatment delivery, => 1 MeV; simple	Procedure	CPT-4
77403	Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 6-10 MeV	Procedure	CPT-4
77404	Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 11-19 MeV	Procedure	CPT-4
77406	Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 20 MeV or greater	Procedure	CPT-4
77407	Radiation treatment delivery, => 1 MeV; intermediate	Procedure	CPT-4
77408	Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks; 6-10 MeV	Procedure	CPT-4
77409	Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks; 11-19 MeV	Procedure	CPT-4
77411	Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks; 20 MeV or greater	Procedure	CPT-4
77412	Radiation treatment delivery, => 1 MeV; complex	Procedure	CPT-4
77413	Radiation treatment delivery, 3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 6-10 MeV	Procedure	CPT-4
77414	Radiation treatment delivery, 3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 11-19 MeV	Procedure	CPT-4
77416	Radiation treatment delivery, 3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 20 MeV or greater	Procedure	CPT-4
77422	High energy neutron radiation treatment delivery; single treatment area using a single port or parallel-opposed ports with no blocks or simple blocking	Procedure	CPT-4
77423	High energy neutron radiation treatment delivery, 1 or more isocenter(s) with coplanar or non-coplanar geometry with blocking and/or wedge, and/or compensator(s)	Procedure	CPT-4
77424	Intraoperative radiation treatment delivery, x-ray, single treatment session	Procedure	CPT-4
77425	Intraoperative radiation treatment delivery, electrons, single treatment session	Procedure	CPT-4
77427	Radiation treatment management, 5 treatments	Procedure	CPT-4
77431	Radiation therapy management with complete course of therapy consisting of 1 or 2 fractions only	Procedure	CPT-4
77432	Stereotactic radiation treatment management of cranial lesion(s) (complete course of treatment consisting of 1 session)	Procedure	CPT-4

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
	Stereotactic body radiation therapy, treatment management, per treatment course, to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions	Procedure	CPT-4
77435			
77469	Intraoperative radiation treatment management	Procedure	CPT-4
	Special treatment procedure (eg, total body irradiation, hemibody radiation, per oral or endocavitary irradiation)	Procedure	CPT-4
77470			
77499	Unlisted procedure, therapeutic radiology treatment management	Procedure	CPT-4
77520	Proton treatment delivery; simple, without compensation	Procedure	CPT-4
77522	Proton treatment delivery; simple, with compensation	Procedure	CPT-4
77523	Proton treatment delivery; intermediate	Procedure	CPT-4
77525	Proton treatment delivery; complex	Procedure	CPT-4
77750	Infusion or instillation of radioelement solution (includes 3-month follow-up care)	Procedure	CPT-4
77761	Intracavitary radiation source application; simple	Procedure	CPT-4
77762	Intracavitary radiation source application; intermediate	Procedure	CPT-4
77763	Intracavitary radiation source application; complex	Procedure	CPT-4
	Remote afterloading high dose rate radionuclide skin surface brachytherapy, includes basic dosimetry, when performed; lesion diameter up to 2.0 cm or 1 channel	Procedure	CPT-4
77767			
	Remote afterloading high dose rate radionuclide skin surface brachytherapy, includes basic dosimetry, when performed; lesion diameter over 2.0 cm and 2 or more channels, or multiple lesions	Procedure	CPT-4
77768			
	Remote afterloading high dose rate radionuclide interstitial or intracavitary brachytherapy, includes basic dosimetry, when performed; 1 channel	Procedure	CPT-4
77770			
	Remote afterloading high dose rate radionuclide interstitial or intracavitary brachytherapy, includes basic dosimetry, when performed; 2-12 channels	Procedure	CPT-4
77771			
	Remote afterloading high dose rate radionuclide interstitial or intracavitary brachytherapy, includes basic dosimetry, when performed; over 12 channels	Procedure	CPT-4
77772			
77776	Interstitial radiation source application; simple	Procedure	CPT-4
77777	Interstitial radiation source application; intermediate	Procedure	CPT-4
	Interstitial radiation source application, complex, includes supervision, handling, loading of radiation source, when performed	Procedure	CPT-4
77778			
77781	Remote afterloading high intensity brachytherapy; 1-4 source positions or catheters	Procedure	CPT-4
77782	Remote afterloading high intensity brachytherapy; 5-8 source positions or catheters	Procedure	CPT-4
	Remote afterloading high intensity brachytherapy; 9-12 source positions or catheters	Procedure	CPT-4
77783			
	Remote afterloading high intensity brachytherapy; over 12 source positions or catheters	Procedure	CPT-4
77784			
77785	Remote afterloading high dose rate radionuclide brachytherapy; 1 channel	Procedure	CPT-4
77786	Remote afterloading high dose rate radionuclide brachytherapy; 2-12 channels	Procedure	CPT-4
77787	Remote afterloading high dose rate radionuclide brachytherapy; over 12 channels	Procedure	CPT-4
77789	Surface application of low dose rate radionuclide source	Procedure	CPT-4
77799	Unlisted procedure, clinical brachytherapy	Procedure	CPT-4

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
90378	Respiratory syncytial virus, monoclonal antibody, recombinant, for intramuscular use, 50 mg, each	Procedure	CPT-4
96401	Chemotherapy administration, subcutaneous or intramuscular; non-hormonal anti-neoplastic	Procedure	CPT-4
96402	Chemotherapy administration, subcutaneous or intramuscular; hormonal anti-neoplastic	Procedure	CPT-4
96409	Chemotherapy administration; intravenous, push technique, single or initial substance/drug	Procedure	CPT-4
96411	Chemotherapy administration; intravenous, push technique, each additional substance/drug (List separately in addition to code for primary procedure)	Procedure	CPT-4
96413	Chemotherapy administration, intravenous infusion technique; up to 1 hour, single or initial substance/drug	Procedure	CPT-4
96415	Chemotherapy administration, intravenous infusion technique; each additional hour (List separately in addition to code for primary procedure)	Procedure	CPT-4
96416	Chemotherapy administration, intravenous infusion technique; initiation of prolonged chemotherapy infusion (more than 8 hours), requiring use of a portable or implantable pump	Procedure	CPT-4
96417	Chemotherapy administration, intravenous infusion technique; each additional sequential infusion (different substance/drug), up to 1 hour (List separately in addition to code for primary procedure)	Procedure	CPT-4
96420	Chemotherapy administration, intra-arterial; push technique	Procedure	CPT-4
96422	Chemotherapy administration, intra-arterial; infusion technique, up to 1 hour	Procedure	CPT-4
96423	Chemotherapy administration, intra-arterial; infusion technique, each additional hour (List separately in addition to code for primary procedure)	Procedure	CPT-4
96425	Chemotherapy administration, intra-arterial; infusion technique, initiation of prolonged infusion (more than 8 hours), requiring the use of a portable or implantable pump	Procedure	CPT-4
96440	Chemotherapy administration into pleural cavity, requiring and including thoracentesis	Procedure	CPT-4
96446	Chemotherapy administration into the peritoneal cavity via indwelling port or catheter	Procedure	CPT-4
96450	Chemotherapy administration, into CNS (eg, intrathecal), requiring and including spinal puncture	Procedure	CPT-4
96542	Chemotherapy injection, subarachnoid or intraventricular via subcutaneous reservoir, single or multiple agents	Procedure	CPT-4
96549	Unlisted chemotherapy procedure	Procedure	CPT-4
A4653	Peritoneal dialysis catheter anchoring device, belt, each	Procedure	HCPCS
A4671	Disposable cyclor set used with cyclor dialysis machine, each	Procedure	HCPCS
A4672	Drainage extension line, sterile, for dialysis, each	Procedure	HCPCS
A4673	Extension line with easy lock connectors, used with dialysis	Procedure	HCPCS
A4674	Chemicals/antiseptics solution used to clean/sterilize dialysis equipment, per 8 oz	Procedure	HCPCS
A4680	Activated carbon filter for hemodialysis, each	Procedure	HCPCS
A4690	Dialyzer (artificial kidneys), all types, all sizes, for hemodialysis, each	Procedure	HCPCS
A4700	Standard dialysate solution, each	Procedure	HCPCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
A4705	Bicarbonate dialysate solution, each	Procedure	HCPCS
A4706	Bicarbonate concentrate, solution, for hemodialysis, per gallon	Procedure	HCPCS
A4707	Bicarbonate concentrate, powder, for hemodialysis, per packet	Procedure	HCPCS
A4708	Acetate concentrate solution, for hemodialysis, per gallon	Procedure	HCPCS
A4709	Acid concentrate, solution, for hemodialysis, per gallon	Procedure	HCPCS
A4712	Water, sterile, for injection, per 10 ml	Procedure	HCPCS
A4714	Treated water (deionized, distilled, or reverse osmosis) for peritoneal dialysis, per gallon	Procedure	HCPCS
A4719	"Y set" tubing for peritoneal dialysis	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
A4730	Fistula cannulation set for hemodialysis, each	Procedure	HCPCS
A4735	Local/topical anesthetics for dialysis only	Procedure	HCPCS
A4736	Topical anesthetic, for dialysis, per g	Procedure	HCPCS
A4737	Injectable anesthetic, for dialysis, per 10 ml	Procedure	HCPCS
A4740	Shunt accessory, for hemodialysis, any type, each	Procedure	HCPCS
A4750	Blood tubing, arterial or venous, for hemodialysis, each	Procedure	HCPCS
A4755	Blood tubing, arterial and venous combined, for hemodialysis, each	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
A4802	Protamine sulfate, for hemodialysis, per 50 mg	Procedure	HCPCS
A4820	Hemodialysis kit supplies	Procedure	HCPCS
A4850	Hemostats with rubber tips for dialysis	Procedure	HCPCS
A4860	Disposable catheter tips for peritoneal dialysis, per 10	Procedure	HCPCS
A4870	Plumbing and/or electrical work for home hemodialysis equipment	Procedure	HCPCS
A4880	Storage tanks utilized in connection with water purification system, replacement tanks for dialysis	Procedure	HCPCS
A4890	Contracts, repair and maintenance, for hemodialysis equipment	Procedure	HCPCS
A4900	Continuous ambulatory peritoneal dialysis (capd) supply kit	Procedure	HCPCS
A4901	Continuous cycling peritoneal dialysis (ccpd) supply kit	Procedure	HCPCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
A4905	Intermittent peritoneal dialysis (ipd) supply kit	Procedure	HCPCS
A4910	Non-medical supplies for dialysis, (i.e., scale, scissors, stopwatch, etc.)	Procedure	HCPCS
A4911	Drain bag/bottle, for dialysis, each	Procedure	HCPCS
A4912	Gomco drain bottle	Procedure	HCPCS
A4913	Miscellaneous dialysis supplies, not otherwise specified	Procedure	HCPCS
A4914	Preparation kits	Procedure	HCPCS
A4918	Venous pressure clamp, for hemodialysis, each	Procedure	HCPCS
A9545	Iodine I-131 tositumomab, therapeutic, per treatment dose	Procedure	HCPCS
B20	Human immunodeficiency virus [HIV] disease	Diagnosis	ICD-10-CM
	Human immunodeficiency virus, type 2 [HIV 2] as the cause of diseases classified elsewhere	Diagnosis	ICD-10-CM
B97.35		Diagnosis	ICD-10-CM
BT29	Computerized Tomography (CT Scan) / Kidney Transplant	Procedure	ICD-10-PCS
	Computerized Tomography (CT Scan) of Kidney Transplant using High Osmolar Contrast, Unenhanced and Enhanced	Procedure	ICD-10-PCS
BT2900Z		Procedure	ICD-10-PCS
	Computerized Tomography (CT Scan) of Kidney Transplant using High Osmolar Contrast	Procedure	ICD-10-PCS
BT290ZZ		Procedure	ICD-10-PCS
	Computerized Tomography (CT Scan) of Kidney Transplant using Low Osmolar Contrast, Unenhanced and Enhanced	Procedure	ICD-10-PCS
BT2910Z		Procedure	ICD-10-PCS
	Computerized Tomography (CT Scan) of Kidney Transplant using Low Osmolar Contrast	Procedure	ICD-10-PCS
BT291ZZ		Procedure	ICD-10-PCS
	Computerized Tomography (CT Scan) of Kidney Transplant using Other Contrast, Unenhanced and Enhanced	Procedure	ICD-10-PCS
BT29Y0Z		Procedure	ICD-10-PCS
	Computerized Tomography (CT Scan) of Kidney Transplant using Other Contrast	Procedure	ICD-10-PCS
BT29ZZZ		Procedure	ICD-10-PCS
	Computerized Tomography (CT Scan) of Kidney Transplant	Procedure	ICD-10-PCS
BT39	Magnetic Resonance Imaging (MRI) / Kidney Transplant	Procedure	ICD-10-PCS
	Magnetic Resonance Imaging (MRI) of Kidney Transplant using Other Contrast, Unenhanced and Enhanced	Procedure	ICD-10-PCS
BT39Y0Z		Procedure	ICD-10-PCS
	Magnetic Resonance Imaging (MRI) of Kidney Transplant using Other Contrast	Procedure	ICD-10-PCS
BT39ZZZ		Procedure	ICD-10-PCS
	Magnetic Resonance Imaging (MRI) of Kidney Transplant	Procedure	ICD-10-PCS
BT49	Ultrasonography / Kidney Transplant	Procedure	ICD-10-PCS
BT49ZZZ		Procedure	ICD-10-PCS
	Ultrasonography of Kidney Transplant	Procedure	ICD-10-PCS
C1084	Denileukin diftitox, 300 mcg, ontak iv	Procedure	HCPCS
C1086	Temozolomide, 5 mg, temodar	Procedure	HCPCS
C1166	Injection, cytarabine liposome, per 10 mg	Procedure	HCPCS
C1167	Injection, epirubicin HCl, 2 mg	Procedure	HCPCS
C1178	Injection, busulfan, per 6 mg	Procedure	HCPCS
C1716	Brachytherapy source, nonstranded, gold-198, per source	Procedure	HCPCS
C1717	Brachytherapy source, nonstranded, high dose rate iridium-192, per source	Procedure	HCPCS
C1719	Brachytherapy source, nonstranded, nonhigh dose rate iridium-192, per source	Procedure	HCPCS
C2616	Brachytherapy source, nonstranded, yttrium-90, per source	Procedure	HCPCS
	Brachytherapy source, nonstranded, high activity, iodine-125, greater than 1.01 mCi (NIST), per source	Procedure	HCPCS
C2634		Procedure	HCPCS
	Brachytherapy source, nonstranded, high activity, palladium-103, greater than 2.2 mCi (NIST), per source	Procedure	HCPCS
C2635		Procedure	HCPCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
C2636	Brachytherapy linear source, nonstranded, palladium-103, per 1 mm	Procedure	HCPCS
C2637	Brachytherapy source, nonstranded, ytterbium-169, per source	Procedure	HCPCS
C2638	Brachytherapy source, stranded, iodine-125, per source	Procedure	HCPCS
C2639	Brachytherapy source, nonstranded, iodine-125, per source	Procedure	HCPCS
C2640	Brachytherapy source, stranded, palladium-103, per source	Procedure	HCPCS
C2641	Brachytherapy source, nonstranded, palladium-103, per source	Procedure	HCPCS
C2642	Brachytherapy source, stranded, cesium-131, per source	Procedure	HCPCS
C2643	Brachytherapy source, nonstranded, cesium-131, per source	Procedure	HCPCS
C2644	Brachytherapy source, cesium-131 chloride solution, per mCi	Procedure	HCPCS
C2698	Brachytherapy source, stranded, not otherwise specified, per source	Procedure	HCPCS
C2699	Brachytherapy source, nonstranded, not otherwise specified, per source	Procedure	HCPCS
C9004	Injection, gemtuzumab ozogamicin, per 5 mg	Procedure	HCPCS
C9006	Injection, tacrolimus, per 5 mg (1 amp)	Procedure	HCPCS
C9012	Injection, arsenic trioxide, per 1 mg/kg	Procedure	HCPCS
C9017	Lomustine, 10 mg	Procedure	HCPCS
C9020	Sunitinib tablet, 1 mg	Procedure	HCPCS
C9021	Injection, obinutuzumab, 10 mg	Procedure	HCPCS
C9024	Injection, liposomal, 1 mg daunorubicin and 2.27 mg cytarabine	Procedure	HCPCS
C9029	Injection, guselkumab, 1 mg	Procedure	HCPCS
C9042	Injection, bendamustine HCl (Belrapzo), 1 mg	Procedure	HCPCS
C9044	Injection, cemiplimab-rwlc, 1 mg	Procedure	HCPCS
C9045	Injection, moxetumomab pasudotox-tdfk, 0.01 mg	Procedure	HCPCS
C9049	Injection, tagraxofusp-erzs, 10 mcg	Procedure	HCPCS
C9050	Injection, emapalumab-lzsg, 1 mg	Procedure	HCPCS
C9106	Sunitinib, per 1 mg/ml	Procedure	HCPCS
C9110	Injection, alemtuzumab, per 10 mg/ ml	Procedure	HCPCS
C9126	Injection natalizumab per 5 mg	Procedure	HCPCS
C9127	Injection, paclitaxel protein-bound particles, per 1 mg	Procedure	HCPCS
C9129	Injection, clofarabine, per 1 mg	Procedure	HCPCS
C9205	Injection, oxaliplatin, per 5 mg	Procedure	HCPCS
C9207	Injection, bortezomib, per 3.5 mg	Procedure	HCPCS
C9211	Injection, alefacept, for intravenous use, per 7.5 mg	Procedure	HCPCS
C9212	Injection, alefacept, for intramuscular use, per 7.5 mg	Procedure	HCPCS
C9213	Injection, pemetrexed, per 10 mg	Procedure	HCPCS
C9214	Injection, bevacizumab, per 10 mg	Procedure	HCPCS
C9215	Injection, cetuximab, per 10 mg	Procedure	HCPCS
C9218	Injection, azacitidine, per 1 mg	Procedure	HCPCS
C9230	Injection, abatacept, per 10 mg	Procedure	HCPCS
C9231	Injection, decitabine, per 1 mg	Procedure	HCPCS
C9235	Injection, panitumumab, 10 mg	Procedure	HCPCS
C9236	Injection, eculizumab, 10 mg	Procedure	HCPCS
C9239	Injection, temsirolimus, 1 mg	Procedure	HCPCS
C9240	Injection, ixabepilone, 1 mg	Procedure	HCPCS
C9243	Injection, bendamustine hcl, 1 mg	Procedure	HCPCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
C9249	Injection, certolizumab pegol, 1 mg	Procedure	HCPCS
C9253	Injection, temozolomide, 1mg	Procedure	HCPCS
C9259	Injection, pralatrexate, 1 mg	Procedure	HCPCS
C9260	Injection, ofatumumab, 10 mg	Procedure	HCPCS
C9261	Injection, ustekinumab, 1 mg	Procedure	HCPCS
C9262	Fludarabine phosphate, oral, 1 mg	Procedure	HCPCS
C9264	Injection, tocilizumab, 1 mg	Procedure	HCPCS
C9265	Injection, romidepsin, 1 mg	Procedure	HCPCS
	Sipuleucel-T, minimum of 50 million autologous CD54+ cells activated with PAP-GM-		
C9273	CSF, including leukapheresis and all other preparatory procedures, per infusion	Procedure	HCPCS
C9276	Injection, cabazitaxel, 1 mg	Procedure	HCPCS
C9280	Injection, eribulin mesylate, 1 mg	Procedure	HCPCS
C9284	Injection, ipilimumab, 1 mg	Procedure	HCPCS
C9286	Injection, belatacept, 1 mg	Procedure	HCPCS
C9287	Injection, brentuximab vedotin, 1 mg	Procedure	HCPCS
C9289	Injection, asparaginase Erwinia chrysanthemi, 1,000 IU	Procedure	HCPCS
C9292	Injection, pertuzumab, 10 mg	Procedure	HCPCS
C9295	Injection, carfilzomib, 1 mg	Procedure	HCPCS
C9297	Injection, omacetaxine mepesuccinate, 0.01 mg	Procedure	HCPCS
C9414	Etoposide; oral, 50 mg, brand name	Procedure	HCPCS
C9415	Doxorubicin HCl, 10 mg, brand name	Procedure	HCPCS
C9417	Bleomycin sulfate, 15 units, brand name	Procedure	HCPCS
C9418	Cisplatin, powder or solution, per 10 mg, brand name	Procedure	HCPCS
C9419	Injection, cladribine, per 1 mg, brand name	Procedure	HCPCS
C9420	Cyclophosphamide, 100 mg, brand name	Procedure	HCPCS
C9421	Cyclophosphamide, lyophilized, 100 mg, brand name	Procedure	HCPCS
C9422	Cytarabine, 100 mg, brand name	Procedure	HCPCS
C9423	Dacarbazine, 100 mg, brand name	Procedure	HCPCS
C9424	Daunorubicin, 10 mg	Procedure	HCPCS
C9425	Etoposide, 10 mg, brand name	Procedure	HCPCS
C9426	Floxuridine, 500 mg, brand name	Procedure	HCPCS
C9427	Ifosfamide, 1 gm, brand name	Procedure	HCPCS
C9429	Idarubicin HCl, 5 mg, brand name	Procedure	HCPCS
C9431	Paclitaxel, 30 mg, brand name	Procedure	HCPCS
C9432	Mitomycin, 5 mg, brand name	Procedure	HCPCS
C9433	Thiotepa, 15 mg, brand name	Procedure	HCPCS
C9436	Azathioprine, parenteral, brand name, per 100 mg	Procedure	HCPCS
C9437	Carmustine, brand name, 100 mg	Procedure	HCPCS
C9438	Cyclosporine, oral, 100 mg, brand name	Procedure	HCPCS
C9440	Vinorelbine tartrate, brand name, per 10 mg	Procedure	HCPCS
C9474	Injection, irinotecan liposome, 1 mg	Procedure	HCPCS
C9487	Ustekinumab, for intravenous injection, 1 mg	Procedure	HCPCS
D0000ZZ	Beam Radiation of Brain using Photons <1 MeV	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D0001ZZ	Beam Radiation of Brain using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D0002ZZ	Beam Radiation of Brain using Photons >10 MeV	Procedure	ICD-10-PCS
D0003ZZ	Beam Radiation of Brain using Electrons	Procedure	ICD-10-PCS
D0004ZZ	Beam Radiation of Brain using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D0005ZZ	Beam Radiation of Brain using Neutrons	Procedure	ICD-10-PCS
D0006ZZ	Beam Radiation of Brain using Neutron Capture	Procedure	ICD-10-PCS
D0010ZZ	Beam Radiation of Brain Stem using Photons <1 MeV	Procedure	ICD-10-PCS
D0011ZZ	Beam Radiation of Brain Stem using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D0012ZZ	Beam Radiation of Brain Stem using Photons >10 MeV	Procedure	ICD-10-PCS
D0013ZZ	Beam Radiation of Brain Stem using Electrons	Procedure	ICD-10-PCS
D0014ZZ	Beam Radiation of Brain Stem using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D0015ZZ	Beam Radiation of Brain Stem using Neutrons	Procedure	ICD-10-PCS
D0016ZZ	Beam Radiation of Brain Stem using Neutron Capture	Procedure	ICD-10-PCS
D0060ZZ	Beam Radiation of Spinal Cord using Photons <1 MeV	Procedure	ICD-10-PCS
D0061ZZ	Beam Radiation of Spinal Cord using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D0062ZZ	Beam Radiation of Spinal Cord using Photons >10 MeV	Procedure	ICD-10-PCS
D0063ZZ	Beam Radiation of Spinal Cord using Electrons	Procedure	ICD-10-PCS
D0064ZZ	Beam Radiation of Spinal Cord using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D0065ZZ	Beam Radiation of Spinal Cord using Neutrons	Procedure	ICD-10-PCS
D0066ZZ	Beam Radiation of Spinal Cord using Neutron Capture	Procedure	ICD-10-PCS
D0070ZZ	Beam Radiation of Peripheral Nerve using Photons <1 MeV	Procedure	ICD-10-PCS
D0073ZZ	Beam Radiation of Peripheral Nerve using Electrons	Procedure	ICD-10-PCS
D0074ZZ	Beam Radiation of Peripheral Nerve using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D0075ZZ	Beam Radiation of Peripheral Nerve using Neutrons	Procedure	ICD-10-PCS
D0076ZZ	Beam Radiation of Peripheral Nerve using Neutron Capture	Procedure	ICD-10-PCS
D01097Z	High Dose Rate (HDR) Brachytherapy of Brain using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D01098Z	High Dose Rate (HDR) Brachytherapy of Brain using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D01099Z	High Dose Rate (HDR) Brachytherapy of Brain using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D0109BZ	High Dose Rate (HDR) Brachytherapy of Brain using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D0109CZ	High Dose Rate (HDR) Brachytherapy of Brain using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D0109YZ	High Dose Rate (HDR) Brachytherapy of Brain using Other Isotope	Procedure	ICD-10-PCS
D010B7Z	Low Dose Rate (LDR) Brachytherapy of Brain using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D010B8Z	Low Dose Rate (LDR) Brachytherapy of Brain using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D010B9Z	Low Dose Rate (LDR) Brachytherapy of Brain using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D010BBZ	Low Dose Rate (LDR) Brachytherapy of Brain using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D010BCZ	Low Dose Rate (LDR) Brachytherapy of Brain using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D010BYZ	Low Dose Rate (LDR) Brachytherapy of Brain using Other Isotope	Procedure	ICD-10-PCS
D01197Z	High Dose Rate (HDR) Brachytherapy of Brain Stem using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D01198Z	High Dose Rate (HDR) Brachytherapy of Brain Stem using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D01199Z	High Dose Rate (HDR) Brachytherapy of Brain Stem using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D0119BZ	High Dose Rate (HDR) Brachytherapy of Brain Stem using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D0119CZ	High Dose Rate (HDR) Brachytherapy of Brain Stem using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D0119YZ	High Dose Rate (HDR) Brachytherapy of Brain Stem using Other Isotope	Procedure	ICD-10-PCS
D011B7Z	Low Dose Rate (LDR) Brachytherapy of Brain Stem using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D011B8Z	Low Dose Rate (LDR) Brachytherapy of Brain Stem using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D011B9Z	Low Dose Rate (LDR) Brachytherapy of Brain Stem using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D011BBZ	Low Dose Rate (LDR) Brachytherapy of Brain Stem using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D011BCZ	Low Dose Rate (LDR) Brachytherapy of Brain Stem using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D011BYZ	Low Dose Rate (LDR) Brachytherapy of Brain Stem using Other Isotope	Procedure	ICD-10-PCS
D01697Z	High Dose Rate (HDR) Brachytherapy of Spinal Cord using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D01698Z	High Dose Rate (HDR) Brachytherapy of Spinal Cord using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D01699Z	High Dose Rate (HDR) Brachytherapy of Spinal Cord using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D0169BZ	High Dose Rate (HDR) Brachytherapy of Spinal Cord using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D0169CZ	High Dose Rate (HDR) Brachytherapy of Spinal Cord using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D0169YZ	High Dose Rate (HDR) Brachytherapy of Spinal Cord using Other Isotope	Procedure	ICD-10-PCS
D016B7Z	Low Dose Rate (LDR) Brachytherapy of Spinal Cord using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D016B8Z	Low Dose Rate (LDR) Brachytherapy of Spinal Cord using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D016B9Z	Low Dose Rate (LDR) Brachytherapy of Spinal Cord using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D016BBZ	Low Dose Rate (LDR) Brachytherapy of Spinal Cord using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D016BCZ	Low Dose Rate (LDR) Brachytherapy of Spinal Cord using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D016BYZ	Low Dose Rate (LDR) Brachytherapy of Spinal Cord using Other Isotope	Procedure	ICD-10-PCS
D01797Z	High Dose Rate (HDR) Brachytherapy of Peripheral Nerve using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D01798Z	High Dose Rate (HDR) Brachytherapy of Peripheral Nerve using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D01799Z	High Dose Rate (HDR) Brachytherapy of Peripheral Nerve using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D0179BZ	High Dose Rate (HDR) Brachytherapy of Peripheral Nerve using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D0179CZ	High Dose Rate (HDR) Brachytherapy of Peripheral Nerve using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D0179YZ	High Dose Rate (HDR) Brachytherapy of Peripheral Nerve using Other Isotope	Procedure	ICD-10-PCS
D017B7Z	Low Dose Rate (LDR) Brachytherapy of Peripheral Nerve using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D017B8Z	Low Dose Rate (LDR) Brachytherapy of Peripheral Nerve using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D017B9Z	Low Dose Rate (LDR) Brachytherapy of Peripheral Nerve using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D017BBZ	Low Dose Rate (LDR) Brachytherapy of Peripheral Nerve using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D017BCZ	Low Dose Rate (LDR) Brachytherapy of Peripheral Nerve using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D017BYZ	Low Dose Rate (LDR) Brachytherapy of Peripheral Nerve using Other Isotope	Procedure	ICD-10-PCS
D0Y07ZZ	Contact Radiation of Brain	Procedure	ICD-10-PCS
D0Y0FZZ	Plaque Radiation of Brain	Procedure	ICD-10-PCS
D0Y17ZZ	Contact Radiation of Brain Stem	Procedure	ICD-10-PCS
D0Y1FZZ	Plaque Radiation of Brain Stem	Procedure	ICD-10-PCS
D0Y67ZZ	Contact Radiation of Spinal Cord	Procedure	ICD-10-PCS
D0Y6FZZ	Plaque Radiation of Spinal Cord	Procedure	ICD-10-PCS
D0Y77ZZ	Contact Radiation of Peripheral Nerve	Procedure	ICD-10-PCS
D0Y7FZZ	Plaque Radiation of Peripheral Nerve	Procedure	ICD-10-PCS
D7000ZZ	Beam Radiation of Bone Marrow using Photons <1 MeV	Procedure	ICD-10-PCS
D7001ZZ	Beam Radiation of Bone Marrow using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D7002ZZ	Beam Radiation of Bone Marrow using Photons >10 MeV	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D7003ZZ	Beam Radiation of Bone Marrow using Electrons	Procedure	ICD-10-PCS
D7004ZZ	Beam Radiation of Bone Marrow using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D7005ZZ	Beam Radiation of Bone Marrow using Neutrons	Procedure	ICD-10-PCS
D7006ZZ	Beam Radiation of Bone Marrow using Neutron Capture	Procedure	ICD-10-PCS
D7010ZZ	Beam Radiation of Thymus using Photons <1 MeV	Procedure	ICD-10-PCS
D7011ZZ	Beam Radiation of Thymus using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D7012ZZ	Beam Radiation of Thymus using Photons >10 MeV	Procedure	ICD-10-PCS
D7013ZZ	Beam Radiation of Thymus using Electrons	Procedure	ICD-10-PCS
D7014ZZ	Beam Radiation of Thymus using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D7015ZZ	Beam Radiation of Thymus using Neutrons	Procedure	ICD-10-PCS
D7016ZZ	Beam Radiation of Thymus using Neutron Capture	Procedure	ICD-10-PCS
D7020ZZ	Beam Radiation of Spleen using Photons <1 MeV	Procedure	ICD-10-PCS
D7021ZZ	Beam Radiation of Spleen using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D7022ZZ	Beam Radiation of Spleen using Photons >10 MeV	Procedure	ICD-10-PCS
D7023ZZ	Beam Radiation of Spleen using Electrons	Procedure	ICD-10-PCS
D7024ZZ	Beam Radiation of Spleen using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D7025ZZ	Beam Radiation of Spleen using Neutrons	Procedure	ICD-10-PCS
D7026ZZ	Beam Radiation of Spleen using Neutron Capture	Procedure	ICD-10-PCS
D7030ZZ	Beam Radiation of Neck Lymphatics using Photons <1 MeV	Procedure	ICD-10-PCS
D7031ZZ	Beam Radiation of Neck Lymphatics using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D7032ZZ	Beam Radiation of Neck Lymphatics using Photons >10 MeV	Procedure	ICD-10-PCS
D7033ZZ	Beam Radiation of Neck Lymphatics using Electrons	Procedure	ICD-10-PCS
D7034ZZ	Beam Radiation of Neck Lymphatics using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D7035ZZ	Beam Radiation of Neck Lymphatics using Neutrons	Procedure	ICD-10-PCS
D7036ZZ	Beam Radiation of Neck Lymphatics using Neutron Capture	Procedure	ICD-10-PCS
D7040ZZ	Beam Radiation of Axillary Lymphatics using Photons <1 MeV	Procedure	ICD-10-PCS
D7041ZZ	Beam Radiation of Axillary Lymphatics using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D7042ZZ	Beam Radiation of Axillary Lymphatics using Photons >10 MeV	Procedure	ICD-10-PCS
D7043ZZ	Beam Radiation of Axillary Lymphatics using Electrons	Procedure	ICD-10-PCS
D7044ZZ	Beam Radiation of Axillary Lymphatics using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D7045ZZ	Beam Radiation of Axillary Lymphatics using Neutrons	Procedure	ICD-10-PCS
D7046ZZ	Beam Radiation of Axillary Lymphatics using Neutron Capture	Procedure	ICD-10-PCS
D7050ZZ	Beam Radiation of Thorax Lymphatics using Photons <1 MeV	Procedure	ICD-10-PCS
D7051ZZ	Beam Radiation of Thorax Lymphatics using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D7052ZZ	Beam Radiation of Thorax Lymphatics using Photons >10 MeV	Procedure	ICD-10-PCS
D7053ZZ	Beam Radiation of Thorax Lymphatics using Electrons	Procedure	ICD-10-PCS
D7054ZZ	Beam Radiation of Thorax Lymphatics using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D7055ZZ	Beam Radiation of Thorax Lymphatics using Neutrons	Procedure	ICD-10-PCS
D7056ZZ	Beam Radiation of Thorax Lymphatics using Neutron Capture	Procedure	ICD-10-PCS
D7060ZZ	Beam Radiation of Abdomen Lymphatics using Photons <1 MeV	Procedure	ICD-10-PCS
D7061ZZ	Beam Radiation of Abdomen Lymphatics using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D7062ZZ	Beam Radiation of Abdomen Lymphatics using Photons >10 MeV	Procedure	ICD-10-PCS
D7063ZZ	Beam Radiation of Abdomen Lymphatics using Electrons	Procedure	ICD-10-PCS
D7064ZZ	Beam Radiation of Abdomen Lymphatics using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D7065ZZ	Beam Radiation of Abdomen Lymphatics using Neutrons	Procedure	ICD-10-PCS
D7066ZZ	Beam Radiation of Abdomen Lymphatics using Neutron Capture	Procedure	ICD-10-PCS
D7070ZZ	Beam Radiation of Pelvis Lymphatics using Photons <1 MeV	Procedure	ICD-10-PCS
D7071ZZ	Beam Radiation of Pelvis Lymphatics using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D7072ZZ	Beam Radiation of Pelvis Lymphatics using Photons >10 MeV	Procedure	ICD-10-PCS
D7073ZZ	Beam Radiation of Pelvis Lymphatics using Electrons	Procedure	ICD-10-PCS
D7074ZZ	Beam Radiation of Pelvis Lymphatics using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D7075ZZ	Beam Radiation of Pelvis Lymphatics using Neutrons	Procedure	ICD-10-PCS
D7076ZZ	Beam Radiation of Pelvis Lymphatics using Neutron Capture	Procedure	ICD-10-PCS
D7080ZZ	Beam Radiation of Inguinal Lymphatics using Photons <1 MeV	Procedure	ICD-10-PCS
D7081ZZ	Beam Radiation of Inguinal Lymphatics using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D7082ZZ	Beam Radiation of Inguinal Lymphatics using Photons >10 MeV	Procedure	ICD-10-PCS
D7083ZZ	Beam Radiation of Inguinal Lymphatics using Electrons	Procedure	ICD-10-PCS
D7084ZZ	Beam Radiation of Inguinal Lymphatics using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D7085ZZ	Beam Radiation of Inguinal Lymphatics using Neutrons	Procedure	ICD-10-PCS
D7086ZZ	Beam Radiation of Inguinal Lymphatics using Neutron Capture	Procedure	ICD-10-PCS
D71	Functional disorders of polymorphonuclear neutrophils	Diagnosis	ICD-10-CM
D71097Z	High Dose Rate (HDR) Brachytherapy of Bone Marrow using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D71098Z	High Dose Rate (HDR) Brachytherapy of Bone Marrow using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D71099Z	High Dose Rate (HDR) Brachytherapy of Bone Marrow using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D7109BZ	High Dose Rate (HDR) Brachytherapy of Bone Marrow using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D7109CZ	High Dose Rate (HDR) Brachytherapy of Bone Marrow using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D7109YZ	High Dose Rate (HDR) Brachytherapy of Bone Marrow using Other Isotope	Procedure	ICD-10-PCS
D710B7Z	Low Dose Rate (LDR) Brachytherapy of Bone Marrow using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D710B8Z	Low Dose Rate (LDR) Brachytherapy of Bone Marrow using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D710B9Z	Low Dose Rate (LDR) Brachytherapy of Bone Marrow using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D710BBZ	Low Dose Rate (LDR) Brachytherapy of Bone Marrow using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D710BCZ	Low Dose Rate (LDR) Brachytherapy of Bone Marrow using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D710BYZ	Low Dose Rate (LDR) Brachytherapy of Bone Marrow using Other Isotope	Procedure	ICD-10-PCS
D71197Z	High Dose Rate (HDR) Brachytherapy of Thymus using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D71198Z	High Dose Rate (HDR) Brachytherapy of Thymus using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D71199Z	High Dose Rate (HDR) Brachytherapy of Thymus using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D7119BZ	High Dose Rate (HDR) Brachytherapy of Thymus using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D7119CZ	High Dose Rate (HDR) Brachytherapy of Thymus using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D7119YZ	High Dose Rate (HDR) Brachytherapy of Thymus using Other Isotope	Procedure	ICD-10-PCS
D711B7Z	Low Dose Rate (LDR) Brachytherapy of Thymus using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D711B8Z	Low Dose Rate (LDR) Brachytherapy of Thymus using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D711B9Z	Low Dose Rate (LDR) Brachytherapy of Thymus using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D711BBZ	Low Dose Rate (LDR) Brachytherapy of Thymus using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D711BCZ	Low Dose Rate (LDR) Brachytherapy of Thymus using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D711BYZ	Low Dose Rate (LDR) Brachytherapy of Thymus using Other Isotope	Procedure	ICD-10-PCS
D71297Z	High Dose Rate (HDR) Brachytherapy of Spleen using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D71298Z	High Dose Rate (HDR) Brachytherapy of Spleen using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D71299Z	High Dose Rate (HDR) Brachytherapy of Spleen using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D7129BZ	High Dose Rate (HDR) Brachytherapy of Spleen using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D7129CZ	High Dose Rate (HDR) Brachytherapy of Spleen using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D7129YZ	High Dose Rate (HDR) Brachytherapy of Spleen using Other Isotope	Procedure	ICD-10-PCS
D712B7Z	Low Dose Rate (LDR) Brachytherapy of Spleen using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D712B8Z	Low Dose Rate (LDR) Brachytherapy of Spleen using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D712B9Z	Low Dose Rate (LDR) Brachytherapy of Spleen using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D712BBZ	Low Dose Rate (LDR) Brachytherapy of Spleen using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D712BCZ	Low Dose Rate (LDR) Brachytherapy of Spleen using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D712BYZ	Low Dose Rate (LDR) Brachytherapy of Spleen using Other Isotope	Procedure	ICD-10-PCS
D71397Z	High Dose Rate (HDR) Brachytherapy of Neck Lymphatics using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D71398Z	High Dose Rate (HDR) Brachytherapy of Neck Lymphatics using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D71399Z	High Dose Rate (HDR) Brachytherapy of Neck Lymphatics using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D7139BZ	High Dose Rate (HDR) Brachytherapy of Neck Lymphatics using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D7139CZ	High Dose Rate (HDR) Brachytherapy of Neck Lymphatics using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D7139YZ	High Dose Rate (HDR) Brachytherapy of Neck Lymphatics using Other Isotope	Procedure	ICD-10-PCS
D713B7Z	Low Dose Rate (LDR) Brachytherapy of Neck Lymphatics using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D713B8Z	Low Dose Rate (LDR) Brachytherapy of Neck Lymphatics using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D713B9Z	Low Dose Rate (LDR) Brachytherapy of Neck Lymphatics using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D713BBZ	Low Dose Rate (LDR) Brachytherapy of Neck Lymphatics using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D713BCZ	Low Dose Rate (LDR) Brachytherapy of Neck Lymphatics using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D713BYZ	Low Dose Rate (LDR) Brachytherapy of Neck Lymphatics using Other Isotope	Procedure	ICD-10-PCS
D71497Z	High Dose Rate (HDR) Brachytherapy of Axillary Lymphatics using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D71498Z	High Dose Rate (HDR) Brachytherapy of Axillary Lymphatics using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D71499Z	High Dose Rate (HDR) Brachytherapy of Axillary Lymphatics using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D7149BZ	High Dose Rate (HDR) Brachytherapy of Axillary Lymphatics using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D7149CZ	High Dose Rate (HDR) Brachytherapy of Axillary Lymphatics using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D7149YZ	High Dose Rate (HDR) Brachytherapy of Axillary Lymphatics using Other Isotope	Procedure	ICD-10-PCS
D714B7Z	Low Dose Rate (LDR) Brachytherapy of Axillary Lymphatics using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D714B8Z	Low Dose Rate (LDR) Brachytherapy of Axillary Lymphatics using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D714B9Z	Low Dose Rate (LDR) Brachytherapy of Axillary Lymphatics using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D714BBZ	Low Dose Rate (LDR) Brachytherapy of Axillary Lymphatics using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D714BCZ	Low Dose Rate (LDR) Brachytherapy of Axillary Lymphatics using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D714BYZ	Low Dose Rate (LDR) Brachytherapy of Axillary Lymphatics using Other Isotope	Procedure	ICD-10-PCS
D71597Z	High Dose Rate (HDR) Brachytherapy of Thorax Lymphatics using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D71598Z	High Dose Rate (HDR) Brachytherapy of Thorax Lymphatics using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D71599Z	High Dose Rate (HDR) Brachytherapy of Thorax Lymphatics using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D7159BZ	High Dose Rate (HDR) Brachytherapy of Thorax Lymphatics using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D7159CZ	High Dose Rate (HDR) Brachytherapy of Thorax Lymphatics using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D7159YZ	High Dose Rate (HDR) Brachytherapy of Thorax Lymphatics using Other Isotope	Procedure	ICD-10-PCS
D715B7Z	Low Dose Rate (LDR) Brachytherapy of Thorax Lymphatics using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D715B8Z	Low Dose Rate (LDR) Brachytherapy of Thorax Lymphatics using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D715B9Z	Low Dose Rate (LDR) Brachytherapy of Thorax Lymphatics using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D715BBZ	Low Dose Rate (LDR) Brachytherapy of Thorax Lymphatics using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D715BCZ	Low Dose Rate (LDR) Brachytherapy of Thorax Lymphatics using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D715BYZ	Low Dose Rate (LDR) Brachytherapy of Thorax Lymphatics using Other Isotope	Procedure	ICD-10-PCS
D71697Z	High Dose Rate (HDR) Brachytherapy of Abdomen Lymphatics using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D71698Z	High Dose Rate (HDR) Brachytherapy of Abdomen Lymphatics using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D71699Z	High Dose Rate (HDR) Brachytherapy of Abdomen Lymphatics using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D7169BZ	High Dose Rate (HDR) Brachytherapy of Abdomen Lymphatics using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D7169CZ	High Dose Rate (HDR) Brachytherapy of Abdomen Lymphatics using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D7169YZ	High Dose Rate (HDR) Brachytherapy of Abdomen Lymphatics using Other Isotope	Procedure	ICD-10-PCS
D716B7Z	Low Dose Rate (LDR) Brachytherapy of Abdomen Lymphatics using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D716B8Z	Low Dose Rate (LDR) Brachytherapy of Abdomen Lymphatics using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D716B9Z	Low Dose Rate (LDR) Brachytherapy of Abdomen Lymphatics using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D716BBZ	Low Dose Rate (LDR) Brachytherapy of Abdomen Lymphatics using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D716BCZ	Low Dose Rate (LDR) Brachytherapy of Abdomen Lymphatics using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D716BYZ	Low Dose Rate (LDR) Brachytherapy of Abdomen Lymphatics using Other Isotope	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D71797Z	High Dose Rate (HDR) Brachytherapy of Pelvis Lymphatics using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D71798Z	High Dose Rate (HDR) Brachytherapy of Pelvis Lymphatics using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D71799Z	High Dose Rate (HDR) Brachytherapy of Pelvis Lymphatics using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D7179BZ	High Dose Rate (HDR) Brachytherapy of Pelvis Lymphatics using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D7179CZ	High Dose Rate (HDR) Brachytherapy of Pelvis Lymphatics using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D7179YZ	High Dose Rate (HDR) Brachytherapy of Pelvis Lymphatics using Other Isotope	Procedure	ICD-10-PCS
D717B7Z	Low Dose Rate (LDR) Brachytherapy of Pelvis Lymphatics using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D717B8Z	Low Dose Rate (LDR) Brachytherapy of Pelvis Lymphatics using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D717B9Z	Low Dose Rate (LDR) Brachytherapy of Pelvis Lymphatics using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D717BBZ	Low Dose Rate (LDR) Brachytherapy of Pelvis Lymphatics using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D717BCZ	Low Dose Rate (LDR) Brachytherapy of Pelvis Lymphatics using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D717BYZ	Low Dose Rate (LDR) Brachytherapy of Pelvis Lymphatics using Other Isotope	Procedure	ICD-10-PCS
D71897Z	High Dose Rate (HDR) Brachytherapy of Inguinal Lymphatics using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D71898Z	High Dose Rate (HDR) Brachytherapy of Inguinal Lymphatics using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D71899Z	High Dose Rate (HDR) Brachytherapy of Inguinal Lymphatics using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D7189BZ	High Dose Rate (HDR) Brachytherapy of Inguinal Lymphatics using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D7189CZ	High Dose Rate (HDR) Brachytherapy of Inguinal Lymphatics using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D7189YZ	High Dose Rate (HDR) Brachytherapy of Inguinal Lymphatics using Other Isotope	Procedure	ICD-10-PCS
D718B7Z	Low Dose Rate (LDR) Brachytherapy of Inguinal Lymphatics using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D718B8Z	Low Dose Rate (LDR) Brachytherapy of Inguinal Lymphatics using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D718B9Z	Low Dose Rate (LDR) Brachytherapy of Inguinal Lymphatics using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D718BBZ	Low Dose Rate (LDR) Brachytherapy of Inguinal Lymphatics using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D718BCZ	Low Dose Rate (LDR) Brachytherapy of Inguinal Lymphatics using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D718BYZ	Low Dose Rate (LDR) Brachytherapy of Inguinal Lymphatics using Other Isotope	Procedure	ICD-10-PCS
D7Y0FZZ	Plaque Radiation of Bone Marrow	Procedure	ICD-10-PCS
D7Y1FZZ	Plaque Radiation of Thymus	Procedure	ICD-10-PCS
D7Y2FZZ	Plaque Radiation of Spleen	Procedure	ICD-10-PCS
D7Y3FZZ	Plaque Radiation of Neck Lymphatics	Procedure	ICD-10-PCS
D7Y4FZZ	Plaque Radiation of Axillary Lymphatics	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D7Y5FZZ	Plaque Radiation of Thorax Lymphatics	Procedure	ICD-10-PCS
D7Y6FZZ	Plaque Radiation of Abdomen Lymphatics	Procedure	ICD-10-PCS
D7Y7FZZ	Plaque Radiation of Pelvis Lymphatics	Procedure	ICD-10-PCS
D7Y8FZZ	Plaque Radiation of Inguinal Lymphatics	Procedure	ICD-10-PCS
D8000ZZ	Beam Radiation of Eye using Photons <1 MeV	Procedure	ICD-10-PCS
D8003ZZ	Beam Radiation of Eye using Electrons	Procedure	ICD-10-PCS
D8004ZZ	Beam Radiation of Eye using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D8005ZZ	Beam Radiation of Eye using Neutrons	Procedure	ICD-10-PCS
D81097Z	High Dose Rate (HDR) Brachytherapy of Eye using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D81098Z	High Dose Rate (HDR) Brachytherapy of Eye using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D81099Z	High Dose Rate (HDR) Brachytherapy of Eye using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D8109BZ	High Dose Rate (HDR) Brachytherapy of Eye using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D8109CZ	High Dose Rate (HDR) Brachytherapy of Eye using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D8109YZ	High Dose Rate (HDR) Brachytherapy of Eye using Other Isotope	Procedure	ICD-10-PCS
D810B7Z	Low Dose Rate (LDR) Brachytherapy of Eye using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D810B8Z	Low Dose Rate (LDR) Brachytherapy of Eye using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D810B9Z	Low Dose Rate (LDR) Brachytherapy of Eye using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D810BBZ	Low Dose Rate (LDR) Brachytherapy of Eye using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D810BCZ	Low Dose Rate (LDR) Brachytherapy of Eye using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D810BYZ	Low Dose Rate (LDR) Brachytherapy of Eye using Other Isotope	Procedure	ICD-10-PCS
D8Y07ZZ	Contact Radiation of Eye	Procedure	ICD-10-PCS
D8Y0FZZ	Plaque Radiation of Eye	Procedure	ICD-10-PCS
D9000ZZ	Beam Radiation of Ear using Photons <1 MeV	Procedure	ICD-10-PCS
D9003ZZ	Beam Radiation of Ear using Electrons	Procedure	ICD-10-PCS
D9004ZZ	Beam Radiation of Ear using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D9005ZZ	Beam Radiation of Ear using Neutrons	Procedure	ICD-10-PCS
D9010ZZ	Beam Radiation of Nose using Photons <1 MeV	Procedure	ICD-10-PCS
D9011ZZ	Beam Radiation of Nose using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D9012ZZ	Beam Radiation of Nose using Photons >10 MeV	Procedure	ICD-10-PCS
D9013ZZ	Beam Radiation of Nose using Electrons	Procedure	ICD-10-PCS
D9014ZZ	Beam Radiation of Nose using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D9015ZZ	Beam Radiation of Nose using Neutrons	Procedure	ICD-10-PCS
D9016ZZ	Beam Radiation of Nose using Neutron Capture	Procedure	ICD-10-PCS
D9030ZZ	Beam Radiation of Hypopharynx using Photons <1 MeV	Procedure	ICD-10-PCS
D9031ZZ	Beam Radiation of Hypopharynx using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D9032ZZ	Beam Radiation of Hypopharynx using Photons >10 MeV	Procedure	ICD-10-PCS
D9033ZZ	Beam Radiation of Hypopharynx using Electrons	Procedure	ICD-10-PCS
D9034ZZ	Beam Radiation of Hypopharynx using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D9035ZZ	Beam Radiation of Hypopharynx using Neutrons	Procedure	ICD-10-PCS
D9036ZZ	Beam Radiation of Hypopharynx using Neutron Capture	Procedure	ICD-10-PCS
D9040ZZ	Beam Radiation of Mouth using Photons <1 MeV	Procedure	ICD-10-PCS
D9041ZZ	Beam Radiation of Mouth using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D9042ZZ	Beam Radiation of Mouth using Photons >10 MeV	Procedure	ICD-10-PCS
D9043ZZ	Beam Radiation of Mouth using Electrons	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D9044ZZ	Beam Radiation of Mouth using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D9045ZZ	Beam Radiation of Mouth using Neutrons	Procedure	ICD-10-PCS
D9046ZZ	Beam Radiation of Mouth using Neutron Capture	Procedure	ICD-10-PCS
D9050ZZ	Beam Radiation of Tongue using Photons <1 MeV	Procedure	ICD-10-PCS
D9051ZZ	Beam Radiation of Tongue using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D9052ZZ	Beam Radiation of Tongue using Photons >10 MeV	Procedure	ICD-10-PCS
D9053ZZ	Beam Radiation of Tongue using Electrons	Procedure	ICD-10-PCS
D9054ZZ	Beam Radiation of Tongue using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D9055ZZ	Beam Radiation of Tongue using Neutrons	Procedure	ICD-10-PCS
D9056ZZ	Beam Radiation of Tongue using Neutron Capture	Procedure	ICD-10-PCS
D9060ZZ	Beam Radiation of Salivary Glands using Photons <1 MeV	Procedure	ICD-10-PCS
D9061ZZ	Beam Radiation of Salivary Glands using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D9062ZZ	Beam Radiation of Salivary Glands using Photons >10 MeV	Procedure	ICD-10-PCS
D9063ZZ	Beam Radiation of Salivary Glands using Electrons	Procedure	ICD-10-PCS
D9064ZZ	Beam Radiation of Salivary Glands using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D9065ZZ	Beam Radiation of Salivary Glands using Neutrons	Procedure	ICD-10-PCS
D9066ZZ	Beam Radiation of Salivary Glands using Neutron Capture	Procedure	ICD-10-PCS
D9070ZZ	Beam Radiation of Sinuses using Photons <1 MeV	Procedure	ICD-10-PCS
D9071ZZ	Beam Radiation of Sinuses using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D9072ZZ	Beam Radiation of Sinuses using Photons >10 MeV	Procedure	ICD-10-PCS
D9073ZZ	Beam Radiation of Sinuses using Electrons	Procedure	ICD-10-PCS
D9074ZZ	Beam Radiation of Sinuses using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D9075ZZ	Beam Radiation of Sinuses using Neutrons	Procedure	ICD-10-PCS
D9076ZZ	Beam Radiation of Sinuses using Neutron Capture	Procedure	ICD-10-PCS
D9080ZZ	Beam Radiation of Hard Palate using Photons <1 MeV	Procedure	ICD-10-PCS
D9081ZZ	Beam Radiation of Hard Palate using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D9082ZZ	Beam Radiation of Hard Palate using Photons >10 MeV	Procedure	ICD-10-PCS
D9083ZZ	Beam Radiation of Hard Palate using Electrons	Procedure	ICD-10-PCS
D9084ZZ	Beam Radiation of Hard Palate using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D9085ZZ	Beam Radiation of Hard Palate using Neutrons	Procedure	ICD-10-PCS
D9086ZZ	Beam Radiation of Hard Palate using Neutron Capture	Procedure	ICD-10-PCS
D9090ZZ	Beam Radiation of Soft Palate using Photons <1 MeV	Procedure	ICD-10-PCS
D9091ZZ	Beam Radiation of Soft Palate using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D9092ZZ	Beam Radiation of Soft Palate using Photons >10 MeV	Procedure	ICD-10-PCS
D9093ZZ	Beam Radiation of Soft Palate using Electrons	Procedure	ICD-10-PCS
D9094ZZ	Beam Radiation of Soft Palate using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D9095ZZ	Beam Radiation of Soft Palate using Neutrons	Procedure	ICD-10-PCS
D9096ZZ	Beam Radiation of Soft Palate using Neutron Capture	Procedure	ICD-10-PCS
D90B0ZZ	Beam Radiation of Larynx using Photons <1 MeV	Procedure	ICD-10-PCS
D90B1ZZ	Beam Radiation of Larynx using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D90B2ZZ	Beam Radiation of Larynx using Photons >10 MeV	Procedure	ICD-10-PCS
D90B3ZZ	Beam Radiation of Larynx using Electrons	Procedure	ICD-10-PCS
D90B4ZZ	Beam Radiation of Larynx using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D90B5ZZ	Beam Radiation of Larynx using Neutrons	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D90B6ZZ	Beam Radiation of Larynx using Neutron Capture	Procedure	ICD-10-PCS
D90D0ZZ	Beam Radiation of Nasopharynx using Photons <1 MeV	Procedure	ICD-10-PCS
D90D1ZZ	Beam Radiation of Nasopharynx using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D90D2ZZ	Beam Radiation of Nasopharynx using Photons >10 MeV	Procedure	ICD-10-PCS
D90D3ZZ	Beam Radiation of Nasopharynx using Electrons	Procedure	ICD-10-PCS
D90D4ZZ	Beam Radiation of Nasopharynx using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D90D5ZZ	Beam Radiation of Nasopharynx using Neutrons	Procedure	ICD-10-PCS
D90D6ZZ	Beam Radiation of Nasopharynx using Neutron Capture	Procedure	ICD-10-PCS
D90F0ZZ	Beam Radiation of Oropharynx using Photons <1 MeV	Procedure	ICD-10-PCS
D90F1ZZ	Beam Radiation of Oropharynx using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
D90F2ZZ	Beam Radiation of Oropharynx using Photons >10 MeV	Procedure	ICD-10-PCS
D90F3ZZ	Beam Radiation of Oropharynx using Electrons	Procedure	ICD-10-PCS
D90F4ZZ	Beam Radiation of Oropharynx using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
D90F5ZZ	Beam Radiation of Oropharynx using Neutrons	Procedure	ICD-10-PCS
D90F6ZZ	Beam Radiation of Oropharynx using Neutron Capture	Procedure	ICD-10-PCS
D91097Z	High Dose Rate (HDR) Brachytherapy of Ear using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91098Z	High Dose Rate (HDR) Brachytherapy of Ear using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91099Z	High Dose Rate (HDR) Brachytherapy of Ear using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D9109BZ	High Dose Rate (HDR) Brachytherapy of Ear using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D9109CZ	High Dose Rate (HDR) Brachytherapy of Ear using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D9109YZ	High Dose Rate (HDR) Brachytherapy of Ear using Other Isotope	Procedure	ICD-10-PCS
D910B7Z	Low Dose Rate (LDR) Brachytherapy of Ear using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D910B8Z	Low Dose Rate (LDR) Brachytherapy of Ear using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D910B9Z	Low Dose Rate (LDR) Brachytherapy of Ear using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D910BBZ	Low Dose Rate (LDR) Brachytherapy of Ear using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D910BCZ	Low Dose Rate (LDR) Brachytherapy of Ear using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D910BYZ	Low Dose Rate (LDR) Brachytherapy of Ear using Other Isotope	Procedure	ICD-10-PCS
D91197Z	High Dose Rate (HDR) Brachytherapy of Nose using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91198Z	High Dose Rate (HDR) Brachytherapy of Nose using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91199Z	High Dose Rate (HDR) Brachytherapy of Nose using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D9119BZ	High Dose Rate (HDR) Brachytherapy of Nose using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D9119CZ	High Dose Rate (HDR) Brachytherapy of Nose using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D9119YZ	High Dose Rate (HDR) Brachytherapy of Nose using Other Isotope	Procedure	ICD-10-PCS
D911B7Z	Low Dose Rate (LDR) Brachytherapy of Nose using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D911B8Z	Low Dose Rate (LDR) Brachytherapy of Nose using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D911B9Z	Low Dose Rate (LDR) Brachytherapy of Nose using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D911BBZ	Low Dose Rate (LDR) Brachytherapy of Nose using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D911BCZ	Low Dose Rate (LDR) Brachytherapy of Nose using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D911BYZ	Low Dose Rate (LDR) Brachytherapy of Nose using Other Isotope	Procedure	ICD-10-PCS
D91397Z	High Dose Rate (HDR) Brachytherapy of Hypopharynx using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91398Z	High Dose Rate (HDR) Brachytherapy of Hypopharynx using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91399Z	High Dose Rate (HDR) Brachytherapy of Hypopharynx using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D9139BZ	High Dose Rate (HDR) Brachytherapy of Hypopharynx using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D9139CZ	High Dose Rate (HDR) Brachytherapy of Hypopharynx using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D9139YZ	High Dose Rate (HDR) Brachytherapy of Hypopharynx using Other Isotope	Procedure	ICD-10-PCS
D913B7Z	Low Dose Rate (LDR) Brachytherapy of Hypopharynx using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D913B8Z	Low Dose Rate (LDR) Brachytherapy of Hypopharynx using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D913B9Z	Low Dose Rate (LDR) Brachytherapy of Hypopharynx using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D913BBZ	Low Dose Rate (LDR) Brachytherapy of Hypopharynx using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D913BCZ	Low Dose Rate (LDR) Brachytherapy of Hypopharynx using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D913BYZ	Low Dose Rate (LDR) Brachytherapy of Hypopharynx using Other Isotope	Procedure	ICD-10-PCS
D91497Z	High Dose Rate (HDR) Brachytherapy of Mouth using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91498Z	High Dose Rate (HDR) Brachytherapy of Mouth using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91499Z	High Dose Rate (HDR) Brachytherapy of Mouth using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D9149BZ	High Dose Rate (HDR) Brachytherapy of Mouth using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D9149CZ	High Dose Rate (HDR) Brachytherapy of Mouth using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D9149YZ	High Dose Rate (HDR) Brachytherapy of Mouth using Other Isotope	Procedure	ICD-10-PCS
D914B7Z	Low Dose Rate (LDR) Brachytherapy of Mouth using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D914B8Z	Low Dose Rate (LDR) Brachytherapy of Mouth using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D914B9Z	Low Dose Rate (LDR) Brachytherapy of Mouth using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D914BBZ	Low Dose Rate (LDR) Brachytherapy of Mouth using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D914BCZ	Low Dose Rate (LDR) Brachytherapy of Mouth using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D914BYZ	Low Dose Rate (LDR) Brachytherapy of Mouth using Other Isotope	Procedure	ICD-10-PCS
D91597Z	High Dose Rate (HDR) Brachytherapy of Tongue using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91598Z	High Dose Rate (HDR) Brachytherapy of Tongue using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91599Z	High Dose Rate (HDR) Brachytherapy of Tongue using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D9159BZ	High Dose Rate (HDR) Brachytherapy of Tongue using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D9159CZ	High Dose Rate (HDR) Brachytherapy of Tongue using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D9159YZ	High Dose Rate (HDR) Brachytherapy of Tongue using Other Isotope	Procedure	ICD-10-PCS
D915B7Z	Low Dose Rate (LDR) Brachytherapy of Tongue using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D915B8Z	Low Dose Rate (LDR) Brachytherapy of Tongue using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D915B9Z	Low Dose Rate (LDR) Brachytherapy of Tongue using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D915BBZ	Low Dose Rate (LDR) Brachytherapy of Tongue using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D915BCZ	Low Dose Rate (LDR) Brachytherapy of Tongue using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D915BYZ	Low Dose Rate (LDR) Brachytherapy of Tongue using Other Isotope	Procedure	ICD-10-PCS
D91697Z	High Dose Rate (HDR) Brachytherapy of Salivary Glands using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91698Z	High Dose Rate (HDR) Brachytherapy of Salivary Glands using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91699Z	High Dose Rate (HDR) Brachytherapy of Salivary Glands using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D9169BZ	High Dose Rate (HDR) Brachytherapy of Salivary Glands using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D9169CZ	High Dose Rate (HDR) Brachytherapy of Salivary Glands using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D9169YZ	High Dose Rate (HDR) Brachytherapy of Salivary Glands using Other Isotope	Procedure	ICD-10-PCS
D916B7Z	Low Dose Rate (LDR) Brachytherapy of Salivary Glands using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D916B8Z	Low Dose Rate (LDR) Brachytherapy of Salivary Glands using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D916B9Z	Low Dose Rate (LDR) Brachytherapy of Salivary Glands using Iodine 125 (I-125)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D916BBZ	Low Dose Rate (LDR) Brachytherapy of Salivary Glands using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D916BCZ	Low Dose Rate (LDR) Brachytherapy of Salivary Glands using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D916BYZ	Low Dose Rate (LDR) Brachytherapy of Salivary Glands using Other Isotope	Procedure	ICD-10-PCS
D91797Z	High Dose Rate (HDR) Brachytherapy of Sinuses using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91798Z	High Dose Rate (HDR) Brachytherapy of Sinuses using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91799Z	High Dose Rate (HDR) Brachytherapy of Sinuses using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D9179BZ	High Dose Rate (HDR) Brachytherapy of Sinuses using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D9179CZ	High Dose Rate (HDR) Brachytherapy of Sinuses using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D9179YZ	High Dose Rate (HDR) Brachytherapy of Sinuses using Other Isotope	Procedure	ICD-10-PCS
D917B7Z	Low Dose Rate (LDR) Brachytherapy of Sinuses using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D917B8Z	Low Dose Rate (LDR) Brachytherapy of Sinuses using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D917B9Z	Low Dose Rate (LDR) Brachytherapy of Sinuses using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D917BBZ	Low Dose Rate (LDR) Brachytherapy of Sinuses using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D917BCZ	Low Dose Rate (LDR) Brachytherapy of Sinuses using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D917BYZ	Low Dose Rate (LDR) Brachytherapy of Sinuses using Other Isotope	Procedure	ICD-10-PCS
D91897Z	High Dose Rate (HDR) Brachytherapy of Hard Palate using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91898Z	High Dose Rate (HDR) Brachytherapy of Hard Palate using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91899Z	High Dose Rate (HDR) Brachytherapy of Hard Palate using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D9189BZ	High Dose Rate (HDR) Brachytherapy of Hard Palate using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D9189CZ	High Dose Rate (HDR) Brachytherapy of Hard Palate using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D9189YZ	High Dose Rate (HDR) Brachytherapy of Hard Palate using Other Isotope	Procedure	ICD-10-PCS
D918B7Z	Low Dose Rate (LDR) Brachytherapy of Hard Palate using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D918B8Z	Low Dose Rate (LDR) Brachytherapy of Hard Palate using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D918B9Z	Low Dose Rate (LDR) Brachytherapy of Hard Palate using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D918BBZ	Low Dose Rate (LDR) Brachytherapy of Hard Palate using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D918BCZ	Low Dose Rate (LDR) Brachytherapy of Hard Palate using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D918BYZ	Low Dose Rate (LDR) Brachytherapy of Hard Palate using Other Isotope	Procedure	ICD-10-PCS
D91997Z	High Dose Rate (HDR) Brachytherapy of Soft Palate using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91998Z	High Dose Rate (HDR) Brachytherapy of Soft Palate using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91999Z	High Dose Rate (HDR) Brachytherapy of Soft Palate using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D9199BZ	High Dose Rate (HDR) Brachytherapy of Soft Palate using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D9199CZ	High Dose Rate (HDR) Brachytherapy of Soft Palate using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D9199YZ	High Dose Rate (HDR) Brachytherapy of Soft Palate using Other Isotope	Procedure	ICD-10-PCS
D919B7Z	Low Dose Rate (LDR) Brachytherapy of Soft Palate using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D919B8Z	Low Dose Rate (LDR) Brachytherapy of Soft Palate using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D919B9Z	Low Dose Rate (LDR) Brachytherapy of Soft Palate using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D919BBZ	Low Dose Rate (LDR) Brachytherapy of Soft Palate using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D919BCZ	Low Dose Rate (LDR) Brachytherapy of Soft Palate using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D919BYZ	Low Dose Rate (LDR) Brachytherapy of Soft Palate using Other Isotope	Procedure	ICD-10-PCS
D91B97Z	High Dose Rate (HDR) Brachytherapy of Larynx using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91B98Z	High Dose Rate (HDR) Brachytherapy of Larynx using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91B99Z	High Dose Rate (HDR) Brachytherapy of Larynx using Iodine 125 (I-125)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D91B9BZ	High Dose Rate (HDR) Brachytherapy of Larynx using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D91B9CZ	High Dose Rate (HDR) Brachytherapy of Larynx using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D91B9YZ	High Dose Rate (HDR) Brachytherapy of Larynx using Other Isotope	Procedure	ICD-10-PCS
D91BB7Z	Low Dose Rate (LDR) Brachytherapy of Larynx using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91BB8Z	Low Dose Rate (LDR) Brachytherapy of Larynx using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91BB9Z	Low Dose Rate (LDR) Brachytherapy of Larynx using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D91BBBZ	Low Dose Rate (LDR) Brachytherapy of Larynx using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D91BBCZ	Low Dose Rate (LDR) Brachytherapy of Larynx using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D91BBYZ	Low Dose Rate (LDR) Brachytherapy of Larynx using Other Isotope	Procedure	ICD-10-PCS
D91D97Z	High Dose Rate (HDR) Brachytherapy of Nasopharynx using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91D98Z	High Dose Rate (HDR) Brachytherapy of Nasopharynx using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91D99Z	High Dose Rate (HDR) Brachytherapy of Nasopharynx using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D91D9BZ	High Dose Rate (HDR) Brachytherapy of Nasopharynx using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D91D9CZ	High Dose Rate (HDR) Brachytherapy of Nasopharynx using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D91D9YZ	High Dose Rate (HDR) Brachytherapy of Nasopharynx using Other Isotope	Procedure	ICD-10-PCS
D91DB7Z	Low Dose Rate (LDR) Brachytherapy of Nasopharynx using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91DB8Z	Low Dose Rate (LDR) Brachytherapy of Nasopharynx using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91DB9Z	Low Dose Rate (LDR) Brachytherapy of Nasopharynx using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D91DBBZ	Low Dose Rate (LDR) Brachytherapy of Nasopharynx using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D91DBCZ	Low Dose Rate (LDR) Brachytherapy of Nasopharynx using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D91DBYZ	Low Dose Rate (LDR) Brachytherapy of Nasopharynx using Other Isotope	Procedure	ICD-10-PCS
D91F97Z	High Dose Rate (HDR) Brachytherapy of Oropharynx using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91F98Z	High Dose Rate (HDR) Brachytherapy of Oropharynx using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91F99Z	High Dose Rate (HDR) Brachytherapy of Oropharynx using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D91F9BZ	High Dose Rate (HDR) Brachytherapy of Oropharynx using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D91F9CZ	High Dose Rate (HDR) Brachytherapy of Oropharynx using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D91F9YZ	High Dose Rate (HDR) Brachytherapy of Oropharynx using Other Isotope	Procedure	ICD-10-PCS
D91FB7Z	Low Dose Rate (LDR) Brachytherapy of Oropharynx using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
D91FB8Z	Low Dose Rate (LDR) Brachytherapy of Oropharynx using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
D91FB9Z	Low Dose Rate (LDR) Brachytherapy of Oropharynx using Iodine 125 (I-125)	Procedure	ICD-10-PCS
D91FBBZ	Low Dose Rate (LDR) Brachytherapy of Oropharynx using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
D91FBCZ	Low Dose Rate (LDR) Brachytherapy of Oropharynx using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
D91FBYZ	Low Dose Rate (LDR) Brachytherapy of Oropharynx using Other Isotope	Procedure	ICD-10-PCS
D9Y07ZZ	Contact Radiation of Ear	Procedure	ICD-10-PCS
D9Y0FZZ	Plaque Radiation of Ear	Procedure	ICD-10-PCS
D9Y17ZZ	Contact Radiation of Nose	Procedure	ICD-10-PCS
D9Y1FZZ	Plaque Radiation of Nose	Procedure	ICD-10-PCS
D9Y37ZZ	Contact Radiation of Hypopharynx	Procedure	ICD-10-PCS
D9Y47ZZ	Contact Radiation of Mouth	Procedure	ICD-10-PCS
D9Y4CZZ	Intraoperative Radiation Therapy (IORT) of Mouth	Procedure	ICD-10-PCS
D9Y4FZZ	Plaque Radiation of Mouth	Procedure	ICD-10-PCS
D9Y57ZZ	Contact Radiation of Tongue	Procedure	ICD-10-PCS
D9Y5FZZ	Plaque Radiation of Tongue	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D9Y67ZZ	Contact Radiation of Salivary Glands	Procedure	ICD-10-PCS
D9Y6FZZ	Plaque Radiation of Salivary Glands	Procedure	ICD-10-PCS
D9Y77ZZ	Contact Radiation of Sinuses	Procedure	ICD-10-PCS
D9Y7FZZ	Plaque Radiation of Sinuses	Procedure	ICD-10-PCS
D9Y87ZZ	Contact Radiation of Hard Palate	Procedure	ICD-10-PCS
D9Y8FZZ	Plaque Radiation of Hard Palate	Procedure	ICD-10-PCS
D9Y97ZZ	Contact Radiation of Soft Palate	Procedure	ICD-10-PCS
D9Y9FZZ	Plaque Radiation of Soft Palate	Procedure	ICD-10-PCS
D9YB7ZZ	Contact Radiation of Larynx	Procedure	ICD-10-PCS
D9YBCZZ	Intraoperative Radiation Therapy (IORT) of Larynx	Procedure	ICD-10-PCS
D9YBFZZ	Plaque Radiation of Larynx	Procedure	ICD-10-PCS
D9YCCZZ	Intraoperative Radiation Therapy (IORT) of Pharynx	Procedure	ICD-10-PCS
D9YCFZZ	Plaque Radiation of Pharynx	Procedure	ICD-10-PCS
D9YD7ZZ	Contact Radiation of Nasopharynx	Procedure	ICD-10-PCS
D9YDCZZ	Intraoperative Radiation Therapy (IORT) of Nasopharynx	Procedure	ICD-10-PCS
D9YDFZZ	Plaque Radiation of Nasopharynx	Procedure	ICD-10-PCS
D9YF7ZZ	Contact Radiation of Oropharynx	Procedure	ICD-10-PCS
DB000ZZ	Beam Radiation of Trachea using Photons <1 MeV	Procedure	ICD-10-PCS
DB001ZZ	Beam Radiation of Trachea using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DB002ZZ	Beam Radiation of Trachea using Photons >10 MeV	Procedure	ICD-10-PCS
DB003ZZ	Beam Radiation of Trachea using Electrons	Procedure	ICD-10-PCS
DB004ZZ	Beam Radiation of Trachea using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DB005ZZ	Beam Radiation of Trachea using Neutrons	Procedure	ICD-10-PCS
DB006ZZ	Beam Radiation of Trachea using Neutron Capture	Procedure	ICD-10-PCS
DB010ZZ	Beam Radiation of Bronchus using Photons <1 MeV	Procedure	ICD-10-PCS
DB011ZZ	Beam Radiation of Bronchus using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DB012ZZ	Beam Radiation of Bronchus using Photons >10 MeV	Procedure	ICD-10-PCS
DB013ZZ	Beam Radiation of Bronchus using Electrons	Procedure	ICD-10-PCS
DB014ZZ	Beam Radiation of Bronchus using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DB015ZZ	Beam Radiation of Bronchus using Neutrons	Procedure	ICD-10-PCS
DB016ZZ	Beam Radiation of Bronchus using Neutron Capture	Procedure	ICD-10-PCS
DB020ZZ	Beam Radiation of Lung using Photons <1 MeV	Procedure	ICD-10-PCS
DB021ZZ	Beam Radiation of Lung using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DB022ZZ	Beam Radiation of Lung using Photons >10 MeV	Procedure	ICD-10-PCS
DB023ZZ	Beam Radiation of Lung using Electrons	Procedure	ICD-10-PCS
DB024ZZ	Beam Radiation of Lung using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DB025ZZ	Beam Radiation of Lung using Neutrons	Procedure	ICD-10-PCS
DB026ZZ	Beam Radiation of Lung using Neutron Capture	Procedure	ICD-10-PCS
DB050ZZ	Beam Radiation of Pleura using Photons <1 MeV	Procedure	ICD-10-PCS
DB051ZZ	Beam Radiation of Pleura using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DB052ZZ	Beam Radiation of Pleura using Photons >10 MeV	Procedure	ICD-10-PCS
DB053ZZ	Beam Radiation of Pleura using Electrons	Procedure	ICD-10-PCS
DB054ZZ	Beam Radiation of Pleura using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DB055ZZ	Beam Radiation of Pleura using Neutrons	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DB056ZZ	Beam Radiation of Pleura using Neutron Capture	Procedure	ICD-10-PCS
DB060ZZ	Beam Radiation of Mediastinum using Photons <1 MeV	Procedure	ICD-10-PCS
DB061ZZ	Beam Radiation of Mediastinum using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DB062ZZ	Beam Radiation of Mediastinum using Photons >10 MeV	Procedure	ICD-10-PCS
DB063ZZ	Beam Radiation of Mediastinum using Electrons	Procedure	ICD-10-PCS
DB064ZZ	Beam Radiation of Mediastinum using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DB065ZZ	Beam Radiation of Mediastinum using Neutrons	Procedure	ICD-10-PCS
DB066ZZ	Beam Radiation of Mediastinum using Neutron Capture	Procedure	ICD-10-PCS
DB070ZZ	Beam Radiation of Chest Wall using Photons <1 MeV	Procedure	ICD-10-PCS
DB071ZZ	Beam Radiation of Chest Wall using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DB072ZZ	Beam Radiation of Chest Wall using Photons >10 MeV	Procedure	ICD-10-PCS
DB073ZZ	Beam Radiation of Chest Wall using Electrons	Procedure	ICD-10-PCS
DB074ZZ	Beam Radiation of Chest Wall using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DB075ZZ	Beam Radiation of Chest Wall using Neutrons	Procedure	ICD-10-PCS
DB076ZZ	Beam Radiation of Chest Wall using Neutron Capture	Procedure	ICD-10-PCS
DB080ZZ	Beam Radiation of Diaphragm using Photons <1 MeV	Procedure	ICD-10-PCS
DB081ZZ	Beam Radiation of Diaphragm using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DB082ZZ	Beam Radiation of Diaphragm using Photons >10 MeV	Procedure	ICD-10-PCS
DB083ZZ	Beam Radiation of Diaphragm using Electrons	Procedure	ICD-10-PCS
DB084ZZ	Beam Radiation of Diaphragm using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DB085ZZ	Beam Radiation of Diaphragm using Neutrons	Procedure	ICD-10-PCS
DB086ZZ	Beam Radiation of Diaphragm using Neutron Capture	Procedure	ICD-10-PCS
DB1097Z	High Dose Rate (HDR) Brachytherapy of Trachea using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB1098Z	High Dose Rate (HDR) Brachytherapy of Trachea using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB1099Z	High Dose Rate (HDR) Brachytherapy of Trachea using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB109BZ	High Dose Rate (HDR) Brachytherapy of Trachea using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DB109CZ	High Dose Rate (HDR) Brachytherapy of Trachea using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DB109YZ	High Dose Rate (HDR) Brachytherapy of Trachea using Other Isotope	Procedure	ICD-10-PCS
DB10B7Z	Low Dose Rate (LDR) Brachytherapy of Trachea using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB10B8Z	Low Dose Rate (LDR) Brachytherapy of Trachea using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB10B9Z	Low Dose Rate (LDR) Brachytherapy of Trachea using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB10BBZ	Low Dose Rate (LDR) Brachytherapy of Trachea using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DB10BCZ	Low Dose Rate (LDR) Brachytherapy of Trachea using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DB10BYZ	Low Dose Rate (LDR) Brachytherapy of Trachea using Other Isotope	Procedure	ICD-10-PCS
DB1197Z	High Dose Rate (HDR) Brachytherapy of Bronchus using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB1198Z	High Dose Rate (HDR) Brachytherapy of Bronchus using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB1199Z	High Dose Rate (HDR) Brachytherapy of Bronchus using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB119BZ	High Dose Rate (HDR) Brachytherapy of Bronchus using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DB119CZ	High Dose Rate (HDR) Brachytherapy of Bronchus using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DB119YZ	High Dose Rate (HDR) Brachytherapy of Bronchus using Other Isotope	Procedure	ICD-10-PCS
DB11B7Z	Low Dose Rate (LDR) Brachytherapy of Bronchus using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB11B8Z	Low Dose Rate (LDR) Brachytherapy of Bronchus using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB11B9Z	Low Dose Rate (LDR) Brachytherapy of Bronchus using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB11BBZ	Low Dose Rate (LDR) Brachytherapy of Bronchus using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DB11BCZ	Low Dose Rate (LDR) Brachytherapy of Bronchus using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DB11BYZ	Low Dose Rate (LDR) Brachytherapy of Bronchus using Other Isotope	Procedure	ICD-10-PCS
DB1297Z	High Dose Rate (HDR) Brachytherapy of Lung using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB1298Z	High Dose Rate (HDR) Brachytherapy of Lung using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB1299Z	High Dose Rate (HDR) Brachytherapy of Lung using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB129BZ	High Dose Rate (HDR) Brachytherapy of Lung using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DB129CZ	High Dose Rate (HDR) Brachytherapy of Lung using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DB129YZ	High Dose Rate (HDR) Brachytherapy of Lung using Other Isotope	Procedure	ICD-10-PCS
DB12B7Z	Low Dose Rate (LDR) Brachytherapy of Lung using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB12B8Z	Low Dose Rate (LDR) Brachytherapy of Lung using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB12B9Z	Low Dose Rate (LDR) Brachytherapy of Lung using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB12BBZ	Low Dose Rate (LDR) Brachytherapy of Lung using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DB12BCZ	Low Dose Rate (LDR) Brachytherapy of Lung using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DB12BYZ	Low Dose Rate (LDR) Brachytherapy of Lung using Other Isotope	Procedure	ICD-10-PCS
DB1597Z	High Dose Rate (HDR) Brachytherapy of Pleura using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB1598Z	High Dose Rate (HDR) Brachytherapy of Pleura using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB1599Z	High Dose Rate (HDR) Brachytherapy of Pleura using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB159BZ	High Dose Rate (HDR) Brachytherapy of Pleura using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DB159CZ	High Dose Rate (HDR) Brachytherapy of Pleura using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DB159YZ	High Dose Rate (HDR) Brachytherapy of Pleura using Other Isotope	Procedure	ICD-10-PCS
DB15B7Z	Low Dose Rate (LDR) Brachytherapy of Pleura using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB15B8Z	Low Dose Rate (LDR) Brachytherapy of Pleura using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB15B9Z	Low Dose Rate (LDR) Brachytherapy of Pleura using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB15BBZ	Low Dose Rate (LDR) Brachytherapy of Pleura using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DB15BCZ	Low Dose Rate (LDR) Brachytherapy of Pleura using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DB15BYZ	Low Dose Rate (LDR) Brachytherapy of Pleura using Other Isotope	Procedure	ICD-10-PCS
DB1697Z	High Dose Rate (HDR) Brachytherapy of Mediastinum using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB1698Z	High Dose Rate (HDR) Brachytherapy of Mediastinum using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB1699Z	High Dose Rate (HDR) Brachytherapy of Mediastinum using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB169BZ	High Dose Rate (HDR) Brachytherapy of Mediastinum using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DB169CZ	High Dose Rate (HDR) Brachytherapy of Mediastinum using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DB169YZ	High Dose Rate (HDR) Brachytherapy of Mediastinum using Other Isotope	Procedure	ICD-10-PCS
DB16B7Z	Low Dose Rate (LDR) Brachytherapy of Mediastinum using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB16B8Z	Low Dose Rate (LDR) Brachytherapy of Mediastinum using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB16B9Z	Low Dose Rate (LDR) Brachytherapy of Mediastinum using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB16BBZ	Low Dose Rate (LDR) Brachytherapy of Mediastinum using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DB16BCZ	Low Dose Rate (LDR) Brachytherapy of Mediastinum using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DB16BYZ	Low Dose Rate (LDR) Brachytherapy of Mediastinum using Other Isotope	Procedure	ICD-10-PCS
DB1797Z	High Dose Rate (HDR) Brachytherapy of Chest Wall using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB1798Z	High Dose Rate (HDR) Brachytherapy of Chest Wall using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB1799Z	High Dose Rate (HDR) Brachytherapy of Chest Wall using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB179BZ	High Dose Rate (HDR) Brachytherapy of Chest Wall using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DB179CZ	High Dose Rate (HDR) Brachytherapy of Chest Wall using Californium 252 (Cf-252)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DB179YZ	High Dose Rate (HDR) Brachytherapy of Chest Wall using Other Isotope	Procedure	ICD-10-PCS
DB17B7Z	Low Dose Rate (LDR) Brachytherapy of Chest Wall using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB17B8Z	Low Dose Rate (LDR) Brachytherapy of Chest Wall using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB17B9Z	Low Dose Rate (LDR) Brachytherapy of Chest Wall using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB17BBZ	Low Dose Rate (LDR) Brachytherapy of Chest Wall using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DB17BCZ	Low Dose Rate (LDR) Brachytherapy of Chest Wall using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DB17BYZ	Low Dose Rate (LDR) Brachytherapy of Chest Wall using Other Isotope	Procedure	ICD-10-PCS
DB1897Z	High Dose Rate (HDR) Brachytherapy of Diaphragm using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB1898Z	High Dose Rate (HDR) Brachytherapy of Diaphragm using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB1899Z	High Dose Rate (HDR) Brachytherapy of Diaphragm using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB189BZ	High Dose Rate (HDR) Brachytherapy of Diaphragm using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DB189CZ	High Dose Rate (HDR) Brachytherapy of Diaphragm using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DB189YZ	High Dose Rate (HDR) Brachytherapy of Diaphragm using Other Isotope	Procedure	ICD-10-PCS
DB18B7Z	Low Dose Rate (LDR) Brachytherapy of Diaphragm using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DB18B8Z	Low Dose Rate (LDR) Brachytherapy of Diaphragm using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DB18B9Z	Low Dose Rate (LDR) Brachytherapy of Diaphragm using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DB18BBZ	Low Dose Rate (LDR) Brachytherapy of Diaphragm using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DB18BCZ	Low Dose Rate (LDR) Brachytherapy of Diaphragm using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DB18BYZ	Low Dose Rate (LDR) Brachytherapy of Diaphragm using Other Isotope	Procedure	ICD-10-PCS
DBY07ZZ	Contact Radiation of Trachea	Procedure	ICD-10-PCS
DBY0FZZ	Plaque Radiation of Trachea	Procedure	ICD-10-PCS
DBY17ZZ	Contact Radiation of Bronchus	Procedure	ICD-10-PCS
DBY1FZZ	Plaque Radiation of Bronchus	Procedure	ICD-10-PCS
DBY27ZZ	Contact Radiation of Lung	Procedure	ICD-10-PCS
DBY2FZZ	Plaque Radiation of Lung	Procedure	ICD-10-PCS
DBY57ZZ	Contact Radiation of Pleura	Procedure	ICD-10-PCS
DBY5FZZ	Plaque Radiation of Pleura	Procedure	ICD-10-PCS
DBY67ZZ	Contact Radiation of Mediastinum	Procedure	ICD-10-PCS
DBY6FZZ	Plaque Radiation of Mediastinum	Procedure	ICD-10-PCS
DBY77ZZ	Contact Radiation of Chest Wall	Procedure	ICD-10-PCS
DBY7FZZ	Plaque Radiation of Chest Wall	Procedure	ICD-10-PCS
DBY87ZZ	Contact Radiation of Diaphragm	Procedure	ICD-10-PCS
DBY8FZZ	Plaque Radiation of Diaphragm	Procedure	ICD-10-PCS
DD000ZZ	Beam Radiation of Esophagus using Photons <1 MeV	Procedure	ICD-10-PCS
DD001ZZ	Beam Radiation of Esophagus using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DD002ZZ	Beam Radiation of Esophagus using Photons >10 MeV	Procedure	ICD-10-PCS
DD003ZZ	Beam Radiation of Esophagus using Electrons	Procedure	ICD-10-PCS
DD004ZZ	Beam Radiation of Esophagus using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DD005ZZ	Beam Radiation of Esophagus using Neutrons	Procedure	ICD-10-PCS
DD006ZZ	Beam Radiation of Esophagus using Neutron Capture	Procedure	ICD-10-PCS
DD010ZZ	Beam Radiation of Stomach using Photons <1 MeV	Procedure	ICD-10-PCS
DD011ZZ	Beam Radiation of Stomach using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DD012ZZ	Beam Radiation of Stomach using Photons >10 MeV	Procedure	ICD-10-PCS
DD013ZZ	Beam Radiation of Stomach using Electrons	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DD014ZZ	Beam Radiation of Stomach using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DD015ZZ	Beam Radiation of Stomach using Neutrons	Procedure	ICD-10-PCS
DD016ZZ	Beam Radiation of Stomach using Neutron Capture	Procedure	ICD-10-PCS
DD020ZZ	Beam Radiation of Duodenum using Photons <1 MeV	Procedure	ICD-10-PCS
DD021ZZ	Beam Radiation of Duodenum using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DD022ZZ	Beam Radiation of Duodenum using Photons >10 MeV	Procedure	ICD-10-PCS
DD023ZZ	Beam Radiation of Duodenum using Electrons	Procedure	ICD-10-PCS
DD024ZZ	Beam Radiation of Duodenum using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DD025ZZ	Beam Radiation of Duodenum using Neutrons	Procedure	ICD-10-PCS
DD026ZZ	Beam Radiation of Duodenum using Neutron Capture	Procedure	ICD-10-PCS
DD030ZZ	Beam Radiation of Jejunum using Photons <1 MeV	Procedure	ICD-10-PCS
DD031ZZ	Beam Radiation of Jejunum using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DD032ZZ	Beam Radiation of Jejunum using Photons >10 MeV	Procedure	ICD-10-PCS
DD033ZZ	Beam Radiation of Jejunum using Electrons	Procedure	ICD-10-PCS
DD034ZZ	Beam Radiation of Jejunum using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DD035ZZ	Beam Radiation of Jejunum using Neutrons	Procedure	ICD-10-PCS
DD036ZZ	Beam Radiation of Jejunum using Neutron Capture	Procedure	ICD-10-PCS
DD040ZZ	Beam Radiation of Ileum using Photons <1 MeV	Procedure	ICD-10-PCS
DD041ZZ	Beam Radiation of Ileum using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DD042ZZ	Beam Radiation of Ileum using Photons >10 MeV	Procedure	ICD-10-PCS
DD043ZZ	Beam Radiation of Ileum using Electrons	Procedure	ICD-10-PCS
DD044ZZ	Beam Radiation of Ileum using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DD045ZZ	Beam Radiation of Ileum using Neutrons	Procedure	ICD-10-PCS
DD046ZZ	Beam Radiation of Ileum using Neutron Capture	Procedure	ICD-10-PCS
DD050ZZ	Beam Radiation of Colon using Photons <1 MeV	Procedure	ICD-10-PCS
DD051ZZ	Beam Radiation of Colon using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DD052ZZ	Beam Radiation of Colon using Photons >10 MeV	Procedure	ICD-10-PCS
DD053ZZ	Beam Radiation of Colon using Electrons	Procedure	ICD-10-PCS
DD054ZZ	Beam Radiation of Colon using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DD055ZZ	Beam Radiation of Colon using Neutrons	Procedure	ICD-10-PCS
DD056ZZ	Beam Radiation of Colon using Neutron Capture	Procedure	ICD-10-PCS
DD070ZZ	Beam Radiation of Rectum using Photons <1 MeV	Procedure	ICD-10-PCS
DD071ZZ	Beam Radiation of Rectum using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DD072ZZ	Beam Radiation of Rectum using Photons >10 MeV	Procedure	ICD-10-PCS
DD073ZZ	Beam Radiation of Rectum using Electrons	Procedure	ICD-10-PCS
DD074ZZ	Beam Radiation of Rectum using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DD075ZZ	Beam Radiation of Rectum using Neutrons	Procedure	ICD-10-PCS
DD076ZZ	Beam Radiation of Rectum using Neutron Capture	Procedure	ICD-10-PCS
DD1097Z	High Dose Rate (HDR) Brachytherapy of Esophagus using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD1098Z	High Dose Rate (HDR) Brachytherapy of Esophagus using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DD1099Z	High Dose Rate (HDR) Brachytherapy of Esophagus using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD109BZ	High Dose Rate (HDR) Brachytherapy of Esophagus using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD109CZ	High Dose Rate (HDR) Brachytherapy of Esophagus using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD109YZ	High Dose Rate (HDR) Brachytherapy of Esophagus using Other Isotope	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DD10B7Z	Low Dose Rate (LDR) Brachytherapy of Esophagus using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD10B8Z	Low Dose Rate (LDR) Brachytherapy of Esophagus using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DD10B9Z	Low Dose Rate (LDR) Brachytherapy of Esophagus using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD10BBZ	Low Dose Rate (LDR) Brachytherapy of Esophagus using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD10BCZ	Low Dose Rate (LDR) Brachytherapy of Esophagus using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD10BYZ	Low Dose Rate (LDR) Brachytherapy of Esophagus using Other Isotope	Procedure	ICD-10-PCS
DD1197Z	High Dose Rate (HDR) Brachytherapy of Stomach using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD1198Z	High Dose Rate (HDR) Brachytherapy of Stomach using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DD1199Z	High Dose Rate (HDR) Brachytherapy of Stomach using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD119BZ	High Dose Rate (HDR) Brachytherapy of Stomach using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD119CZ	High Dose Rate (HDR) Brachytherapy of Stomach using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD119YZ	High Dose Rate (HDR) Brachytherapy of Stomach using Other Isotope	Procedure	ICD-10-PCS
DD11B7Z	Low Dose Rate (LDR) Brachytherapy of Stomach using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD11B8Z	Low Dose Rate (LDR) Brachytherapy of Stomach using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DD11B9Z	Low Dose Rate (LDR) Brachytherapy of Stomach using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD11BBZ	Low Dose Rate (LDR) Brachytherapy of Stomach using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD11BCZ	Low Dose Rate (LDR) Brachytherapy of Stomach using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD11BYZ	Low Dose Rate (LDR) Brachytherapy of Stomach using Other Isotope	Procedure	ICD-10-PCS
DD1297Z	High Dose Rate (HDR) Brachytherapy of Duodenum using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD1298Z	High Dose Rate (HDR) Brachytherapy of Duodenum using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DD1299Z	High Dose Rate (HDR) Brachytherapy of Duodenum using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD129BZ	High Dose Rate (HDR) Brachytherapy of Duodenum using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD129CZ	High Dose Rate (HDR) Brachytherapy of Duodenum using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD129YZ	High Dose Rate (HDR) Brachytherapy of Duodenum using Other Isotope	Procedure	ICD-10-PCS
DD12B7Z	Low Dose Rate (LDR) Brachytherapy of Duodenum using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD12B8Z	Low Dose Rate (LDR) Brachytherapy of Duodenum using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DD12B9Z	Low Dose Rate (LDR) Brachytherapy of Duodenum using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD12BBZ	Low Dose Rate (LDR) Brachytherapy of Duodenum using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD12BCZ	Low Dose Rate (LDR) Brachytherapy of Duodenum using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD12BYZ	Low Dose Rate (LDR) Brachytherapy of Duodenum using Other Isotope	Procedure	ICD-10-PCS
DD1397Z	High Dose Rate (HDR) Brachytherapy of Jejunum using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD1398Z	High Dose Rate (HDR) Brachytherapy of Jejunum using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DD1399Z	High Dose Rate (HDR) Brachytherapy of Jejunum using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD139BZ	High Dose Rate (HDR) Brachytherapy of Jejunum using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD139CZ	High Dose Rate (HDR) Brachytherapy of Jejunum using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD139YZ	High Dose Rate (HDR) Brachytherapy of Jejunum using Other Isotope	Procedure	ICD-10-PCS
DD13B7Z	Low Dose Rate (LDR) Brachytherapy of Jejunum using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD13B8Z	Low Dose Rate (LDR) Brachytherapy of Jejunum using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DD13B9Z	Low Dose Rate (LDR) Brachytherapy of Jejunum using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD13BBZ	Low Dose Rate (LDR) Brachytherapy of Jejunum using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD13BCZ	Low Dose Rate (LDR) Brachytherapy of Jejunum using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD13BYZ	Low Dose Rate (LDR) Brachytherapy of Jejunum using Other Isotope	Procedure	ICD-10-PCS
DD1497Z	High Dose Rate (HDR) Brachytherapy of Ileum using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD1498Z	High Dose Rate (HDR) Brachytherapy of Ileum using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DD1499Z	High Dose Rate (HDR) Brachytherapy of Ileum using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD149BZ	High Dose Rate (HDR) Brachytherapy of Ileum using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD149CZ	High Dose Rate (HDR) Brachytherapy of Ileum using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD149YZ	High Dose Rate (HDR) Brachytherapy of Ileum using Other Isotope	Procedure	ICD-10-PCS
DD14B7Z	Low Dose Rate (LDR) Brachytherapy of Ileum using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD14B8Z	Low Dose Rate (LDR) Brachytherapy of Ileum using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DD14B9Z	Low Dose Rate (LDR) Brachytherapy of Ileum using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD14BBZ	Low Dose Rate (LDR) Brachytherapy of Ileum using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD14BCZ	Low Dose Rate (LDR) Brachytherapy of Ileum using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD14BYZ	Low Dose Rate (LDR) Brachytherapy of Ileum using Other Isotope	Procedure	ICD-10-PCS
DD1597Z	High Dose Rate (HDR) Brachytherapy of Colon using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD1598Z	High Dose Rate (HDR) Brachytherapy of Colon using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DD1599Z	High Dose Rate (HDR) Brachytherapy of Colon using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD159BZ	High Dose Rate (HDR) Brachytherapy of Colon using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD159CZ	High Dose Rate (HDR) Brachytherapy of Colon using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD159YZ	High Dose Rate (HDR) Brachytherapy of Colon using Other Isotope	Procedure	ICD-10-PCS
DD15B7Z	Low Dose Rate (LDR) Brachytherapy of Colon using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD15B8Z	Low Dose Rate (LDR) Brachytherapy of Colon using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DD15B9Z	Low Dose Rate (LDR) Brachytherapy of Colon using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD15BBZ	Low Dose Rate (LDR) Brachytherapy of Colon using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD15BCZ	Low Dose Rate (LDR) Brachytherapy of Colon using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD15BYZ	Low Dose Rate (LDR) Brachytherapy of Colon using Other Isotope	Procedure	ICD-10-PCS
DD1797Z	High Dose Rate (HDR) Brachytherapy of Rectum using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD1798Z	High Dose Rate (HDR) Brachytherapy of Rectum using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DD1799Z	High Dose Rate (HDR) Brachytherapy of Rectum using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD179BZ	High Dose Rate (HDR) Brachytherapy of Rectum using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD179CZ	High Dose Rate (HDR) Brachytherapy of Rectum using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD179YZ	High Dose Rate (HDR) Brachytherapy of Rectum using Other Isotope	Procedure	ICD-10-PCS
DD17B7Z	Low Dose Rate (LDR) Brachytherapy of Rectum using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DD17B8Z	Low Dose Rate (LDR) Brachytherapy of Rectum using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DD17B9Z	Low Dose Rate (LDR) Brachytherapy of Rectum using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DD17BBZ	Low Dose Rate (LDR) Brachytherapy of Rectum using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DD17BCZ	Low Dose Rate (LDR) Brachytherapy of Rectum using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DD17BYZ	Low Dose Rate (LDR) Brachytherapy of Rectum using Other Isotope	Procedure	ICD-10-PCS
DDY07ZZ	Contact Radiation of Esophagus	Procedure	ICD-10-PCS
DDY0FZZ	Plaque Radiation of Esophagus	Procedure	ICD-10-PCS
DDY17ZZ	Contact Radiation of Stomach	Procedure	ICD-10-PCS
DDY1CZZ	Intraoperative Radiation Therapy (IORT) of Stomach	Procedure	ICD-10-PCS
DDY1FZZ	Plaque Radiation of Stomach	Procedure	ICD-10-PCS
DDY27ZZ	Contact Radiation of Duodenum	Procedure	ICD-10-PCS
DDY2CZZ	Intraoperative Radiation Therapy (IORT) of Duodenum	Procedure	ICD-10-PCS
DDY2FZZ	Plaque Radiation of Duodenum	Procedure	ICD-10-PCS
DDY37ZZ	Contact Radiation of Jejunum	Procedure	ICD-10-PCS
DDY3CZZ	Intraoperative Radiation Therapy (IORT) of Jejunum	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DDY3FZZ	Plaque Radiation of Jejunum	Procedure	ICD-10-PCS
DDY47ZZ	Contact Radiation of Ileum	Procedure	ICD-10-PCS
DDY4CZZ	Intraoperative Radiation Therapy (IORT) of Ileum	Procedure	ICD-10-PCS
DDY4FZZ	Plaque Radiation of Ileum	Procedure	ICD-10-PCS
DDY57ZZ	Contact Radiation of Colon	Procedure	ICD-10-PCS
DDY5CZZ	Intraoperative Radiation Therapy (IORT) of Colon	Procedure	ICD-10-PCS
DDY5FZZ	Plaque Radiation of Colon	Procedure	ICD-10-PCS
DDY77ZZ	Contact Radiation of Rectum	Procedure	ICD-10-PCS
DDY7CZZ	Intraoperative Radiation Therapy (IORT) of Rectum	Procedure	ICD-10-PCS
DDY7FZZ	Plaque Radiation of Rectum	Procedure	ICD-10-PCS
DDY8CZZ	Intraoperative Radiation Therapy (IORT) of Anus	Procedure	ICD-10-PCS
DDY8FZZ	Plaque Radiation of Anus	Procedure	ICD-10-PCS
DF000ZZ	Beam Radiation of Liver using Photons <1 MeV	Procedure	ICD-10-PCS
DF001ZZ	Beam Radiation of Liver using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DF002ZZ	Beam Radiation of Liver using Photons >10 MeV	Procedure	ICD-10-PCS
DF003ZZ	Beam Radiation of Liver using Electrons	Procedure	ICD-10-PCS
DF004ZZ	Beam Radiation of Liver using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DF005ZZ	Beam Radiation of Liver using Neutrons	Procedure	ICD-10-PCS
DF006ZZ	Beam Radiation of Liver using Neutron Capture	Procedure	ICD-10-PCS
DF010ZZ	Beam Radiation of Gallbladder using Photons <1 MeV	Procedure	ICD-10-PCS
DF011ZZ	Beam Radiation of Gallbladder using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DF012ZZ	Beam Radiation of Gallbladder using Photons >10 MeV	Procedure	ICD-10-PCS
DF013ZZ	Beam Radiation of Gallbladder using Electrons	Procedure	ICD-10-PCS
DF014ZZ	Beam Radiation of Gallbladder using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DF015ZZ	Beam Radiation of Gallbladder using Neutrons	Procedure	ICD-10-PCS
DF016ZZ	Beam Radiation of Gallbladder using Neutron Capture	Procedure	ICD-10-PCS
DF020ZZ	Beam Radiation of Bile Ducts using Photons <1 MeV	Procedure	ICD-10-PCS
DF021ZZ	Beam Radiation of Bile Ducts using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DF022ZZ	Beam Radiation of Bile Ducts using Photons >10 MeV	Procedure	ICD-10-PCS
DF023ZZ	Beam Radiation of Bile Ducts using Electrons	Procedure	ICD-10-PCS
DF024ZZ	Beam Radiation of Bile Ducts using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DF025ZZ	Beam Radiation of Bile Ducts using Neutrons	Procedure	ICD-10-PCS
DF026ZZ	Beam Radiation of Bile Ducts using Neutron Capture	Procedure	ICD-10-PCS
DF030ZZ	Beam Radiation of Pancreas using Photons <1 MeV	Procedure	ICD-10-PCS
DF031ZZ	Beam Radiation of Pancreas using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DF032ZZ	Beam Radiation of Pancreas using Photons >10 MeV	Procedure	ICD-10-PCS
DF033ZZ	Beam Radiation of Pancreas using Electrons	Procedure	ICD-10-PCS
DF034ZZ	Beam Radiation of Pancreas using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DF035ZZ	Beam Radiation of Pancreas using Neutrons	Procedure	ICD-10-PCS
DF036ZZ	Beam Radiation of Pancreas using Neutron Capture	Procedure	ICD-10-PCS
DF1097Z	High Dose Rate (HDR) Brachytherapy of Liver using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DF1098Z	High Dose Rate (HDR) Brachytherapy of Liver using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DF1099Z	High Dose Rate (HDR) Brachytherapy of Liver using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DF109BZ	High Dose Rate (HDR) Brachytherapy of Liver using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DF109CZ	High Dose Rate (HDR) Brachytherapy of Liver using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DF109YZ	High Dose Rate (HDR) Brachytherapy of Liver using Other Isotope	Procedure	ICD-10-PCS
DF10B7Z	Low Dose Rate (LDR) Brachytherapy of Liver using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DF10B8Z	Low Dose Rate (LDR) Brachytherapy of Liver using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DF10B9Z	Low Dose Rate (LDR) Brachytherapy of Liver using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DF10BBZ	Low Dose Rate (LDR) Brachytherapy of Liver using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DF10BCZ	Low Dose Rate (LDR) Brachytherapy of Liver using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DF10BYZ	Low Dose Rate (LDR) Brachytherapy of Liver using Other Isotope	Procedure	ICD-10-PCS
DF1197Z	High Dose Rate (HDR) Brachytherapy of Gallbladder using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DF1198Z	High Dose Rate (HDR) Brachytherapy of Gallbladder using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DF1199Z	High Dose Rate (HDR) Brachytherapy of Gallbladder using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DF119BZ	High Dose Rate (HDR) Brachytherapy of Gallbladder using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DF119CZ	High Dose Rate (HDR) Brachytherapy of Gallbladder using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DF119YZ	High Dose Rate (HDR) Brachytherapy of Gallbladder using Other Isotope	Procedure	ICD-10-PCS
DF11B7Z	Low Dose Rate (LDR) Brachytherapy of Gallbladder using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DF11B8Z	Low Dose Rate (LDR) Brachytherapy of Gallbladder using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DF11B9Z	Low Dose Rate (LDR) Brachytherapy of Gallbladder using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DF11BBZ	Low Dose Rate (LDR) Brachytherapy of Gallbladder using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DF11BCZ	Low Dose Rate (LDR) Brachytherapy of Gallbladder using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DF11BYZ	Low Dose Rate (LDR) Brachytherapy of Gallbladder using Other Isotope	Procedure	ICD-10-PCS
DF1297Z	High Dose Rate (HDR) Brachytherapy of Bile Ducts using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DF1298Z	High Dose Rate (HDR) Brachytherapy of Bile Ducts using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DF1299Z	High Dose Rate (HDR) Brachytherapy of Bile Ducts using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DF129BZ	High Dose Rate (HDR) Brachytherapy of Bile Ducts using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DF129CZ	High Dose Rate (HDR) Brachytherapy of Bile Ducts using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DF129YZ	High Dose Rate (HDR) Brachytherapy of Bile Ducts using Other Isotope	Procedure	ICD-10-PCS
DF12B7Z	Low Dose Rate (LDR) Brachytherapy of Bile Ducts using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DF12B8Z	Low Dose Rate (LDR) Brachytherapy of Bile Ducts using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DF12B9Z	Low Dose Rate (LDR) Brachytherapy of Bile Ducts using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DF12BBZ	Low Dose Rate (LDR) Brachytherapy of Bile Ducts using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DF12BCZ	Low Dose Rate (LDR) Brachytherapy of Bile Ducts using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DF12BYZ	Low Dose Rate (LDR) Brachytherapy of Bile Ducts using Other Isotope	Procedure	ICD-10-PCS
DF1397Z	High Dose Rate (HDR) Brachytherapy of Pancreas using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DF1398Z	High Dose Rate (HDR) Brachytherapy of Pancreas using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DF1399Z	High Dose Rate (HDR) Brachytherapy of Pancreas using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DF139BZ	High Dose Rate (HDR) Brachytherapy of Pancreas using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DF139CZ	High Dose Rate (HDR) Brachytherapy of Pancreas using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DF139YZ	High Dose Rate (HDR) Brachytherapy of Pancreas using Other Isotope	Procedure	ICD-10-PCS
DF13B7Z	Low Dose Rate (LDR) Brachytherapy of Pancreas using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DF13B8Z	Low Dose Rate (LDR) Brachytherapy of Pancreas using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DF13B9Z	Low Dose Rate (LDR) Brachytherapy of Pancreas using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DF13BBZ	Low Dose Rate (LDR) Brachytherapy of Pancreas using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DF13BCZ	Low Dose Rate (LDR) Brachytherapy of Pancreas using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DF13BYZ	Low Dose Rate (LDR) Brachytherapy of Pancreas using Other Isotope	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DFY07ZZ	Contact Radiation of Liver	Procedure	ICD-10-PCS
DFY0CZZ	Intraoperative Radiation Therapy (IORT) of Liver	Procedure	ICD-10-PCS
DFY0FZZ	Plaque Radiation of Liver	Procedure	ICD-10-PCS
DFY17ZZ	Contact Radiation of Gallbladder	Procedure	ICD-10-PCS
DFY1CZZ	Intraoperative Radiation Therapy (IORT) of Gallbladder	Procedure	ICD-10-PCS
DFY1FZZ	Plaque Radiation of Gallbladder	Procedure	ICD-10-PCS
DFY27ZZ	Contact Radiation of Bile Ducts	Procedure	ICD-10-PCS
DFY2CZZ	Intraoperative Radiation Therapy (IORT) of Bile Ducts	Procedure	ICD-10-PCS
DFY2FZZ	Plaque Radiation of Bile Ducts	Procedure	ICD-10-PCS
DFY37ZZ	Contact Radiation of Pancreas	Procedure	ICD-10-PCS
DFY3CZZ	Intraoperative Radiation Therapy (IORT) of Pancreas	Procedure	ICD-10-PCS
DFY3FZZ	Plaque Radiation of Pancreas	Procedure	ICD-10-PCS
DG000ZZ	Beam Radiation of Pituitary Gland using Photons <1 MeV	Procedure	ICD-10-PCS
DG001ZZ	Beam Radiation of Pituitary Gland using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DG002ZZ	Beam Radiation of Pituitary Gland using Photons >10 MeV	Procedure	ICD-10-PCS
DG003ZZ	Beam Radiation of Pituitary Gland using Electrons	Procedure	ICD-10-PCS
DG005ZZ	Beam Radiation of Pituitary Gland using Neutrons	Procedure	ICD-10-PCS
DG006ZZ	Beam Radiation of Pituitary Gland using Neutron Capture	Procedure	ICD-10-PCS
DG010ZZ	Beam Radiation of Pineal Body using Photons <1 MeV	Procedure	ICD-10-PCS
DG011ZZ	Beam Radiation of Pineal Body using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DG012ZZ	Beam Radiation of Pineal Body using Photons >10 MeV	Procedure	ICD-10-PCS
DG013ZZ	Beam Radiation of Pineal Body using Electrons	Procedure	ICD-10-PCS
DG015ZZ	Beam Radiation of Pineal Body using Neutrons	Procedure	ICD-10-PCS
DG016ZZ	Beam Radiation of Pineal Body using Neutron Capture	Procedure	ICD-10-PCS
DG020ZZ	Beam Radiation of Adrenal Glands using Photons <1 MeV	Procedure	ICD-10-PCS
DG021ZZ	Beam Radiation of Adrenal Glands using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DG022ZZ	Beam Radiation of Adrenal Glands using Photons >10 MeV	Procedure	ICD-10-PCS
DG023ZZ	Beam Radiation of Adrenal Glands using Electrons	Procedure	ICD-10-PCS
DG025ZZ	Beam Radiation of Adrenal Glands using Neutrons	Procedure	ICD-10-PCS
DG026ZZ	Beam Radiation of Adrenal Glands using Neutron Capture	Procedure	ICD-10-PCS
DG040ZZ	Beam Radiation of Parathyroid Glands using Photons <1 MeV	Procedure	ICD-10-PCS
DG041ZZ	Beam Radiation of Parathyroid Glands using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DG042ZZ	Beam Radiation of Parathyroid Glands using Photons >10 MeV	Procedure	ICD-10-PCS
DG043ZZ	Beam Radiation of Parathyroid Glands using Electrons	Procedure	ICD-10-PCS
DG045ZZ	Beam Radiation of Parathyroid Glands using Neutrons	Procedure	ICD-10-PCS
DG046ZZ	Beam Radiation of Parathyroid Glands using Neutron Capture	Procedure	ICD-10-PCS
DG050ZZ	Beam Radiation of Thyroid using Photons <1 MeV	Procedure	ICD-10-PCS
DG051ZZ	Beam Radiation of Thyroid using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DG052ZZ	Beam Radiation of Thyroid using Photons >10 MeV	Procedure	ICD-10-PCS
DG053ZZ	Beam Radiation of Thyroid using Electrons	Procedure	ICD-10-PCS
DG055ZZ	Beam Radiation of Thyroid using Neutrons	Procedure	ICD-10-PCS
DG056ZZ	Beam Radiation of Thyroid using Neutron Capture	Procedure	ICD-10-PCS
DG1097Z	High Dose Rate (HDR) Brachytherapy of Pituitary Gland using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DG1098Z	High Dose Rate (HDR) Brachytherapy of Pituitary Gland using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DG1099Z	High Dose Rate (HDR) Brachytherapy of Pituitary Gland using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DG109BZ	High Dose Rate (HDR) Brachytherapy of Pituitary Gland using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DG109CZ	High Dose Rate (HDR) Brachytherapy of Pituitary Gland using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DG109YZ	High Dose Rate (HDR) Brachytherapy of Pituitary Gland using Other Isotope	Procedure	ICD-10-PCS
DG10B7Z	Low Dose Rate (LDR) Brachytherapy of Pituitary Gland using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DG10B8Z	Low Dose Rate (LDR) Brachytherapy of Pituitary Gland using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DG10B9Z	Low Dose Rate (LDR) Brachytherapy of Pituitary Gland using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DG10BBZ	Low Dose Rate (LDR) Brachytherapy of Pituitary Gland using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DG10BCZ	Low Dose Rate (LDR) Brachytherapy of Pituitary Gland using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DG10BYZ	Low Dose Rate (LDR) Brachytherapy of Pituitary Gland using Other Isotope	Procedure	ICD-10-PCS
DG1197Z	High Dose Rate (HDR) Brachytherapy of Pineal Body using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DG1198Z	High Dose Rate (HDR) Brachytherapy of Pineal Body using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DG1199Z	High Dose Rate (HDR) Brachytherapy of Pineal Body using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DG119BZ	High Dose Rate (HDR) Brachytherapy of Pineal Body using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DG119CZ	High Dose Rate (HDR) Brachytherapy of Pineal Body using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DG119YZ	High Dose Rate (HDR) Brachytherapy of Pineal Body using Other Isotope	Procedure	ICD-10-PCS
DG11B7Z	Low Dose Rate (LDR) Brachytherapy of Pineal Body using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DG11B8Z	Low Dose Rate (LDR) Brachytherapy of Pineal Body using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DG11B9Z	Low Dose Rate (LDR) Brachytherapy of Pineal Body using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DG11BBZ	Low Dose Rate (LDR) Brachytherapy of Pineal Body using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DG11BCZ	Low Dose Rate (LDR) Brachytherapy of Pineal Body using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DG11BYZ	Low Dose Rate (LDR) Brachytherapy of Pineal Body using Other Isotope	Procedure	ICD-10-PCS
DG1297Z	High Dose Rate (HDR) Brachytherapy of Adrenal Glands using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DG1298Z	High Dose Rate (HDR) Brachytherapy of Adrenal Glands using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DG1299Z	High Dose Rate (HDR) Brachytherapy of Adrenal Glands using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DG129BZ	High Dose Rate (HDR) Brachytherapy of Adrenal Glands using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DG129CZ	High Dose Rate (HDR) Brachytherapy of Adrenal Glands using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DG129YZ	High Dose Rate (HDR) Brachytherapy of Adrenal Glands using Other Isotope	Procedure	ICD-10-PCS
DG12B7Z	Low Dose Rate (LDR) Brachytherapy of Adrenal Glands using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DG12B8Z	Low Dose Rate (LDR) Brachytherapy of Adrenal Glands using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DG12B9Z	Low Dose Rate (LDR) Brachytherapy of Adrenal Glands using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DG12BBZ	Low Dose Rate (LDR) Brachytherapy of Adrenal Glands using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DG12BCZ	Low Dose Rate (LDR) Brachytherapy of Adrenal Glands using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DG12BYZ	Low Dose Rate (LDR) Brachytherapy of Adrenal Glands using Other Isotope	Procedure	ICD-10-PCS
DG1497Z	High Dose Rate (HDR) Brachytherapy of Parathyroid Glands using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DG1498Z	High Dose Rate (HDR) Brachytherapy of Parathyroid Glands using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DG1499Z	High Dose Rate (HDR) Brachytherapy of Parathyroid Glands using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DG149BZ	High Dose Rate (HDR) Brachytherapy of Parathyroid Glands using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DG149CZ	High Dose Rate (HDR) Brachytherapy of Parathyroid Glands using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DG149YZ	High Dose Rate (HDR) Brachytherapy of Parathyroid Glands using Other Isotope	Procedure	ICD-10-PCS
DG14B7Z	Low Dose Rate (LDR) Brachytherapy of Parathyroid Glands using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DG14B8Z	Low Dose Rate (LDR) Brachytherapy of Parathyroid Glands using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DG14B9Z	Low Dose Rate (LDR) Brachytherapy of Parathyroid Glands using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DG14BBZ	Low Dose Rate (LDR) Brachytherapy of Parathyroid Glands using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DG14BCZ	Low Dose Rate (LDR) Brachytherapy of Parathyroid Glands using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DG14BYZ	Low Dose Rate (LDR) Brachytherapy of Parathyroid Glands using Other Isotope	Procedure	ICD-10-PCS
DG1597Z	High Dose Rate (HDR) Brachytherapy of Thyroid using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DG1598Z	High Dose Rate (HDR) Brachytherapy of Thyroid using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DG1599Z	High Dose Rate (HDR) Brachytherapy of Thyroid using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DG159BZ	High Dose Rate (HDR) Brachytherapy of Thyroid using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DG159CZ	High Dose Rate (HDR) Brachytherapy of Thyroid using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DG159YZ	High Dose Rate (HDR) Brachytherapy of Thyroid using Other Isotope	Procedure	ICD-10-PCS
DG15B7Z	Low Dose Rate (LDR) Brachytherapy of Thyroid using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DG15B8Z	Low Dose Rate (LDR) Brachytherapy of Thyroid using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DG15B9Z	Low Dose Rate (LDR) Brachytherapy of Thyroid using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DG15BBZ	Low Dose Rate (LDR) Brachytherapy of Thyroid using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DG15BCZ	Low Dose Rate (LDR) Brachytherapy of Thyroid using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DG15BYZ	Low Dose Rate (LDR) Brachytherapy of Thyroid using Other Isotope	Procedure	ICD-10-PCS
DGY07ZZ	Contact Radiation of Pituitary Gland	Procedure	ICD-10-PCS
DGY0FZZ	Plaque Radiation of Pituitary Gland	Procedure	ICD-10-PCS
DGY17ZZ	Contact Radiation of Pineal Body	Procedure	ICD-10-PCS
DGY1FZZ	Plaque Radiation of Pineal Body	Procedure	ICD-10-PCS
DGY27ZZ	Contact Radiation of Adrenal Glands	Procedure	ICD-10-PCS
DGY2FZZ	Plaque Radiation of Adrenal Glands	Procedure	ICD-10-PCS
DGY47ZZ	Contact Radiation of Parathyroid Glands	Procedure	ICD-10-PCS
DGY4FZZ	Plaque Radiation of Parathyroid Glands	Procedure	ICD-10-PCS
DGY57ZZ	Contact Radiation of Thyroid	Procedure	ICD-10-PCS
DGY5FZZ	Plaque Radiation of Thyroid	Procedure	ICD-10-PCS
DM000ZZ	Beam Radiation of Left Breast using Photons <1 MeV	Procedure	ICD-10-PCS
DM001ZZ	Beam Radiation of Left Breast using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DM002ZZ	Beam Radiation of Left Breast using Photons >10 MeV	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DM003ZZ	Beam Radiation of Left Breast using Electrons	Procedure	ICD-10-PCS
DM004ZZ	Beam Radiation of Left Breast using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DM005ZZ	Beam Radiation of Left Breast using Neutrons	Procedure	ICD-10-PCS
DM006ZZ	Beam Radiation of Left Breast using Neutron Capture	Procedure	ICD-10-PCS
DM010ZZ	Beam Radiation of Right Breast using Photons <1 MeV	Procedure	ICD-10-PCS
DM011ZZ	Beam Radiation of Right Breast using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DM012ZZ	Beam Radiation of Right Breast using Photons >10 MeV	Procedure	ICD-10-PCS
DM013ZZ	Beam Radiation of Right Breast using Electrons	Procedure	ICD-10-PCS
DM014ZZ	Beam Radiation of Right Breast using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DM015ZZ	Beam Radiation of Right Breast using Neutrons	Procedure	ICD-10-PCS
DM016ZZ	Beam Radiation of Right Breast using Neutron Capture	Procedure	ICD-10-PCS
DM1097Z	High Dose Rate (HDR) Brachytherapy of Left Breast using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DM1098Z	High Dose Rate (HDR) Brachytherapy of Left Breast using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DM1099Z	High Dose Rate (HDR) Brachytherapy of Left Breast using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DM109BZ	High Dose Rate (HDR) Brachytherapy of Left Breast using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DM109CZ	High Dose Rate (HDR) Brachytherapy of Left Breast using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DM109YZ	High Dose Rate (HDR) Brachytherapy of Left Breast using Other Isotope	Procedure	ICD-10-PCS
DM10B7Z	Low Dose Rate (LDR) Brachytherapy of Left Breast using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DM10B8Z	Low Dose Rate (LDR) Brachytherapy of Left Breast using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DM10B9Z	Low Dose Rate (LDR) Brachytherapy of Left Breast using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DM10BBZ	Low Dose Rate (LDR) Brachytherapy of Left Breast using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DM10BCZ	Low Dose Rate (LDR) Brachytherapy of Left Breast using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DM10BYZ	Low Dose Rate (LDR) Brachytherapy of Left Breast using Other Isotope	Procedure	ICD-10-PCS
DM1197Z	High Dose Rate (HDR) Brachytherapy of Right Breast using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DM1198Z	High Dose Rate (HDR) Brachytherapy of Right Breast using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DM1199Z	High Dose Rate (HDR) Brachytherapy of Right Breast using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DM119BZ	High Dose Rate (HDR) Brachytherapy of Right Breast using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DM119CZ	High Dose Rate (HDR) Brachytherapy of Right Breast using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DM119YZ	High Dose Rate (HDR) Brachytherapy of Right Breast using Other Isotope	Procedure	ICD-10-PCS
DM11B7Z	Low Dose Rate (LDR) Brachytherapy of Right Breast using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DM11B8Z	Low Dose Rate (LDR) Brachytherapy of Right Breast using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DM11B9Z	Low Dose Rate (LDR) Brachytherapy of Right Breast using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DM11BBZ	Low Dose Rate (LDR) Brachytherapy of Right Breast using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DM11BCZ	Low Dose Rate (LDR) Brachytherapy of Right Breast using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DM11BYZ	Low Dose Rate (LDR) Brachytherapy of Right Breast using Other Isotope	Procedure	ICD-10-PCS
DMY07ZZ	Contact Radiation of Left Breast	Procedure	ICD-10-PCS
DMY0FZZ	Plaque Radiation of Left Breast	Procedure	ICD-10-PCS
DMY17ZZ	Contact Radiation of Right Breast	Procedure	ICD-10-PCS
DMY1FZZ	Plaque Radiation of Right Breast	Procedure	ICD-10-PCS
DP000ZZ	Beam Radiation of Skull using Photons <1 MeV	Procedure	ICD-10-PCS
DP001ZZ	Beam Radiation of Skull using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DP002ZZ	Beam Radiation of Skull using Photons >10 MeV	Procedure	ICD-10-PCS
DP003ZZ	Beam Radiation of Skull using Electrons	Procedure	ICD-10-PCS
DP004ZZ	Beam Radiation of Skull using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DP005ZZ	Beam Radiation of Skull using Neutrons	Procedure	ICD-10-PCS
DP006ZZ	Beam Radiation of Skull using Neutron Capture	Procedure	ICD-10-PCS
DP020ZZ	Beam Radiation of Maxilla using Photons <1 MeV	Procedure	ICD-10-PCS
DP021ZZ	Beam Radiation of Maxilla using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DP022ZZ	Beam Radiation of Maxilla using Photons >10 MeV	Procedure	ICD-10-PCS
DP023ZZ	Beam Radiation of Maxilla using Electrons	Procedure	ICD-10-PCS
DP024ZZ	Beam Radiation of Maxilla using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DP025ZZ	Beam Radiation of Maxilla using Neutrons	Procedure	ICD-10-PCS
DP026ZZ	Beam Radiation of Maxilla using Neutron Capture	Procedure	ICD-10-PCS
DP030ZZ	Beam Radiation of Mandible using Photons <1 MeV	Procedure	ICD-10-PCS
DP031ZZ	Beam Radiation of Mandible using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DP032ZZ	Beam Radiation of Mandible using Photons >10 MeV	Procedure	ICD-10-PCS
DP033ZZ	Beam Radiation of Mandible using Electrons	Procedure	ICD-10-PCS
DP034ZZ	Beam Radiation of Mandible using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DP035ZZ	Beam Radiation of Mandible using Neutrons	Procedure	ICD-10-PCS
DP036ZZ	Beam Radiation of Mandible using Neutron Capture	Procedure	ICD-10-PCS
DP040ZZ	Beam Radiation of Sternum using Photons <1 MeV	Procedure	ICD-10-PCS
DP041ZZ	Beam Radiation of Sternum using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DP042ZZ	Beam Radiation of Sternum using Photons >10 MeV	Procedure	ICD-10-PCS
DP043ZZ	Beam Radiation of Sternum using Electrons	Procedure	ICD-10-PCS
DP044ZZ	Beam Radiation of Sternum using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DP045ZZ	Beam Radiation of Sternum using Neutrons	Procedure	ICD-10-PCS
DP046ZZ	Beam Radiation of Sternum using Neutron Capture	Procedure	ICD-10-PCS
DP050ZZ	Beam Radiation of Rib(s) using Photons <1 MeV	Procedure	ICD-10-PCS
DP051ZZ	Beam Radiation of Rib(s) using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DP052ZZ	Beam Radiation of Rib(s) using Photons >10 MeV	Procedure	ICD-10-PCS
DP053ZZ	Beam Radiation of Rib(s) using Electrons	Procedure	ICD-10-PCS
DP054ZZ	Beam Radiation of Rib(s) using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DP055ZZ	Beam Radiation of Rib(s) using Neutrons	Procedure	ICD-10-PCS
DP056ZZ	Beam Radiation of Rib(s) using Neutron Capture	Procedure	ICD-10-PCS
DP060ZZ	Beam Radiation of Humerus using Photons <1 MeV	Procedure	ICD-10-PCS
DP061ZZ	Beam Radiation of Humerus using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DP062ZZ	Beam Radiation of Humerus using Photons >10 MeV	Procedure	ICD-10-PCS
DP063ZZ	Beam Radiation of Humerus using Electrons	Procedure	ICD-10-PCS
DP064ZZ	Beam Radiation of Humerus using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DP065ZZ	Beam Radiation of Humerus using Neutrons	Procedure	ICD-10-PCS
DP066ZZ	Beam Radiation of Humerus using Neutron Capture	Procedure	ICD-10-PCS
DP070ZZ	Beam Radiation of Radius/Ulna using Photons <1 MeV	Procedure	ICD-10-PCS
DP071ZZ	Beam Radiation of Radius/Ulna using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DP072ZZ	Beam Radiation of Radius/Ulna using Photons >10 MeV	Procedure	ICD-10-PCS
DP073ZZ	Beam Radiation of Radius/Ulna using Electrons	Procedure	ICD-10-PCS
DP074ZZ	Beam Radiation of Radius/Ulna using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DP075ZZ	Beam Radiation of Radius/Ulna using Neutrons	Procedure	ICD-10-PCS
DP076ZZ	Beam Radiation of Radius/Ulna using Neutron Capture	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DP080ZZ	Beam Radiation of Pelvic Bones using Photons <1 MeV	Procedure	ICD-10-PCS
DP081ZZ	Beam Radiation of Pelvic Bones using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DP082ZZ	Beam Radiation of Pelvic Bones using Photons >10 MeV	Procedure	ICD-10-PCS
DP083ZZ	Beam Radiation of Pelvic Bones using Electrons	Procedure	ICD-10-PCS
DP084ZZ	Beam Radiation of Pelvic Bones using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DP085ZZ	Beam Radiation of Pelvic Bones using Neutrons	Procedure	ICD-10-PCS
DP086ZZ	Beam Radiation of Pelvic Bones using Neutron Capture	Procedure	ICD-10-PCS
DP090ZZ	Beam Radiation of Femur using Photons <1 MeV	Procedure	ICD-10-PCS
DP091ZZ	Beam Radiation of Femur using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DP092ZZ	Beam Radiation of Femur using Photons >10 MeV	Procedure	ICD-10-PCS
DP093ZZ	Beam Radiation of Femur using Electrons	Procedure	ICD-10-PCS
DP094ZZ	Beam Radiation of Femur using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DP095ZZ	Beam Radiation of Femur using Neutrons	Procedure	ICD-10-PCS
DP096ZZ	Beam Radiation of Femur using Neutron Capture	Procedure	ICD-10-PCS
DP0B0ZZ	Beam Radiation of Tibia/Fibula using Photons <1 MeV	Procedure	ICD-10-PCS
DP0B1ZZ	Beam Radiation of Tibia/Fibula using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DP0B2ZZ	Beam Radiation of Tibia/Fibula using Photons >10 MeV	Procedure	ICD-10-PCS
DP0B3ZZ	Beam Radiation of Tibia/Fibula using Electrons	Procedure	ICD-10-PCS
DP0B4ZZ	Beam Radiation of Tibia/Fibula using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DP0B5ZZ	Beam Radiation of Tibia/Fibula using Neutrons	Procedure	ICD-10-PCS
DP0B6ZZ	Beam Radiation of Tibia/Fibula using Neutron Capture	Procedure	ICD-10-PCS
DP0C0ZZ	Beam Radiation of Other Bone using Photons <1 MeV	Procedure	ICD-10-PCS
DP0C1ZZ	Beam Radiation of Other Bone using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DP0C2ZZ	Beam Radiation of Other Bone using Photons >10 MeV	Procedure	ICD-10-PCS
DP0C3ZZ	Beam Radiation of Other Bone using Electrons	Procedure	ICD-10-PCS
DP0C4ZZ	Beam Radiation of Other Bone using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DP0C5ZZ	Beam Radiation of Other Bone using Neutrons	Procedure	ICD-10-PCS
DP0C6ZZ	Beam Radiation of Other Bone using Neutron Capture	Procedure	ICD-10-PCS
DPY07ZZ	Contact Radiation of Skull	Procedure	ICD-10-PCS
DPY0FZZ	Plaque Radiation of Skull	Procedure	ICD-10-PCS
DPY27ZZ	Contact Radiation of Maxilla	Procedure	ICD-10-PCS
DPY2FZZ	Plaque Radiation of Maxilla	Procedure	ICD-10-PCS
DPY37ZZ	Contact Radiation of Mandible	Procedure	ICD-10-PCS
DPY3FZZ	Plaque Radiation of Mandible	Procedure	ICD-10-PCS
DPY47ZZ	Contact Radiation of Sternum	Procedure	ICD-10-PCS
DPY4FZZ	Plaque Radiation of Sternum	Procedure	ICD-10-PCS
DPY57ZZ	Contact Radiation of Rib(s)	Procedure	ICD-10-PCS
DPY5FZZ	Plaque Radiation of Rib(s)	Procedure	ICD-10-PCS
DPY67ZZ	Contact Radiation of Humerus	Procedure	ICD-10-PCS
DPY6FZZ	Plaque Radiation of Humerus	Procedure	ICD-10-PCS
DPY77ZZ	Contact Radiation of Radius/Ulna	Procedure	ICD-10-PCS
DPY7FZZ	Plaque Radiation of Radius/Ulna	Procedure	ICD-10-PCS
DPY87ZZ	Contact Radiation of Pelvic Bones	Procedure	ICD-10-PCS
DPY8FZZ	Plaque Radiation of Pelvic Bones	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DPY97ZZ	Contact Radiation of Femur	Procedure	ICD-10-PCS
DPY9FZZ	Plaque Radiation of Femur	Procedure	ICD-10-PCS
DPYB7ZZ	Contact Radiation of Tibia/Fibula	Procedure	ICD-10-PCS
DPYBFZZ	Plaque Radiation of Tibia/Fibula	Procedure	ICD-10-PCS
DPYC7ZZ	Contact Radiation of Other Bone	Procedure	ICD-10-PCS
DPYCFZZ	Plaque Radiation of Other Bone	Procedure	ICD-10-PCS
DT000ZZ	Beam Radiation of Kidney using Photons <1 MeV	Procedure	ICD-10-PCS
DT001ZZ	Beam Radiation of Kidney using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DT002ZZ	Beam Radiation of Kidney using Photons >10 MeV	Procedure	ICD-10-PCS
DT003ZZ	Beam Radiation of Kidney using Electrons	Procedure	ICD-10-PCS
DT004ZZ	Beam Radiation of Kidney using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DT005ZZ	Beam Radiation of Kidney using Neutrons	Procedure	ICD-10-PCS
DT006ZZ	Beam Radiation of Kidney using Neutron Capture	Procedure	ICD-10-PCS
DT010ZZ	Beam Radiation of Ureter using Photons <1 MeV	Procedure	ICD-10-PCS
DT011ZZ	Beam Radiation of Ureter using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DT012ZZ	Beam Radiation of Ureter using Photons >10 MeV	Procedure	ICD-10-PCS
DT013ZZ	Beam Radiation of Ureter using Electrons	Procedure	ICD-10-PCS
DT014ZZ	Beam Radiation of Ureter using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DT015ZZ	Beam Radiation of Ureter using Neutrons	Procedure	ICD-10-PCS
DT016ZZ	Beam Radiation of Ureter using Neutron Capture	Procedure	ICD-10-PCS
DT020ZZ	Beam Radiation of Bladder using Photons <1 MeV	Procedure	ICD-10-PCS
DT021ZZ	Beam Radiation of Bladder using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DT022ZZ	Beam Radiation of Bladder using Photons >10 MeV	Procedure	ICD-10-PCS
DT023ZZ	Beam Radiation of Bladder using Electrons	Procedure	ICD-10-PCS
DT024ZZ	Beam Radiation of Bladder using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DT025ZZ	Beam Radiation of Bladder using Neutrons	Procedure	ICD-10-PCS
DT026ZZ	Beam Radiation of Bladder using Neutron Capture	Procedure	ICD-10-PCS
DT030ZZ	Beam Radiation of Urethra using Photons <1 MeV	Procedure	ICD-10-PCS
DT031ZZ	Beam Radiation of Urethra using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DT032ZZ	Beam Radiation of Urethra using Photons >10 MeV	Procedure	ICD-10-PCS
DT033ZZ	Beam Radiation of Urethra using Electrons	Procedure	ICD-10-PCS
DT034ZZ	Beam Radiation of Urethra using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DT035ZZ	Beam Radiation of Urethra using Neutrons	Procedure	ICD-10-PCS
DT036ZZ	Beam Radiation of Urethra using Neutron Capture	Procedure	ICD-10-PCS
DT1097Z	High Dose Rate (HDR) Brachytherapy of Kidney using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DT1098Z	High Dose Rate (HDR) Brachytherapy of Kidney using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DT1099Z	High Dose Rate (HDR) Brachytherapy of Kidney using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DT109BZ	High Dose Rate (HDR) Brachytherapy of Kidney using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DT109CZ	High Dose Rate (HDR) Brachytherapy of Kidney using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DT109YZ	High Dose Rate (HDR) Brachytherapy of Kidney using Other Isotope	Procedure	ICD-10-PCS
DT10B7Z	Low Dose Rate (LDR) Brachytherapy of Kidney using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DT10B8Z	Low Dose Rate (LDR) Brachytherapy of Kidney using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DT10B9Z	Low Dose Rate (LDR) Brachytherapy of Kidney using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DT10BBZ	Low Dose Rate (LDR) Brachytherapy of Kidney using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DT10BCZ	Low Dose Rate (LDR) Brachytherapy of Kidney using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DT10BYZ	Low Dose Rate (LDR) Brachytherapy of Kidney using Other Isotope	Procedure	ICD-10-PCS
DT1197Z	High Dose Rate (HDR) Brachytherapy of Ureter using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DT1198Z	High Dose Rate (HDR) Brachytherapy of Ureter using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DT1199Z	High Dose Rate (HDR) Brachytherapy of Ureter using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DT119BZ	High Dose Rate (HDR) Brachytherapy of Ureter using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DT119CZ	High Dose Rate (HDR) Brachytherapy of Ureter using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DT119YZ	High Dose Rate (HDR) Brachytherapy of Ureter using Other Isotope	Procedure	ICD-10-PCS
DT11B7Z	Low Dose Rate (LDR) Brachytherapy of Ureter using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DT11B8Z	Low Dose Rate (LDR) Brachytherapy of Ureter using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DT11B9Z	Low Dose Rate (LDR) Brachytherapy of Ureter using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DT11BBZ	Low Dose Rate (LDR) Brachytherapy of Ureter using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DT11BCZ	Low Dose Rate (LDR) Brachytherapy of Ureter using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DT11BYZ	Low Dose Rate (LDR) Brachytherapy of Ureter using Other Isotope	Procedure	ICD-10-PCS
DT1297Z	High Dose Rate (HDR) Brachytherapy of Bladder using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DT1298Z	High Dose Rate (HDR) Brachytherapy of Bladder using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DT1299Z	High Dose Rate (HDR) Brachytherapy of Bladder using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DT129BZ	High Dose Rate (HDR) Brachytherapy of Bladder using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DT129CZ	High Dose Rate (HDR) Brachytherapy of Bladder using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DT129YZ	High Dose Rate (HDR) Brachytherapy of Bladder using Other Isotope	Procedure	ICD-10-PCS
DT12B7Z	Low Dose Rate (LDR) Brachytherapy of Bladder using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DT12B8Z	Low Dose Rate (LDR) Brachytherapy of Bladder using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DT12B9Z	Low Dose Rate (LDR) Brachytherapy of Bladder using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DT12BBZ	Low Dose Rate (LDR) Brachytherapy of Bladder using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DT12BCZ	Low Dose Rate (LDR) Brachytherapy of Bladder using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DT12BYZ	Low Dose Rate (LDR) Brachytherapy of Bladder using Other Isotope	Procedure	ICD-10-PCS
DT1397Z	High Dose Rate (HDR) Brachytherapy of Urethra using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DT1398Z	High Dose Rate (HDR) Brachytherapy of Urethra using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DT1399Z	High Dose Rate (HDR) Brachytherapy of Urethra using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DT139BZ	High Dose Rate (HDR) Brachytherapy of Urethra using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DT139CZ	High Dose Rate (HDR) Brachytherapy of Urethra using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DT139YZ	High Dose Rate (HDR) Brachytherapy of Urethra using Other Isotope	Procedure	ICD-10-PCS
DT13B7Z	Low Dose Rate (LDR) Brachytherapy of Urethra using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DT13B8Z	Low Dose Rate (LDR) Brachytherapy of Urethra using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DT13B9Z	Low Dose Rate (LDR) Brachytherapy of Urethra using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DT13BBZ	Low Dose Rate (LDR) Brachytherapy of Urethra using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DT13BCZ	Low Dose Rate (LDR) Brachytherapy of Urethra using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DT13BYZ	Low Dose Rate (LDR) Brachytherapy of Urethra using Other Isotope	Procedure	ICD-10-PCS
DTY07ZZ	Contact Radiation of Kidney	Procedure	ICD-10-PCS
DTY0CZZ	Intraoperative Radiation Therapy (IORT) of Kidney	Procedure	ICD-10-PCS
DTY0FZZ	Plaque Radiation of Kidney	Procedure	ICD-10-PCS
DTY17ZZ	Contact Radiation of Ureter	Procedure	ICD-10-PCS
DTY1CZZ	Intraoperative Radiation Therapy (IORT) of Ureter	Procedure	ICD-10-PCS
DTY1FZZ	Plaque Radiation of Ureter	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DTY27ZZ	Contact Radiation of Bladder	Procedure	ICD-10-PCS
DTY2CZZ	Intraoperative Radiation Therapy (IORT) of Bladder	Procedure	ICD-10-PCS
DTY2FZZ	Plaque Radiation of Bladder	Procedure	ICD-10-PCS
DTY37ZZ	Contact Radiation of Urethra	Procedure	ICD-10-PCS
DTY3CZZ	Intraoperative Radiation Therapy (IORT) of Urethra	Procedure	ICD-10-PCS
DTY3FZZ	Plaque Radiation of Urethra	Procedure	ICD-10-PCS
DU000ZZ	Beam Radiation of Ovary using Photons <1 MeV	Procedure	ICD-10-PCS
DU001ZZ	Beam Radiation of Ovary using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DU002ZZ	Beam Radiation of Ovary using Photons >10 MeV	Procedure	ICD-10-PCS
DU003ZZ	Beam Radiation of Ovary using Electrons	Procedure	ICD-10-PCS
DU004ZZ	Beam Radiation of Ovary using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DU005ZZ	Beam Radiation of Ovary using Neutrons	Procedure	ICD-10-PCS
DU006ZZ	Beam Radiation of Ovary using Neutron Capture	Procedure	ICD-10-PCS
DU010ZZ	Beam Radiation of Cervix using Photons <1 MeV	Procedure	ICD-10-PCS
DU011ZZ	Beam Radiation of Cervix using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DU012ZZ	Beam Radiation of Cervix using Photons >10 MeV	Procedure	ICD-10-PCS
DU013ZZ	Beam Radiation of Cervix using Electrons	Procedure	ICD-10-PCS
DU014ZZ	Beam Radiation of Cervix using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DU015ZZ	Beam Radiation of Cervix using Neutrons	Procedure	ICD-10-PCS
DU016ZZ	Beam Radiation of Cervix using Neutron Capture	Procedure	ICD-10-PCS
DU020ZZ	Beam Radiation of Uterus using Photons <1 MeV	Procedure	ICD-10-PCS
DU021ZZ	Beam Radiation of Uterus using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DU022ZZ	Beam Radiation of Uterus using Photons >10 MeV	Procedure	ICD-10-PCS
DU023ZZ	Beam Radiation of Uterus using Electrons	Procedure	ICD-10-PCS
DU024ZZ	Beam Radiation of Uterus using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DU025ZZ	Beam Radiation of Uterus using Neutrons	Procedure	ICD-10-PCS
DU026ZZ	Beam Radiation of Uterus using Neutron Capture	Procedure	ICD-10-PCS
DU1097Z	High Dose Rate (HDR) Brachytherapy of Ovary using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DU1098Z	High Dose Rate (HDR) Brachytherapy of Ovary using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DU1099Z	High Dose Rate (HDR) Brachytherapy of Ovary using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DU109BZ	High Dose Rate (HDR) Brachytherapy of Ovary using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DU109CZ	High Dose Rate (HDR) Brachytherapy of Ovary using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DU109YZ	High Dose Rate (HDR) Brachytherapy of Ovary using Other Isotope	Procedure	ICD-10-PCS
DU10B7Z	Low Dose Rate (LDR) Brachytherapy of Ovary using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DU10B8Z	Low Dose Rate (LDR) Brachytherapy of Ovary using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DU10B9Z	Low Dose Rate (LDR) Brachytherapy of Ovary using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DU10BBZ	Low Dose Rate (LDR) Brachytherapy of Ovary using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DU10BCZ	Low Dose Rate (LDR) Brachytherapy of Ovary using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DU10BYZ	Low Dose Rate (LDR) Brachytherapy of Ovary using Other Isotope	Procedure	ICD-10-PCS
DU1197Z	High Dose Rate (HDR) Brachytherapy of Cervix using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DU1198Z	High Dose Rate (HDR) Brachytherapy of Cervix using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DU1199Z	High Dose Rate (HDR) Brachytherapy of Cervix using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DU119BZ	High Dose Rate (HDR) Brachytherapy of Cervix using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DU119CZ	High Dose Rate (HDR) Brachytherapy of Cervix using Californium 252 (Cf-252)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DU119YZ	High Dose Rate (HDR) Brachytherapy of Cervix using Other Isotope	Procedure	ICD-10-PCS
DU11B7Z	Low Dose Rate (LDR) Brachytherapy of Cervix using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DU11B8Z	Low Dose Rate (LDR) Brachytherapy of Cervix using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DU11B9Z	Low Dose Rate (LDR) Brachytherapy of Cervix using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DU11BBZ	Low Dose Rate (LDR) Brachytherapy of Cervix using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DU11BCZ	Low Dose Rate (LDR) Brachytherapy of Cervix using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DU11BYZ	Low Dose Rate (LDR) Brachytherapy of Cervix using Other Isotope	Procedure	ICD-10-PCS
DU1297Z	High Dose Rate (HDR) Brachytherapy of Uterus using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DU1298Z	High Dose Rate (HDR) Brachytherapy of Uterus using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DU1299Z	High Dose Rate (HDR) Brachytherapy of Uterus using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DU129BZ	High Dose Rate (HDR) Brachytherapy of Uterus using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DU129CZ	High Dose Rate (HDR) Brachytherapy of Uterus using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DU129YZ	High Dose Rate (HDR) Brachytherapy of Uterus using Other Isotope	Procedure	ICD-10-PCS
DU12B7Z	Low Dose Rate (LDR) Brachytherapy of Uterus using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DU12B8Z	Low Dose Rate (LDR) Brachytherapy of Uterus using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DU12B9Z	Low Dose Rate (LDR) Brachytherapy of Uterus using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DU12BBZ	Low Dose Rate (LDR) Brachytherapy of Uterus using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DU12BCZ	Low Dose Rate (LDR) Brachytherapy of Uterus using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DU12BYZ	Low Dose Rate (LDR) Brachytherapy of Uterus using Other Isotope	Procedure	ICD-10-PCS
DUY07ZZ	Contact Radiation of Ovary	Procedure	ICD-10-PCS
DUY0CZZ	Intraoperative Radiation Therapy (IORT) of Ovary	Procedure	ICD-10-PCS
DUY0FZZ	Plaque Radiation of Ovary	Procedure	ICD-10-PCS
DUY17ZZ	Contact Radiation of Cervix	Procedure	ICD-10-PCS
DUY1CZZ	Intraoperative Radiation Therapy (IORT) of Cervix	Procedure	ICD-10-PCS
DUY1FZZ	Plaque Radiation of Cervix	Procedure	ICD-10-PCS
DUY27ZZ	Contact Radiation of Uterus	Procedure	ICD-10-PCS
DUY2CZZ	Intraoperative Radiation Therapy (IORT) of Uterus	Procedure	ICD-10-PCS
DUY2FZZ	Plaque Radiation of Uterus	Procedure	ICD-10-PCS
DV000ZZ	Beam Radiation of Prostate using Photons <1 MeV	Procedure	ICD-10-PCS
DV001ZZ	Beam Radiation of Prostate using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DV002ZZ	Beam Radiation of Prostate using Photons >10 MeV	Procedure	ICD-10-PCS
DV003ZZ	Beam Radiation of Prostate using Electrons	Procedure	ICD-10-PCS
DV004ZZ	Beam Radiation of Prostate using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DV005ZZ	Beam Radiation of Prostate using Neutrons	Procedure	ICD-10-PCS
DV006ZZ	Beam Radiation of Prostate using Neutron Capture	Procedure	ICD-10-PCS
DV010ZZ	Beam Radiation of Testis using Photons <1 MeV	Procedure	ICD-10-PCS
DV011ZZ	Beam Radiation of Testis using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DV012ZZ	Beam Radiation of Testis using Photons >10 MeV	Procedure	ICD-10-PCS
DV013ZZ	Beam Radiation of Testis using Electrons	Procedure	ICD-10-PCS
DV014ZZ	Beam Radiation of Testis using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DV015ZZ	Beam Radiation of Testis using Neutrons	Procedure	ICD-10-PCS
DV016ZZ	Beam Radiation of Testis using Neutron Capture	Procedure	ICD-10-PCS
DV1097Z	High Dose Rate (HDR) Brachytherapy of Prostate using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DV1098Z	High Dose Rate (HDR) Brachytherapy of Prostate using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DV1099Z	High Dose Rate (HDR) Brachytherapy of Prostate using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DV109BZ	High Dose Rate (HDR) Brachytherapy of Prostate using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DV109CZ	High Dose Rate (HDR) Brachytherapy of Prostate using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DV109YZ	High Dose Rate (HDR) Brachytherapy of Prostate using Other Isotope	Procedure	ICD-10-PCS
DV10B7Z	Low Dose Rate (LDR) Brachytherapy of Prostate using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DV10B8Z	Low Dose Rate (LDR) Brachytherapy of Prostate using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DV10B9Z	Low Dose Rate (LDR) Brachytherapy of Prostate using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DV10BBZ	Low Dose Rate (LDR) Brachytherapy of Prostate using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DV10BCZ	Low Dose Rate (LDR) Brachytherapy of Prostate using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DV10BYZ	Low Dose Rate (LDR) Brachytherapy of Prostate using Other Isotope	Procedure	ICD-10-PCS
DV1197Z	High Dose Rate (HDR) Brachytherapy of Testis using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DV1198Z	High Dose Rate (HDR) Brachytherapy of Testis using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DV1199Z	High Dose Rate (HDR) Brachytherapy of Testis using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DV119BZ	High Dose Rate (HDR) Brachytherapy of Testis using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DV119CZ	High Dose Rate (HDR) Brachytherapy of Testis using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DV119YZ	High Dose Rate (HDR) Brachytherapy of Testis using Other Isotope	Procedure	ICD-10-PCS
DV11B7Z	Low Dose Rate (LDR) Brachytherapy of Testis using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DV11B8Z	Low Dose Rate (LDR) Brachytherapy of Testis using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DV11B9Z	Low Dose Rate (LDR) Brachytherapy of Testis using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DV11BBZ	Low Dose Rate (LDR) Brachytherapy of Testis using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DV11BCZ	Low Dose Rate (LDR) Brachytherapy of Testis using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DV11BYZ	Low Dose Rate (LDR) Brachytherapy of Testis using Other Isotope	Procedure	ICD-10-PCS
DVY07ZZ	Contact Radiation of Prostate	Procedure	ICD-10-PCS
DVY0CZZ	Intraoperative Radiation Therapy (IORT) of Prostate	Procedure	ICD-10-PCS
DVY0FZZ	Plaque Radiation of Prostate	Procedure	ICD-10-PCS
DVY17ZZ	Contact Radiation of Testis	Procedure	ICD-10-PCS
DVY1FZZ	Plaque Radiation of Testis	Procedure	ICD-10-PCS
DW010ZZ	Beam Radiation of Head and Neck using Photons <1 MeV	Procedure	ICD-10-PCS
DW011ZZ	Beam Radiation of Head and Neck using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DW012ZZ	Beam Radiation of Head and Neck using Photons >10 MeV	Procedure	ICD-10-PCS
DW013ZZ	Beam Radiation of Head and Neck using Electrons	Procedure	ICD-10-PCS
DW014ZZ	Beam Radiation of Head and Neck using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DW015ZZ	Beam Radiation of Head and Neck using Neutrons	Procedure	ICD-10-PCS
DW016ZZ	Beam Radiation of Head and Neck using Neutron Capture	Procedure	ICD-10-PCS
DW020ZZ	Beam Radiation of Chest using Photons <1 MeV	Procedure	ICD-10-PCS
DW021ZZ	Beam Radiation of Chest using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DW022ZZ	Beam Radiation of Chest using Photons >10 MeV	Procedure	ICD-10-PCS
DW023ZZ	Beam Radiation of Chest using Electrons	Procedure	ICD-10-PCS
DW024ZZ	Beam Radiation of Chest using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DW025ZZ	Beam Radiation of Chest using Neutrons	Procedure	ICD-10-PCS
DW026ZZ	Beam Radiation of Chest using Neutron Capture	Procedure	ICD-10-PCS
DW030ZZ	Beam Radiation of Abdomen using Photons <1 MeV	Procedure	ICD-10-PCS
DW031ZZ	Beam Radiation of Abdomen using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DW032ZZ	Beam Radiation of Abdomen using Photons >10 MeV	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DW033ZZ	Beam Radiation of Abdomen using Electrons	Procedure	ICD-10-PCS
DW034ZZ	Beam Radiation of Abdomen using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DW035ZZ	Beam Radiation of Abdomen using Neutrons	Procedure	ICD-10-PCS
DW036ZZ	Beam Radiation of Abdomen using Neutron Capture	Procedure	ICD-10-PCS
DW040ZZ	Beam Radiation of Hemibody using Photons <1 MeV	Procedure	ICD-10-PCS
DW041ZZ	Beam Radiation of Hemibody using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DW042ZZ	Beam Radiation of Hemibody using Photons >10 MeV	Procedure	ICD-10-PCS
DW043ZZ	Beam Radiation of Hemibody using Electrons	Procedure	ICD-10-PCS
DW044ZZ	Beam Radiation of Hemibody using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DW045ZZ	Beam Radiation of Hemibody using Neutrons	Procedure	ICD-10-PCS
DW046ZZ	Beam Radiation of Hemibody using Neutron Capture	Procedure	ICD-10-PCS
DW050ZZ	Beam Radiation of Whole Body using Photons <1 MeV	Procedure	ICD-10-PCS
DW051ZZ	Beam Radiation of Whole Body using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DW052ZZ	Beam Radiation of Whole Body using Photons >10 MeV	Procedure	ICD-10-PCS
DW053ZZ	Beam Radiation of Whole Body using Electrons	Procedure	ICD-10-PCS
DW054ZZ	Beam Radiation of Whole Body using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DW055ZZ	Beam Radiation of Whole Body using Neutrons	Procedure	ICD-10-PCS
DW056ZZ	Beam Radiation of Whole Body using Neutron Capture	Procedure	ICD-10-PCS
DW060ZZ	Beam Radiation of Pelvic Region using Photons <1 MeV	Procedure	ICD-10-PCS
DW061ZZ	Beam Radiation of Pelvic Region using Photons 1 - 10 MeV	Procedure	ICD-10-PCS
DW062ZZ	Beam Radiation of Pelvic Region using Photons >10 MeV	Procedure	ICD-10-PCS
DW063ZZ	Beam Radiation of Pelvic Region using Electrons	Procedure	ICD-10-PCS
DW064ZZ	Beam Radiation of Pelvic Region using Heavy Particles (Protons,Ions)	Procedure	ICD-10-PCS
DW065ZZ	Beam Radiation of Pelvic Region using Neutrons	Procedure	ICD-10-PCS
DW066ZZ	Beam Radiation of Pelvic Region using Neutron Capture	Procedure	ICD-10-PCS
DW1197Z	High Dose Rate (HDR) Brachytherapy of Head and Neck using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DW1198Z	High Dose Rate (HDR) Brachytherapy of Head and Neck using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DW1199Z	High Dose Rate (HDR) Brachytherapy of Head and Neck using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DW119BZ	High Dose Rate (HDR) Brachytherapy of Head and Neck using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DW119CZ	High Dose Rate (HDR) Brachytherapy of Head and Neck using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DW119YZ	High Dose Rate (HDR) Brachytherapy of Head and Neck using Other Isotope	Procedure	ICD-10-PCS
DW11B7Z	Low Dose Rate (LDR) Brachytherapy of Head and Neck using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DW11B8Z	Low Dose Rate (LDR) Brachytherapy of Head and Neck using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DW11B9Z	Low Dose Rate (LDR) Brachytherapy of Head and Neck using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DW11BBZ	Low Dose Rate (LDR) Brachytherapy of Head and Neck using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DW11BCZ	Low Dose Rate (LDR) Brachytherapy of Head and Neck using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DW11BYZ	Low Dose Rate (LDR) Brachytherapy of Head and Neck using Other Isotope	Procedure	ICD-10-PCS
DW1297Z	High Dose Rate (HDR) Brachytherapy of Chest using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DW1298Z	High Dose Rate (HDR) Brachytherapy of Chest using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DW1299Z	High Dose Rate (HDR) Brachytherapy of Chest using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DW129BZ	High Dose Rate (HDR) Brachytherapy of Chest using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DW129CZ	High Dose Rate (HDR) Brachytherapy of Chest using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DW129YZ	High Dose Rate (HDR) Brachytherapy of Chest using Other Isotope	Procedure	ICD-10-PCS
DW12B7Z	Low Dose Rate (LDR) Brachytherapy of Chest using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DW12B8Z	Low Dose Rate (LDR) Brachytherapy of Chest using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DW12B9Z	Low Dose Rate (LDR) Brachytherapy of Chest using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DW12BBZ	Low Dose Rate (LDR) Brachytherapy of Chest using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DW12BCZ	Low Dose Rate (LDR) Brachytherapy of Chest using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DW12BYZ	Low Dose Rate (LDR) Brachytherapy of Chest using Other Isotope	Procedure	ICD-10-PCS
DW1397Z	High Dose Rate (HDR) Brachytherapy of Abdomen using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DW1398Z	High Dose Rate (HDR) Brachytherapy of Abdomen using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DW1399Z	High Dose Rate (HDR) Brachytherapy of Abdomen using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DW139BZ	High Dose Rate (HDR) Brachytherapy of Abdomen using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DW139CZ	High Dose Rate (HDR) Brachytherapy of Abdomen using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DW139YZ	High Dose Rate (HDR) Brachytherapy of Abdomen using Other Isotope	Procedure	ICD-10-PCS
DW13B7Z	Low Dose Rate (LDR) Brachytherapy of Abdomen using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DW13B8Z	Low Dose Rate (LDR) Brachytherapy of Abdomen using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DW13B9Z	Low Dose Rate (LDR) Brachytherapy of Abdomen using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DW13BBZ	Low Dose Rate (LDR) Brachytherapy of Abdomen using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DW13BCZ	Low Dose Rate (LDR) Brachytherapy of Abdomen using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DW13BYZ	Low Dose Rate (LDR) Brachytherapy of Abdomen using Other Isotope	Procedure	ICD-10-PCS
DW1697Z	High Dose Rate (HDR) Brachytherapy of Pelvic Region using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DW1698Z	High Dose Rate (HDR) Brachytherapy of Pelvic Region using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DW1699Z	High Dose Rate (HDR) Brachytherapy of Pelvic Region using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DW169BZ	High Dose Rate (HDR) Brachytherapy of Pelvic Region using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DW169CZ	High Dose Rate (HDR) Brachytherapy of Pelvic Region using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DW169YZ	High Dose Rate (HDR) Brachytherapy of Pelvic Region using Other Isotope	Procedure	ICD-10-PCS
DW16B7Z	Low Dose Rate (LDR) Brachytherapy of Pelvic Region using Cesium 137 (Cs-137)	Procedure	ICD-10-PCS
DW16B8Z	Low Dose Rate (LDR) Brachytherapy of Pelvic Region using Iridium 192 (Ir-192)	Procedure	ICD-10-PCS
DW16B9Z	Low Dose Rate (LDR) Brachytherapy of Pelvic Region using Iodine 125 (I-125)	Procedure	ICD-10-PCS
DW16BBZ	Low Dose Rate (LDR) Brachytherapy of Pelvic Region using Palladium 103 (Pd-103)	Procedure	ICD-10-PCS
DW16BCZ	Low Dose Rate (LDR) Brachytherapy of Pelvic Region using Californium 252 (Cf-252)	Procedure	ICD-10-PCS
DW16BYZ	Low Dose Rate (LDR) Brachytherapy of Pelvic Region using Other Isotope	Procedure	ICD-10-PCS
DWY17ZZ	Contact Radiation of Head and Neck	Procedure	ICD-10-PCS
DWY1FZZ	Plaque Radiation of Head and Neck	Procedure	ICD-10-PCS
DWY27ZZ	Contact Radiation of Chest	Procedure	ICD-10-PCS
DWY2FZZ	Plaque Radiation of Chest	Procedure	ICD-10-PCS
DWY37ZZ	Contact Radiation of Abdomen	Procedure	ICD-10-PCS
DWY3FZZ	Plaque Radiation of Abdomen	Procedure	ICD-10-PCS
DWY47ZZ	Contact Radiation of Hemibody	Procedure	ICD-10-PCS
DWY4FZZ	Plaque Radiation of Hemibody	Procedure	ICD-10-PCS
DWY57ZZ	Contact Radiation of Whole Body	Procedure	ICD-10-PCS
DWY5FZZ	Plaque Radiation of Whole Body	Procedure	ICD-10-PCS
DWY67ZZ	Contact Radiation of Pelvic Region	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
DWY6FZZ	Plaque Radiation of Pelvic Region	Procedure	ICD-10-PCS
E1500	Centrifuge, for dialysis	Procedure	HCPCS
	Kidney, dialysate delivery system kidney machine, pump recirculating, air removal system, flowrate meter, power off, heater and temperature control with alarm, IV		
E1510	poles, pressure gauge, concentrate container	Procedure	HCPCS
E1520	Heparin infusion pump for hemodialysis	Procedure	HCPCS
E1530	Air bubble detector for hemodialysis, each, replacement	Procedure	HCPCS
E1540	Pressure alarm for hemodialysis, each, replacement	Procedure	HCPCS
E1550	Bath conductivity meter for hemodialysis, each	Procedure	HCPCS
E1560	Blood leak detector for hemodialysis, each, replacement	Procedure	HCPCS
E1570	Adjustable chair, for ESRD patients	Procedure	HCPCS
E1575	Transducer protectors/fluid barriers, for hemodialysis, any size, per 10	Procedure	HCPCS
E1580	Unipuncture control system for hemodialysis	Procedure	HCPCS
E1590	Hemodialysis machine	Procedure	HCPCS
E1592	Automatic intermittent peritoneal dialysis system	Procedure	HCPCS
E1594	Cycler dialysis machine for peritoneal dialysis	Procedure	HCPCS
E1600	Delivery and/or installation charges for hemodialysis equipment	Procedure	HCPCS
E1610	Reverse osmosis water purification system, for hemodialysis	Procedure	HCPCS
E1615	Deionizer water purification system, for hemodialysis	Procedure	HCPCS
E1620	Blood pump for hemodialysis, replacement	Procedure	HCPCS
E1625	Water softening system, for hemodialysis	Procedure	HCPCS
E1630	Reciprocating peritoneal dialysis system	Procedure	HCPCS
E1632	Wearable artificial kidney, each	Procedure	HCPCS
E1634	Peritoneal dialysis clamps, each	Procedure	HCPCS
E1635	Compact (portable) travel hemodialyzer system	Procedure	HCPCS
E1636	Sorbent cartridges, for hemodialysis, per 10	Procedure	HCPCS
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
G0458	Low dose rate (LDR) prostate brachytherapy services, composite rate	Procedure	HCPCS
	Chemotherapy administration, intravenous infusion technique; initiation of infusion in the office/clinic setting using office/clinic pump/supplies, with continuation of the infusion in the community setting (e.g., home, domiciliary, rest home or assisted living) using a portable pump provided by the office/clinic, includes follow up		
G0498	office/clinic visit at the conclusion of the infusion	Procedure	HCPCS
G3001	Administration and supply of tositumomab, 450 mg	Procedure	HCPCS
G35	Multiple sclerosis	Diagnosis	ICD-10-CM
	Stereoscopic x-ray guidance for localization of target volume for the delivery of		
G6002	radiation therapy	Procedure	HCPCS
	Radiation treatment delivery, single treatment area, single port or parallel opposed		
G6003	ports, simple blocks or no blocks: up to 5 mev	Procedure	HCPCS
	Radiation treatment delivery, single treatment area, single port or parallel opposed		
G6004	ports, simple blocks or no blocks: 6-10 mev	Procedure	HCPCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
G6005	Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks: 11-19 mev	Procedure	HCPCS
G6006	Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks: 20 mev or greater	Procedure	HCPCS
G6007	Radiation treatment delivery, two separate treatment areas, three or more ports on a single treatment area, use of multiple blocks: up to 5 mev	Procedure	HCPCS
G6008	Radiation treatment delivery, two separate treatment areas, three or more ports on a single treatment area, use of multiple blocks: 6-10 mev	Procedure	HCPCS
G6009	Radiation treatment delivery, two separate treatment areas, three or more ports on a single treatment area, use of multiple blocks: 11-19 mev	Procedure	HCPCS
G6010	Radiation treatment delivery, two separate treatment areas, three or more ports on a single treatment area, use of multiple blocks: 20 mev or greater	Procedure	HCPCS
G6011	Radiation treatment delivery, three or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; up to 5 mev	Procedure	HCPCS
G6012	Radiation treatment delivery, three or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 6-10 mev	Procedure	HCPCS
G6013	Radiation treatment delivery, three or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 11-19 mev	Procedure	HCPCS
G6014	Radiation treatment delivery, three or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 20 mev or greater	Procedure	HCPCS
G6015	Intensity modulated treatment delivery, single or multiple fields/arcs, via narrow spatially and temporally modulated beams, binary, dynamic MLC, per treatment session	Procedure	HCPCS
G6017	Intra-fraction localization and tracking of target or patient motion during delivery of radiation therapy (e.g., 3D positional tracking, gating, 3D surface tracking), each fraction of treatment	Procedure	HCPCS
G9835	Trastuzumab administered within 12 months of diagnosis	Procedure	HCPCS
G9837	Trastuzumab not administered within 12 months of diagnosis	Procedure	HCPCS
J0129	Injection, abatacept, 10 mg (code may be used for Medicare when drug administered under the direct supervision of a physician, not for use when drug is self-administered)	Procedure	HCPCS
J0135	Injection, adalimumab, 20 mg	Procedure	HCPCS
J0202	Injection, alemtuzumab, 1 mg	Procedure	HCPCS
J0207	Injection, amifostine, 500 mg	Procedure	HCPCS
J0215	Injection, alefacept, 0.5 mg	Procedure	HCPCS
J0480	Injection, basiliximab, 20 mg	Procedure	HCPCS
J0485	Injection, belatacept, 1 mg	Procedure	HCPCS
J0490	Injection, belimumab, 10 mg	Procedure	HCPCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
J0593	Injection, lanadelumab-flyo, 1 mg (code may be used for Medicare when drug administered under direct supervision of a physician, not for use when drug is self-administered)	Procedure	HCPCS
J0594	Injection, busulfan, 1 mg	Procedure	HCPCS
J0638	Injection, canakinumab, 1 mg	Procedure	HCPCS
J0717	Injection, certolizumab pegol, 1 mg (code may be used for Medicare when drug administered under the direct supervision of a physician, not for use when drug is self-administered)	Procedure	HCPCS
J0718	Injection, certolizumab pegol, 1 mg	Procedure	HCPCS
J0894	Injection, decitabine, 1 mg	Procedure	HCPCS
J0897	Injection, denosumab, 1 mg	Procedure	HCPCS
J1300	Injection, eculizumab, 10 mg	Procedure	HCPCS
J1303	Injection, ravulizumab-cwvz, 10 mg	Procedure	HCPCS
J1438	Injection, etanercept, 25 mg (code may be used for Medicare when drug administered under the direct supervision of a physician, not for use when drug is self-administered)	Procedure	HCPCS
J1595	Injection, glatiramer acetate, 20 mg	Procedure	HCPCS
J1600	Injection, gold sodium thiomalate, up to 50 mg	Procedure	HCPCS
J1602	Injection, golimumab, 1 mg, for intravenous use	Procedure	HCPCS
J1628	Injection, guselkumab, 1 mg	Procedure	HCPCS
J1745	Injection, infliximab, excludes biosimilar, 10 mg	Procedure	HCPCS
J1825	Injection, interferon beta-1a, 33 mcg	Procedure	HCPCS
J1826	Injection, interferon beta-1a, 30 mcg	Procedure	HCPCS
J1830	Injection interferon beta-1b, 0.25 mg (code may be used for Medicare when drug administered under the direct supervision of a physician, not for use when drug is self-administered)	Procedure	HCPCS
J2323	Injection, natalizumab, 1 mg	Procedure	HCPCS
J2350	Injection, ocrelizumab, 1 mg	Procedure	HCPCS
J2504	Injection, pegademase bovine, 25 IU	Procedure	HCPCS
J2793	Injection, rilonacept, 1 mg	Procedure	HCPCS
J2860	Injection, siltuximab, 10 mg	Procedure	HCPCS
J2910	Injection, aurothioglucose, up to 50 mg	Procedure	HCPCS
J3031	Injection, fremanezumab-vfrm, 1 mg (code may be used for Medicare when drug administered under the direct supervision of a physician, not for use when drug is self-administered)	Procedure	HCPCS
J3111	Injection, romosozumab-aqqg, 1 mg	Procedure	HCPCS
J3245	Injection, tildrakizumab, 1 mg	Procedure	HCPCS
J3262	Injection, tocilizumab, 1 mg	Procedure	HCPCS
J3357	Ustekinumab, for subcutaneous injection, 1 mg	Procedure	HCPCS
J3358	Ustekinumab, for intravenous injection, 1 mg	Procedure	HCPCS
J3380	Injection, vedolizumab, 1 mg	Procedure	HCPCS
J7500	Azathioprine, oral, 50 mg	Procedure	HCPCS
J7501	Azathioprine, parenteral, 100 mg	Procedure	HCPCS
J7502	Cyclosporine, oral, 100 mg	Procedure	HCPCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
J7503	Tacrolimus, extended release, (Envarsus XR), oral, 0.25 mg	Procedure	HCPCS
J7505	Muromonab-CD3, parenteral, 5 mg	Procedure	HCPCS
J7507	Tacrolimus, immediate release, oral, 1 mg	Procedure	HCPCS
J7508	Tacrolimus, extended release, (Astagraf XL), oral, 0.1 mg	Procedure	HCPCS
J7513	Daclizumab, parenteral, 25 mg	Procedure	HCPCS
J7515	Cyclosporine, oral, 25 mg	Procedure	HCPCS
J7516	Cyclosporine, parenteral, 250 mg	Procedure	HCPCS
J7517	Mycophenolate mofetil, oral, 250 mg	Procedure	HCPCS
J7520	Sirolimus, oral, 1 mg	Procedure	HCPCS
J7525	Tacrolimus, parenteral, 5 mg	Procedure	HCPCS
J7527	Everolimus, oral, 0.25 mg	Procedure	HCPCS
J7599	Immunosuppressive drug, not otherwise classified	Procedure	HCPCS
J8510	Busulfan, oral, 2 mg	Procedure	HCPCS
J8520	Capecitabine, oral, 150 mg	Procedure	HCPCS
J8521	Capecitabine, oral, 500 mg	Procedure	HCPCS
J8530	Cyclophosphamide, oral, 25 mg	Procedure	HCPCS
J8560	Etoposide, oral, 50 mg	Procedure	HCPCS
J8561	Everolimus, oral, 0.25 mg	Procedure	HCPCS
J8562	Fludarabine phosphate, oral, 10 mg	Procedure	HCPCS
J8565	Gefitinib, oral, 250 mg	Procedure	HCPCS
J8600	Melphalan, oral, 2 mg	Procedure	HCPCS
J8610	Methotrexate, oral, 2.5 mg	Procedure	HCPCS
J8700	Temozolomide, oral, 5 mg	Procedure	HCPCS
J8705	Topotecan, oral, 0.25 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
J9002	Injection, doxorubicin hydrochloride, liposomal, Doxil, 10 mg	Procedure	HCPCS
J9010	Injection, alemtuzumab, 10 mg	Procedure	HCPCS
J9015	Injection, aldesleukin, per single use vial	Procedure	HCPCS
J9017	Injection, arsenic trioxide, 1 mg	Procedure	HCPCS
J9019	Injection, asparaginase (Erwinaze), 1,000 IU	Procedure	HCPCS
J9020	Injection, asparaginase, not otherwise specified, 10,000 units	Procedure	HCPCS
J9025	Injection, azacitidine, 1 mg	Procedure	HCPCS
J9027	Injection, clofarabine, 1 mg	Procedure	HCPCS
J9033	Injection, bendamustine HCl (Treanda), 1 mg	Procedure	HCPCS
J9034	Injection, bendamustine HCl (Bendeka), 1 mg	Procedure	HCPCS
J9035	Injection, bevacizumab, 10 mg	Procedure	HCPCS
J9036	Injection, bendamustine hydrochloride, (Belrapzo/bendamustine), 1 mg	Procedure	HCPCS
J9040	Injection, bleomycin sulfate, 15 units	Procedure	HCPCS
J9041	Injection, bortezomib (Velcade), 0.1 mg	Procedure	HCPCS
J9042	Injection, brentuximab vedotin, 1 mg	Procedure	HCPCS
J9043	Injection, cabazitaxel, 1 mg	Procedure	HCPCS
J9045	Injection, carboplatin, 50 mg	Procedure	HCPCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
J9047	Injection, carfilzomib, 1 mg	Procedure	HCPCS
J9050	Injection, carmustine, 100 mg	Procedure	HCPCS
J9055	Injection, cetuximab, 10 mg	Procedure	HCPCS
J9057	Injection, copanlisib, 1 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
J9070	Cyclophosphamide, 100 mg	Procedure	HCPCS
J9080	Cyclophosphamide, 200 mg	Procedure	HCPCS
J9090	Cyclophosphamide, 500 mg	Procedure	HCPCS
J9091	Cyclophosphamide, 1 g	Procedure	HCPCS
J9092	Cyclophosphamide, 2 g	Procedure	HCPCS
J9093	Cyclophosphamide, lyophilized, 100 mg	Procedure	HCPCS
J9094	Cyclophosphamide, lyophilized, 200 mg	Procedure	HCPCS
J9095	Cyclophosphamide, lyophilized, 500 mg	Procedure	HCPCS
J9096	Cyclophosphamide, lyophilized, 1 g	Procedure	HCPCS
J9097	Cyclophosphamide, lyophilized, 2 g	Procedure	HCPCS
J9098	Injection, cytarabine liposome, 10 mg	Procedure	HCPCS
J9100	Injection, cytarabine, 100 mg	Procedure	HCPCS
J9110	Injection, cytarabine, 500 mg	Procedure	HCPCS
J9118	Injection, calaspargase pegol-mknl, 10 units	Procedure	HCPCS
J9119	Injection, cemiplimab-rwlc, 1 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
J9153	Injection, liposomal, 1 mg daunorubicin and 2.27 mg cytarabine	Procedure	HCPCS
J9160	Injection, denileukin diftitox, 300 mcg	Procedure	HCPCS
J9170	Injection, docetaxel, 20 mg	Procedure	HCPCS
J9171	Injection, docetaxel, 1 mg	Procedure	HCPCS
J9173	Injection, durvalumab, 10 mg	Procedure	HCPCS
J9178	Injection, epirubicin HCl, 2 mg	Procedure	HCPCS
J9179	Injection, eribulin mesylate, 0.1 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
J9190	Injection, fluorouracil, 500 mg	Procedure	HCPCS
J9200	Injection, floxuridine, 500 mg	Procedure	HCPCS
J9201	Injection, gemcitabine HCl, not otherwise specified, 200 mg	Procedure	HCPCS
J9203	Injection, gemtuzumab ozogamicin, 0.1 mg	Procedure	HCPCS
J9204	Injection, mogamulizumab-kpkc, 1 mg	Procedure	HCPCS
J9205	Injection, irinotecan liposome, 1 mg	Procedure	HCPCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
J9206	Injection, irinotecan, 20 mg	Procedure	HCPCS
J9207	Injection, ixabepilone, 1 mg	Procedure	HCPCS
J9208	Injection, ifosfamide, 1 g	Procedure	HCPCS
J9210	Injection, emapalumab-lzsg, 1 mg	Procedure	HCPCS
J9211	Injection, idarubicin HCl, 5 mg	Procedure	HCPCS
J9212	Injection, interferon alfacon-1, recombinant, 1 mcg	Procedure	HCPCS
J9213	Injection, interferon, alfa-2a, recombinant, 3 million units	Procedure	HCPCS
J9214	Injection, interferon, alfa-2b, recombinant, 1 million units	Procedure	HCPCS
J9215	Injection, interferon, alfa-N3, (human leukocyte derived), 250,000 IU	Procedure	HCPCS
J9216	Injection, interferon, gamma 1-b, 3 million units	Procedure	HCPCS
J9228	Injection, ipilimumab, 1 mg	Procedure	HCPCS
J9229	Injection, inotuzumab ozogamicin, 0.1 mg	Procedure	HCPCS
J9230	Injection, mechlorethamine HCl, (nitrogen mustard), 10 mg	Procedure	HCPCS
J9245	Injection, melphalan hydrochloride, not otherwise specified, 50 mg	Procedure	HCPCS
J9250	Methotrexate sodium, 5 mg	Procedure	HCPCS
J9260	Methotrexate sodium, 50 mg	Procedure	HCPCS
J9261	Injection, nelarabine, 50 mg	Procedure	HCPCS
J9262	Injection, omacetaxine mepesuccinate, 0.01 mg	Procedure	HCPCS
J9263	Injection, oxaliplatin, 0.5 mg	Procedure	HCPCS
J9264	Injection, paclitaxel protein-bound particles, 1 mg	Procedure	HCPCS
J9265	Injection, paclitaxel, 30 mg	Procedure	HCPCS
J9266	Injection, pegaspargase, per single dose vial	Procedure	HCPCS
J9267	Injection, paclitaxel, 1 mg	Procedure	HCPCS
J9268	Injection, pentostatin, 10 mg	Procedure	HCPCS
J9269	Injection, tagraxofusp-erzs, 10 mcg	Procedure	HCPCS
J9270	Injection, plicamycin, 2.5 mg	Procedure	HCPCS
J9271	Injection, pembrolizumab, 1 mg	Procedure	HCPCS
J9280	Injection, 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
J9301	Injection, obinutuzumab, 10 mg	Procedure	HCPCS
J9302	Injection, ofatumumab, 10 mg	Procedure	HCPCS
J9303	Injection, panitumumab, 10 mg	Procedure	HCPCS
J9305	Injection, pemetrexed, NOS, 10 mg	Procedure	HCPCS
J9306	Injection, pertuzumab, 1 mg	Procedure	HCPCS
J9307	Injection, pralatrexate, 1 mg	Procedure	HCPCS
J9310	Injection, rituximab, 100 mg	Procedure	HCPCS
J9311	Injection, rituximab 10 mg and hyaluronidase	Procedure	HCPCS
J9312	Injection, rituximab, 10 mg	Procedure	HCPCS
J9315	Injection, romidepsin, 1 mg	Procedure	HCPCS
J9320	Injection, streptozocin, 1 g	Procedure	HCPCS
J9328	Injection, temozolomide, 1 mg	Procedure	HCPCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
J9330	Injection, temsirolimus, 1 mg	Procedure	HCPCS
J9340	Injection, thiotepa, 15 mg	Procedure	HCPCS
J9350	Injection, topotecan, 4 mg	Procedure	HCPCS
J9351	Injection, topotecan, 0.1 mg	Procedure	HCPCS
J9355	Injection, trastuzumab, excludes biosimilar, 10 mg	Procedure	HCPCS
J9356	Injection, trastuzumab, 10 mg and hyaluronidase-oysk	Procedure	HCPCS
J9360	Injection, vinblastine sulfate, 1 mg	Procedure	HCPCS
J9370	Vincristine sulfate, 1 mg	Procedure	HCPCS
J9371	Injection, vincristine sulfate liposome, 1 mg	Procedure	HCPCS
J9375	Vincristine sulfate, 2 mg	Procedure	HCPCS
J9380	Vincristine sulfate, 5 mg	Procedure	HCPCS
J9390	Injection, vinorelbine tartrate, 10 mg	Procedure	HCPCS
J9999	Not otherwise classified, antineoplastic drugs	Procedure	HCPCS
K0119	Azathioprine, oral, tab, 50 mg	Procedure	HCPCS
K0120	Azathioprine, parenteral, 100 mg	Procedure	HCPCS
K0122	Cyclosporine, parenteral, 250 mg	Procedure	HCPCS
K0412	Mycophenolate mofetil, oral, 250 mg (CellCept)	Procedure	HCPCS
N08	Glomerular disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N16	Renal tubulo-interstitial disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
Q2010	Injection, glatiramer acetate, per dose	Procedure	HCPCS
Q2012	Injection, pegademase bovine, 25 IU	Procedure	HCPCS
Q2019	Injection, basiliximab, 20 mg	Procedure	HCPCS
Q2025	Fludarabine phosphate, oral, 1 mg	Procedure	HCPCS
	Sipuleucel-T, minimum of 50 million autologous CD54+ cells activated with PAP-GM-		
Q2043	CSF, including leukapheresis and all other preparatory procedures, per infusion	Procedure	HCPCS
Q2044	Injection, belimumab, 10 mg	Procedure	HCPCS
Q2048	Injection, doxorubicin hydrochloride, liposomal, DOXIL, 10 mg	Procedure	HCPCS
Q2049	Injection, doxorubicin HCl, liposomal, imported Lipodox, 10 mg	Procedure	HCPCS
Q2050	Injection, doxorubicin HCl, liposomal, not otherwise specified, 10 mg	Procedure	HCPCS
Q3001	Radioelements for brachytherapy, any type, each	Procedure	HCPCS
Q3025	Injection, interferon beta-1a, 11 mcg for intramuscular use	Procedure	HCPCS
Q3026	Injection, interferon beta-1a, 11 mcg for subcutaneous use	Procedure	HCPCS
Q3027	Injection, interferon beta-1a, 1 mcg for intramuscular use	Procedure	HCPCS
Q3028	Injection, interferon beta-1a, 1 mcg for subcutaneous use	Procedure	HCPCS
Q4079	Injection, natalizumab, 1 mg	Procedure	HCPCS
Q5102	Injection, infliximab, biosimilar, 10 mg	Procedure	HCPCS
Q5103	Injection, infliximab-dyyb, biosimilar, (Inflectra), 10 mg	Procedure	HCPCS
Q5104	Injection, infliximab-abda, biosimilar, (Renflexis), 10 mg	Procedure	HCPCS
Q5107	Injection, bevacizumab-awwb, biosimilar, (Mvasi), 10 mg	Procedure	HCPCS
Q5109	Injection, infliximab-qbtx, biosimilar, (Ixifi), 10 mg	Procedure	HCPCS
Q5112	Injection, trastuzumab-dttb, biosimilar, (Ontruzant), 10 mg	Procedure	HCPCS
Q5113	Injection, trastuzumab-pkrb, biosimilar, (Herzuma), 10 mg	Procedure	HCPCS
Q5114	Injection, Trastuzumab-dkst, biosimilar, (Ogivri), 10 mg	Procedure	HCPCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
Q5115	Injection, rituximab-abbs, biosimilar, (Truxima), 10 mg	Procedure	HCPCS
Q5116	Injection, trastuzumab-qyyp, biosimilar, (Trazimera), 10 mg	Procedure	HCPCS
Q5117	Injection, trastuzumab-anns, biosimilar, (Kanjinti), 10 mg	Procedure	HCPCS
Q5118	Injection, bevacizumab-bvzr, biosimilar, (Zirabev), 10 mg	Procedure	HCPCS
Q5119	Injection, rituximab-pvvr, biosimilar, (RUXIENCE), 10 mg	Procedure	HCPCS
Q5121	Injection, infliximab-axxq, biosimilar, (AVSOLA), 10 mg	Procedure	HCPCS
Q9979	Injection, Alemtuzumab, 1 mg	Procedure	HCPCS
Q9989	Ustekinumab, for intravenous injection, 1 mg	Procedure	HCPCS
R75	Inconclusive laboratory evidence of human immunodeficiency virus [HIV]	Diagnosis	ICD-10-CM
S0087	Injection, alemtuzumab, 30 mg	Procedure	HCPCS
S0088	Imatinib, 100 mg	Procedure	HCPCS
S0108	Mercaptopurine, oral, 50 mg	Procedure	HCPCS
S0115	Bortezomib, 3.5 mg	Procedure	HCPCS
S0116	Bevacizumab, 100 mg	Procedure	HCPCS
S0145	Injection, PEGylated interferon alfa-2A, 180 mcg per ml	Procedure	HCPCS
S0146	Injection, pegylated interferon alfa-2b, 10 mcg per 0.5 ml	Procedure	HCPCS
S0148	Injection, PEGylated interferon alfa-2B, 10 mcg	Procedure	HCPCS
S0162	Injection, efalizumab, 125 mg	Procedure	HCPCS
S0168	Injection, azacitidine, 100 mg	Procedure	HCPCS
S0172	Chlorambucil, oral, 2 mg	Procedure	HCPCS
S0176	Hydroxyurea, oral, 500 mg	Procedure	HCPCS
S0178	Lomustine, oral, 10 mg	Procedure	HCPCS
S0182	Procarbazine HCl, oral, 50 mg	Procedure	HCPCS
S0193	Injection alefacept, 7.5 mg (includes dose packaging)	Procedure	HCPCS
S2053	Transplantation of small intestine and liver allografts	Procedure	HCPCS
S2054	Transplantation of multivisceral organs	Procedure	HCPCS
S2060	Lobar lung transplantation	Procedure	HCPCS
S2065	Simultaneous pancreas kidney transplantation	Procedure	HCPCS
S2142	Cord blood-derived stem-cell transplantation, allogeneic	Procedure	HCPCS
	Bone marrow or blood-derived stem cells (peripheral or umbilical), allogeneic or autologous, harvesting, transplantation, and related complications; including: pheresis and cell preparation/storage; marrow ablative therapy; drugs, supplies, hospitalization with outpatient follow-up; medical/surgical, diagnostic, emergency, and rehabilitative services; and the number of days of pre- and posttransplant care in the global definition		
S2150	Solid organ(s), complete or segmental, single organ or combination of organs; deceased or living donor(s), procurement, transplantation, and related complications; including: drugs; supplies; hospitalization with outpatient follow-up; medical/surgical, diagnostic, emergency, and rehabilitative services, and the number of days of pre- and posttransplant care in the global definition	Procedure	HCPCS
S2152	Introduction of Blinatumomab Antineoplastic Immunotherapy into Peripheral Vein,	Procedure	HCPCS
XW03351	Percutaneous Approach, New Technology Group 1	Procedure	ICD-10-PCS
	Introduction of Cytarabine and Daunorubicin Liposome Antineoplastic into		
XW033B3	Peripheral Vein, Percutaneous Approach, New Technology Group 3	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
	Introduction of Engineered Autologous Chimeric Antigen Receptor T-cell Immunotherapy into Peripheral Vein, Percutaneous Approach, New Technology		
XW033C3	Group 3	Procedure	ICD-10-PCS
	Introduction of Tagraxofusp-erzs Antineoplastic into Peripheral Vein, Percutaneous		
XW033Q5	Approach, New Technology Group 5	Procedure	ICD-10-PCS
	Introduction of Iobenguane I-131 Antineoplastic into Peripheral Vein, Percutaneous		
XW033S5	Approach, New Technology Group 5	Procedure	ICD-10-PCS
	Introduction of Blinatumomab Antineoplastic Immunotherapy into Central Vein, Percutaneous Approach, New Technology Group 1		
XW04351		Procedure	ICD-10-PCS
	Introduction of Cytarabine and Daunorubicin Liposome Antineoplastic into Central Vein, Percutaneous Approach, New Technology Group 3		
XW043B3		Procedure	ICD-10-PCS
	Introduction of Engineered Autologous Chimeric Antigen Receptor T-cell Immunotherapy into Central Vein, Percutaneous Approach, New Technology Group		
XW043C3	3	Procedure	ICD-10-PCS
	Introduction of Tagraxofusp-erzs Antineoplastic into Central Vein, Percutaneous		
XW043Q5	Approach, New Technology Group 5	Procedure	ICD-10-PCS
	Introduction of Iobenguane I-131 Antineoplastic into Central Vein, Percutaneous		
XW043S5	Approach, New Technology Group 5	Procedure	ICD-10-PCS
	Introduction of Erdafitinib Antineoplastic into Mouth and Pharynx, External		
XW0DXL5	Approach, New Technology Group 5	Procedure	ICD-10-PCS
	Introduction of Venetoclax Antineoplastic into Mouth and Pharynx, External		
XW0DXR5	Approach, New Technology Group 5	Procedure	ICD-10-PCS
	Introduction of Ruxolitinib into Mouth and Pharynx, External Approach, New		
XW0DXT5	Technology Group 5	Procedure	ICD-10-PCS
	Introduction of Gilteritinib Antineoplastic into Mouth and Pharynx, External		
XW0DXV5	Approach, New Technology Group 5	Procedure	ICD-10-PCS
Z21	Asymptomatic human immunodeficiency virus [HIV] infection status	Diagnosis	ICD-10-CM
Z49	Encounter for care involving renal dialysis	Diagnosis	ICD-10-CM
Tildrakizumab			
J3245	Injection, tildrakizumab, 1 mg	Procedure	HCPCS
Ustekinumab			
PX	Ustekinumab, for intravenous injection, 1 mg	HC	C94
PX	Ustekinumab, for subcutaneous injection, 1 mg	HC	J33
PX	Ustekinumab, for intravenous injection, 1 mg	HC	J33
PX	Ustekinumab, for intravenous injection, 1 mg	HC	Q99
PX	Injection, ustekinumab, 1 mg	HC	C92
Systemic Non-Biologic Treatments			
J7502	CYCLOSPORINE ORAL 100 MG	Procedure	HCPCS
J7515	CYCLOSPORINE ORAL 25 MG	Procedure	HCPCS
J8610	Methotrexate, oral, 2.5 mg	Procedure	HCPCS
J9250	Methotrexate sodium, 5 mg	Procedure	HCPCS
J9260	Methotrexate sodium, 50 mg	Procedure	HCPCS
Systemic Biologic Anti-TNF Treatments			
80145	Adalimumab	Procedure	CPT-4

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
80230	Infliximab	Procedure	CPT-4
J0135	Injection, adalimumab, 20 mg	Procedure	HCPCS
J1438	Injection, etanercept, 25 mg (code may be used for Medicare when drug administered under the direct supervision of a physician, not for use when drug is self-administered)	Procedure	HCPCS
J1745	Injection, infliximab, excludes biosimilar, 10 mg	Procedure	HCPCS
Q5102	Injection, infliximab, biosimilar, 10 mg	Procedure	HCPCS
Q5103	Injection, infliximab-dyyb, biosimilar, (Inflectra), 10 mg	Procedure	HCPCS
Q5104	Injection, infliximab-abda, biosimilar, (Renflexis), 10 mg	Procedure	HCPCS
Q5109	Injection, infliximab-qbtx, biosimilar, (Ixifi), 10 mg	Procedure	HCPCS
Q5121	Injection, infliximab-axxq, biosimilar, (AVSOLA), 10 mg	Procedure	HCPCS
S9359	Home infusion therapy, antitumor necrosis factor intravenous therapy; (e.g., Infliximab); administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem	Procedure	HCPCS
Acute Myocardial Infarction			
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery	Diagnosis	ICD-10-CM
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery	Diagnosis	ICD-10-CM
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall	Diagnosis	ICD-10-CM
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery	Diagnosis	ICD-10-CM
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall	Diagnosis	ICD-10-CM
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery	Diagnosis	ICD-10-CM
I21.29	ST elevation (STEMI) myocardial infarction involving other sites	Diagnosis	ICD-10-CM
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
I21.4	Non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I21.9	Acute myocardial infarction, unspecified	Diagnosis	ICD-10-CM
I21.A1	Myocardial infarction type 2	Diagnosis	ICD-10-CM
I21.A9	Other myocardial infarction type	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
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction	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
I23.0	Hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.1	Atrial septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.2	Ventricular septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.3	Rupture of cardiac wall without hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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
I23.6	Thrombosis of atrium, auricular appendage, and ventricle as current complications following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.7	Postinfarction angina	Diagnosis	ICD-10-CM
I23.8	Other current complications following acute myocardial infarction	Diagnosis	ICD-10-CM
Alzheimer's Disease			
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
Anemia			
C94.6	Myelodysplastic disease, not elsewhere classified	Diagnosis	ICD-10-CM
D46.0	Refractory anemia without ring sideroblasts, so stated	Diagnosis	ICD-10-CM
D46.1	Refractory anemia with ring sideroblasts	Diagnosis	ICD-10-CM
D46.20	Refractory anemia with excess of blasts, unspecified	Diagnosis	ICD-10-CM
D46.21	Refractory anemia with excess of blasts 1	Diagnosis	ICD-10-CM
D46.22	Refractory anemia with excess of blasts 2	Diagnosis	ICD-10-CM
D46.4	Refractory anemia, unspecified	Diagnosis	ICD-10-CM
D46.9	Myelodysplastic syndrome, unspecified	Diagnosis	ICD-10-CM
D46.A	Refractory cytopenia with multilineage dysplasia	Diagnosis	ICD-10-CM
D46.B	Refractory cytopenia with multilineage dysplasia and ring sideroblasts	Diagnosis	ICD-10-CM
D46.C	Myelodysplastic syndrome with isolated del(5q) chromosomal abnormality	Diagnosis	ICD-10-CM
D46.Z	Other myelodysplastic syndromes	Diagnosis	ICD-10-CM
D47.4	Osteomyelofibrosis	Diagnosis	ICD-10-CM
D50.0	Iron deficiency anemia secondary to blood loss (chronic)	Diagnosis	ICD-10-CM
D50.1	Sideropenic dysphagia	Diagnosis	ICD-10-CM
D50.8	Other iron deficiency anemias	Diagnosis	ICD-10-CM
D50.9	Iron deficiency anemia, unspecified	Diagnosis	ICD-10-CM
D51.0	Vitamin B12 deficiency anemia due to intrinsic factor deficiency	Diagnosis	ICD-10-CM
D51.1	Vitamin B12 deficiency anemia due to selective vitamin B12 malabsorption with proteinuria	Diagnosis	ICD-10-CM
D51.2	Transcobalamin II deficiency	Diagnosis	ICD-10-CM
D51.3	Other dietary vitamin B12 deficiency anemia	Diagnosis	ICD-10-CM
D51.8	Other vitamin B12 deficiency anemias	Diagnosis	ICD-10-CM
D51.9	Vitamin B12 deficiency anemia, unspecified	Diagnosis	ICD-10-CM
D52.0	Dietary folate deficiency anemia	Diagnosis	ICD-10-CM
D52.1	Drug-induced folate deficiency anemia	Diagnosis	ICD-10-CM
D52.8	Other folate deficiency anemias	Diagnosis	ICD-10-CM
D52.9	Folate deficiency anemia, unspecified	Diagnosis	ICD-10-CM
D53.0	Protein deficiency anemia	Diagnosis	ICD-10-CM
D53.1	Other megaloblastic anemias, not elsewhere classified	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D53.2	Scorbutic anemia	Diagnosis	ICD-10-CM
D53.8	Other specified nutritional anemias	Diagnosis	ICD-10-CM
D53.9	Nutritional anemia, unspecified	Diagnosis	ICD-10-CM
D55.0	Anemia due to glucose-6-phosphate dehydrogenase [G6PD] deficiency	Diagnosis	ICD-10-CM
D55.1	Anemia due to other disorders of glutathione metabolism	Diagnosis	ICD-10-CM
D55.2	Anemia due to disorders of glycolytic enzymes	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
D55.3	Anemia due to disorders of nucleotide metabolism	Diagnosis	ICD-10-CM
D55.8	Other anemias due to enzyme disorders	Diagnosis	ICD-10-CM
D55.9	Anemia due to enzyme disorder, unspecified	Diagnosis	ICD-10-CM
D56.0	Alpha thalassemia	Diagnosis	ICD-10-CM
D56.1	Beta thalassemia	Diagnosis	ICD-10-CM
D56.2	Delta-beta thalassemia	Diagnosis	ICD-10-CM
D56.3	Thalassemia minor	Diagnosis	ICD-10-CM
D56.4	Hereditary persistence of fetal hemoglobin [HPFH]	Diagnosis	ICD-10-CM
D56.5	Hemoglobin E-beta thalassemia	Diagnosis	ICD-10-CM
D56.8	Other thalassemias	Diagnosis	ICD-10-CM
D56.9	Thalassemia, unspecified	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
D57.02	Hb-SS disease with splenic sequestration	Diagnosis	ICD-10-CM
D57.03	Hb-SS disease with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.09	Hb-SS disease with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.1	Sickle-cell disease without crisis	Diagnosis	ICD-10-CM
D57.20	Sickle-cell/Hb-C disease without crisis	Diagnosis	ICD-10-CM
D57.211	Sickle-cell/Hb-C disease with acute chest syndrome	Diagnosis	ICD-10-CM
D57.212	Sickle-cell/Hb-C disease with splenic sequestration	Diagnosis	ICD-10-CM
D57.213	Sickle-cell/Hb-C disease with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.218	Sickle-cell/Hb-C disease with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.219	Sickle-cell/Hb-C disease with crisis, unspecified	Diagnosis	ICD-10-CM
D57.3	Sickle-cell trait	Diagnosis	ICD-10-CM
D57.40	Sickle-cell thalassemia without crisis	Diagnosis	ICD-10-CM
D57.411	Sickle-cell thalassemia, unspecified, with acute chest syndrome	Diagnosis	ICD-10-CM
D57.412	Sickle-cell thalassemia, unspecified, with splenic sequestration	Diagnosis	ICD-10-CM
D57.413	Sickle-cell thalassemia, unspecified, with cerebral vascular involvement	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
D57.42	Sickle-cell thalassemia beta zero without crisis	Diagnosis	ICD-10-CM
D57.431	Sickle-cell thalassemia beta zero with acute chest syndrome	Diagnosis	ICD-10-CM
D57.432	Sickle-cell thalassemia beta zero with splenic sequestration	Diagnosis	ICD-10-CM
D57.433	Sickle-cell thalassemia beta zero with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.438	Sickle-cell thalassemia beta zero with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.439	Sickle-cell thalassemia beta zero with crisis, unspecified	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D57.44	Sickle-cell thalassemia beta plus without crisis	Diagnosis	ICD-10-CM
D57.451	Sickle-cell thalassemia beta plus with acute chest syndrome	Diagnosis	ICD-10-CM
D57.452	Sickle-cell thalassemia beta plus with splenic sequestration	Diagnosis	ICD-10-CM
D57.453	Sickle-cell thalassemia beta plus with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.458	Sickle-cell thalassemia beta plus with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.459	Sickle-cell thalassemia beta plus with crisis, unspecified	Diagnosis	ICD-10-CM
D57.80	Other sickle-cell disorders without crisis	Diagnosis	ICD-10-CM
D57.811	Other sickle-cell disorders with acute chest syndrome	Diagnosis	ICD-10-CM
D57.812	Other sickle-cell disorders with splenic sequestration	Diagnosis	ICD-10-CM
D57.813	Other sickle-cell disorders with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.818	Other sickle-cell disorders with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.819	Other sickle-cell disorders with crisis, unspecified	Diagnosis	ICD-10-CM
D58.0	Hereditary spherocytosis	Diagnosis	ICD-10-CM
D58.1	Hereditary elliptocytosis	Diagnosis	ICD-10-CM
D58.2	Other hemoglobinopathies	Diagnosis	ICD-10-CM
D58.8	Other specified hereditary hemolytic anemias	Diagnosis	ICD-10-CM
D58.9	Hereditary hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
D59.0	Drug-induced autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.1	Other autoimmune hemolytic anemias	Diagnosis	ICD-10-CM
D59.10	Autoimmune hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
D59.11	Warm autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.12	Cold autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.13	Mixed type autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.19	Other autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.2	Drug-induced nonautoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.3	Hemolytic-uremic syndrome	Diagnosis	ICD-10-CM
D59.4	Other nonautoimmune hemolytic anemias	Diagnosis	ICD-10-CM
D59.5	Paroxysmal nocturnal hemoglobinuria [Marchiafava-Micheli]	Diagnosis	ICD-10-CM
D59.6	Hemoglobinuria due to hemolysis from other external causes	Diagnosis	ICD-10-CM
D59.8	Other acquired hemolytic anemias	Diagnosis	ICD-10-CM
D59.9	Acquired hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
D60.0	Chronic acquired pure red cell aplasia	Diagnosis	ICD-10-CM
D60.1	Transient acquired pure red cell aplasia	Diagnosis	ICD-10-CM
D60.8	Other acquired pure red cell aplasias	Diagnosis	ICD-10-CM
D60.9	Acquired pure red cell aplasia, unspecified	Diagnosis	ICD-10-CM
D61.01	Constitutional (pure) red blood cell aplasia	Diagnosis	ICD-10-CM
D61.09	Other constitutional aplastic anemia	Diagnosis	ICD-10-CM
D61.1	Drug-induced aplastic anemia	Diagnosis	ICD-10-CM
D61.2	Aplastic anemia due to other external agents	Diagnosis	ICD-10-CM
D61.3	Idiopathic aplastic anemia	Diagnosis	ICD-10-CM
D61.810	Antineoplastic chemotherapy induced pancytopenia	Diagnosis	ICD-10-CM
D61.811	Other drug-induced pancytopenia	Diagnosis	ICD-10-CM
D61.818	Other pancytopenia	Diagnosis	ICD-10-CM
D61.82	Myelophthisis	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
D61.89	Other specified aplastic anemias and other bone marrow failure syndromes	Diagnosis	ICD-10-CM
D61.9	Aplastic anemia, unspecified	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
D63.8	Anemia in other chronic diseases classified elsewhere	Diagnosis	ICD-10-CM
D64.0	Hereditary sideroblastic anemia	Diagnosis	ICD-10-CM
D64.1	Secondary sideroblastic anemia due to disease	Diagnosis	ICD-10-CM
D64.2	Secondary sideroblastic anemia due to drugs and toxins	Diagnosis	ICD-10-CM
D64.3	Other sideroblastic anemias	Diagnosis	ICD-10-CM
D64.4	Congenital dyserythropoietic anemia	Diagnosis	ICD-10-CM
D64.81	Anemia due to antineoplastic chemotherapy	Diagnosis	ICD-10-CM
D64.89	Other specified anemias	Diagnosis	ICD-10-CM
D64.9	Anemia, unspecified	Diagnosis	ICD-10-CM
D75.81	Myelofibrosis	Diagnosis	ICD-10-CM
Asthma			
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
Atrial Fibrillation or Flutter			
I48.0	Paroxysmal atrial fibrillation	Diagnosis	ICD-10-CM
I48.1	Persistent atrial fibrillation	Diagnosis	ICD-10-CM
I48.11	Longstanding persistent atrial fibrillation	Diagnosis	ICD-10-CM
I48.19	Other persistent atrial fibrillation	Diagnosis	ICD-10-CM
I48.2	Chronic atrial fibrillation	Diagnosis	ICD-10-CM
I48.20	Chronic atrial fibrillation, unspecified	Diagnosis	ICD-10-CM
I48.21	Permanent atrial fibrillation	Diagnosis	ICD-10-CM
I48.3	Typical atrial flutter	Diagnosis	ICD-10-CM
I48.4	Atypical atrial flutter	Diagnosis	ICD-10-CM
I48.91	Unspecified atrial fibrillation	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
Benign Prostatic Hyperplasia			
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
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
Breast Cancer			
C50.011	Malignant neoplasm of nipple and areola, right female breast	Diagnosis	ICD-10-CM
C50.012	Malignant neoplasm of nipple and areola, left female breast	Diagnosis	ICD-10-CM
C50.019	Malignant neoplasm of nipple and areola, unspecified female breast	Diagnosis	ICD-10-CM
C50.021	Malignant neoplasm of nipple and areola, right male breast	Diagnosis	ICD-10-CM
C50.022	Malignant neoplasm of nipple and areola, left male breast	Diagnosis	ICD-10-CM
C50.029	Malignant neoplasm of nipple and areola, unspecified male breast	Diagnosis	ICD-10-CM
C50.111	Malignant neoplasm of central portion of right female breast	Diagnosis	ICD-10-CM
C50.112	Malignant neoplasm of central portion of left female breast	Diagnosis	ICD-10-CM
C50.119	Malignant neoplasm of central portion of unspecified female breast	Diagnosis	ICD-10-CM
C50.121	Malignant neoplasm of central portion of right male breast	Diagnosis	ICD-10-CM
C50.122	Malignant neoplasm of central portion of left male breast	Diagnosis	ICD-10-CM
C50.129	Malignant neoplasm of central portion of unspecified male breast	Diagnosis	ICD-10-CM
C50.211	Malignant neoplasm of upper-inner quadrant of right female breast	Diagnosis	ICD-10-CM
C50.212	Malignant neoplasm of upper-inner quadrant of left female breast	Diagnosis	ICD-10-CM
C50.219	Malignant neoplasm of upper-inner quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.221	Malignant neoplasm of upper-inner quadrant of right male breast	Diagnosis	ICD-10-CM
C50.222	Malignant neoplasm of upper-inner quadrant of left male breast	Diagnosis	ICD-10-CM
C50.229	Malignant neoplasm of upper-inner quadrant of unspecified male breast	Diagnosis	ICD-10-CM
C50.311	Malignant neoplasm of lower-inner quadrant of right female breast	Diagnosis	ICD-10-CM
C50.312	Malignant neoplasm of lower-inner quadrant of left female breast	Diagnosis	ICD-10-CM
C50.319	Malignant neoplasm of lower-inner quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.321	Malignant neoplasm of lower-inner quadrant of right male breast	Diagnosis	ICD-10-CM
C50.322	Malignant neoplasm of lower-inner quadrant of left male breast	Diagnosis	ICD-10-CM
C50.329	Malignant neoplasm of lower-inner quadrant of unspecified male breast	Diagnosis	ICD-10-CM
C50.411	Malignant neoplasm of upper-outer quadrant of right female breast	Diagnosis	ICD-10-CM
C50.412	Malignant neoplasm of upper-outer quadrant of left female breast	Diagnosis	ICD-10-CM
C50.419	Malignant neoplasm of upper-outer quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.421	Malignant neoplasm of upper-outer quadrant of right male breast	Diagnosis	ICD-10-CM
C50.422	Malignant neoplasm of upper-outer quadrant of left male breast	Diagnosis	ICD-10-CM
C50.429	Malignant neoplasm of upper-outer quadrant of unspecified male breast	Diagnosis	ICD-10-CM
C50.511	Malignant neoplasm of lower-outer quadrant of right female breast	Diagnosis	ICD-10-CM
C50.512	Malignant neoplasm of lower-outer quadrant of left female breast	Diagnosis	ICD-10-CM
C50.519	Malignant neoplasm of lower-outer quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.521	Malignant neoplasm of lower-outer quadrant of right male breast	Diagnosis	ICD-10-CM
C50.522	Malignant neoplasm of lower-outer quadrant of left male breast	Diagnosis	ICD-10-CM
C50.529	Malignant neoplasm of lower-outer quadrant of unspecified male breast	Diagnosis	ICD-10-CM
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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
C50.619	Malignant neoplasm of axillary tail of unspecified female breast	Diagnosis	ICD-10-CM
C50.621	Malignant neoplasm of axillary tail of right male breast	Diagnosis	ICD-10-CM
C50.622	Malignant neoplasm of axillary tail of left male breast	Diagnosis	ICD-10-CM
C50.629	Malignant neoplasm of axillary tail of unspecified male breast	Diagnosis	ICD-10-CM
C50.811	Malignant neoplasm of overlapping sites of right female breast	Diagnosis	ICD-10-CM
C50.812	Malignant neoplasm of overlapping sites of left female breast	Diagnosis	ICD-10-CM
C50.819	Malignant neoplasm of overlapping sites of unspecified female breast	Diagnosis	ICD-10-CM
C50.821	Malignant neoplasm of overlapping sites of right male breast	Diagnosis	ICD-10-CM
C50.822	Malignant neoplasm of overlapping sites of left male breast	Diagnosis	ICD-10-CM
C50.829	Malignant neoplasm of overlapping sites of unspecified male breast	Diagnosis	ICD-10-CM
C50.911	Malignant neoplasm of unspecified site of right female breast	Diagnosis	ICD-10-CM
C50.912	Malignant neoplasm of unspecified site of left female breast	Diagnosis	ICD-10-CM
C50.919	Malignant neoplasm of unspecified site of unspecified female breast	Diagnosis	ICD-10-CM
C50.921	Malignant neoplasm of unspecified site of right male breast	Diagnosis	ICD-10-CM
C50.922	Malignant neoplasm of unspecified site of left male breast	Diagnosis	ICD-10-CM
C50.929	Malignant neoplasm of unspecified site of unspecified male breast	Diagnosis	ICD-10-CM
D05.00	Lobular carcinoma in situ of unspecified breast	Diagnosis	ICD-10-CM
D05.01	Lobular carcinoma in situ of right breast	Diagnosis	ICD-10-CM
D05.02	Lobular carcinoma in situ of left breast	Diagnosis	ICD-10-CM
D05.10	Intraductal carcinoma in situ of unspecified breast	Diagnosis	ICD-10-CM
D05.11	Intraductal carcinoma in situ of right breast	Diagnosis	ICD-10-CM
D05.12	Intraductal carcinoma in situ of left breast	Diagnosis	ICD-10-CM
D05.80	Other specified type of carcinoma in situ of unspecified breast	Diagnosis	ICD-10-CM
D05.81	Other specified type of carcinoma in situ of right breast	Diagnosis	ICD-10-CM
D05.82	Other specified type of carcinoma in situ of left breast	Diagnosis	ICD-10-CM
D05.90	Unspecified type of carcinoma in situ of unspecified breast	Diagnosis	ICD-10-CM
D05.91	Unspecified type of carcinoma in situ of right breast	Diagnosis	ICD-10-CM
D05.92	Unspecified type of carcinoma in situ of left breast	Diagnosis	ICD-10-CM
Z17.0	Estrogen receptor positive status [ER+]	Diagnosis	ICD-10-CM
Z17.1	Estrogen receptor negative status [ER-]	Diagnosis	ICD-10-CM
Z19.1	Hormone sensitive malignancy status	Diagnosis	ICD-10-CM
Z19.2	Hormone resistant malignancy status	Diagnosis	ICD-10-CM
Z85.3	Personal history of malignant neoplasm of breast	Diagnosis	ICD-10-CM
Z86.000	Personal history of in-situ neoplasm of breast	Diagnosis	ICD-10-CM
Colorectal Cancer			
C18.0	Malignant neoplasm of cecum	Diagnosis	ICD-10-CM
C18.1	Malignant neoplasm of appendix	Diagnosis	ICD-10-CM
C18.2	Malignant neoplasm of ascending colon	Diagnosis	ICD-10-CM
C18.3	Malignant neoplasm of hepatic flexure	Diagnosis	ICD-10-CM
C18.4	Malignant neoplasm of transverse colon	Diagnosis	ICD-10-CM
C18.5	Malignant neoplasm of splenic flexure	Diagnosis	ICD-10-CM
C18.6	Malignant neoplasm of descending colon	Diagnosis	ICD-10-CM
C18.7	Malignant neoplasm of sigmoid colon	Diagnosis	ICD-10-CM
C18.8	Malignant neoplasm of overlapping sites of colon	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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
C49.A4	Gastrointestinal stromal tumor of large intestine	Diagnosis	ICD-10-CM
C49.A5	Gastrointestinal stromal tumor of rectum	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
Z85.030	Personal history of malignant carcinoid tumor of large intestine	Diagnosis	ICD-10-CM
Z85.038	Personal history of other malignant neoplasm of large intestine	Diagnosis	ICD-10-CM
Z85.040	Personal history of malignant carcinoid tumor of rectum	Diagnosis	ICD-10-CM
Z85.048	Personal history of other malignant neoplasm of rectum, rectosigmoid junction, and anus	Diagnosis	ICD-10-CM
Endometrial Cancer			
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
D07.0	Carcinoma in situ of endometrium	Diagnosis	ICD-10-CM
Z85.42	Personal history of malignant neoplasm of other parts of uterus	Diagnosis	ICD-10-CM
Lung Cancer			
C34.00	Malignant neoplasm of unspecified main bronchus	Diagnosis	ICD-10-CM
C34.01	Malignant neoplasm of right main bronchus	Diagnosis	ICD-10-CM
C34.02	Malignant neoplasm of left main bronchus	Diagnosis	ICD-10-CM
C34.10	Malignant neoplasm of upper lobe, unspecified bronchus or lung	Diagnosis	ICD-10-CM
C34.11	Malignant neoplasm of upper lobe, right bronchus or lung	Diagnosis	ICD-10-CM
C34.12	Malignant neoplasm of upper lobe, left bronchus or lung	Diagnosis	ICD-10-CM
C34.2	Malignant neoplasm of middle lobe, bronchus or lung	Diagnosis	ICD-10-CM
C34.30	Malignant neoplasm of lower lobe, unspecified bronchus or lung	Diagnosis	ICD-10-CM
C34.31	Malignant neoplasm of lower lobe, right bronchus or lung	Diagnosis	ICD-10-CM
C34.32	Malignant neoplasm of lower lobe, left bronchus or lung	Diagnosis	ICD-10-CM
C34.80	Malignant neoplasm of overlapping sites of unspecified bronchus and lung	Diagnosis	ICD-10-CM
C34.81	Malignant neoplasm of overlapping sites of right bronchus and lung	Diagnosis	ICD-10-CM
C34.82	Malignant neoplasm of overlapping sites of left bronchus and lung	Diagnosis	ICD-10-CM
C34.90	Malignant neoplasm of unspecified part of unspecified bronchus or lung	Diagnosis	ICD-10-CM
C34.91	Malignant neoplasm of unspecified part of right bronchus or lung	Diagnosis	ICD-10-CM
C34.92	Malignant neoplasm of unspecified part of left bronchus or lung	Diagnosis	ICD-10-CM
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
Z85.110	Personal history of malignant carcinoid tumor of bronchus and lung	Diagnosis	ICD-10-CM
Z85.118	Personal history of other malignant neoplasm of bronchus and lung	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
Prostate Cancer			
C61	Malignant neoplasm of prostate	Diagnosis	ICD-10-CM
D07.5	Carcinoma in situ of prostate	Diagnosis	ICD-10-CM
Z85.46	Personal history of malignant neoplasm of prostate	Diagnosis	ICD-10-CM
Urologic Cancer			
C64.1	Malignant neoplasm of right kidney, except renal pelvis	Diagnosis	ICD-10-CM
C64.2	Malignant neoplasm of left kidney, except renal pelvis	Diagnosis	ICD-10-CM
C64.9	Malignant neoplasm of unspecified kidney, except renal pelvis	Diagnosis	ICD-10-CM
C65.1	Malignant neoplasm of right renal pelvis	Diagnosis	ICD-10-CM
C65.2	Malignant neoplasm of left renal pelvis	Diagnosis	ICD-10-CM
C65.9	Malignant neoplasm of unspecified renal pelvis	Diagnosis	ICD-10-CM
C66.1	Malignant neoplasm of right ureter	Diagnosis	ICD-10-CM
C66.2	Malignant neoplasm of left ureter	Diagnosis	ICD-10-CM
C66.9	Malignant neoplasm of unspecified ureter	Diagnosis	ICD-10-CM
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
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
Z85.520	Personal history of malignant carcinoid tumor of kidney	Diagnosis	ICD-10-CM
Z85.528	Personal history of other malignant neoplasm of kidney	Diagnosis	ICD-10-CM
Z85.53	Personal history of malignant neoplasm of renal pelvis	Diagnosis	ICD-10-CM
Z85.54	Personal history of malignant neoplasm of ureter	Diagnosis	ICD-10-CM
Z85.59	Personal history of malignant neoplasm of other urinary tract organ	Diagnosis	ICD-10-CM
Cataract			
E08.36	Diabetes mellitus due to underlying condition with diabetic cataract	Diagnosis	ICD-10-CM
E09.36	Drug or chemical induced diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E10.36	Type 1 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E11.36	Type 2 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E13.36	Other specified diabetes mellitus with diabetic cataract	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
H25.019	Cortical 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
H25.039	Anterior 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
H25.049	Posterior subcapsular polar age-related cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.091	Other age-related incipient cataract, right eye	Diagnosis	ICD-10-CM
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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
H25.099	Other age-related incipient cataract, unspecified eye	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
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
H25.819	Combined forms of age-related cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.89	Other age-related cataract	Diagnosis	ICD-10-CM
H25.9	Unspecified age-related cataract	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
H26.009	Unspecified infantile and juvenile cataract, unspecified eye	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
H26.019	Infantile and juvenile cortical, lamellar, or zonular 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
H26.039	Infantile and juvenile nuclear 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
H26.049	Anterior subcapsular polar infantile and juvenile cataract, unspecified eye	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
H26.059	Posterior subcapsular polar 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
H26.069	Combined forms of infantile and juvenile cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.09	Other infantile and juvenile cataract	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
H26.109	Unspecified traumatic cataract, unspecified eye	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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
H26.119	Localized traumatic opacities, 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
H26.129	Partially resolved 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
H26.139	Total traumatic cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.20	Unspecified complicated cataract	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
H26.219	Cataract with neovascularization, 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
H26.223	Cataract secondary to ocular disorders (degenerative) (inflammatory), bilateral	Diagnosis	ICD-10-CM
H26.229	Cataract secondary to ocular disorders (degenerative) (inflammatory), unspecified eye	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
H26.40	Unspecified secondary cataract	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
H26.419	Soemmering's ring, 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
H26.499	Other secondary cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.8	Other specified cataract	Diagnosis	ICD-10-CM
H26.9	Unspecified cataract	Diagnosis	ICD-10-CM
Q12.0	Congenital cataract	Diagnosis	ICD-10-CM
Chronic Kidney Disease			
A18.11	Tuberculosis of kidney and ureter	Diagnosis	ICD-10-CM
A52.75	Syphilis of kidney and ureter	Diagnosis	ICD-10-CM
B52.0	Plasmodium malariae malaria with nephropathy	Diagnosis	ICD-10-CM
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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E08.29	Diabetes mellitus due to underlying condition 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
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E13.21	Other specified diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
I12.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease	Diagnosis	ICD-10-CM
I12.9	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
K76.7	Hepatorenal syndrome	Diagnosis	ICD-10-CM
M10.30	Gout due to renal impairment, unspecified site	Diagnosis	ICD-10-CM
M10.311	Gout due to renal impairment, right shoulder	Diagnosis	ICD-10-CM
M10.312	Gout due to renal impairment, left shoulder	Diagnosis	ICD-10-CM
M10.319	Gout due to renal impairment, unspecified shoulder	Diagnosis	ICD-10-CM
M10.321	Gout due to renal impairment, right elbow	Diagnosis	ICD-10-CM
M10.322	Gout due to renal impairment, left elbow	Diagnosis	ICD-10-CM
M10.329	Gout due to renal impairment, unspecified elbow	Diagnosis	ICD-10-CM
M10.331	Gout due to renal impairment, right wrist	Diagnosis	ICD-10-CM
M10.332	Gout due to renal impairment, left wrist	Diagnosis	ICD-10-CM
M10.339	Gout due to renal impairment, unspecified wrist	Diagnosis	ICD-10-CM
M10.341	Gout due to renal impairment, right hand	Diagnosis	ICD-10-CM
M10.342	Gout due to renal impairment, left hand	Diagnosis	ICD-10-CM
M10.349	Gout due to renal impairment, unspecified hand	Diagnosis	ICD-10-CM
M10.351	Gout due to renal impairment, right hip	Diagnosis	ICD-10-CM
M10.352	Gout due to renal impairment, left hip	Diagnosis	ICD-10-CM
M10.359	Gout due to renal impairment, unspecified hip	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M10.361	Gout due to renal impairment, right knee	Diagnosis	ICD-10-CM
M10.362	Gout due to renal impairment, left knee	Diagnosis	ICD-10-CM
M10.369	Gout due to renal impairment, unspecified knee	Diagnosis	ICD-10-CM
M10.371	Gout due to renal impairment, right ankle and foot	Diagnosis	ICD-10-CM
M10.372	Gout due to renal impairment, left ankle and foot	Diagnosis	ICD-10-CM
M10.379	Gout due to renal impairment, unspecified ankle and foot	Diagnosis	ICD-10-CM
M10.38	Gout due to renal impairment, vertebrae	Diagnosis	ICD-10-CM
M10.39	Gout due to renal impairment, multiple sites	Diagnosis	ICD-10-CM
M32.14	Glomerular disease in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M32.15	Tubulo-interstitial nephropathy in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M35.04	Sjogren syndrome with tubulo-interstitial nephropathy	Diagnosis	ICD-10-CM
M35.0A	Sjogren syndrome with glomerular disease	Diagnosis	ICD-10-CM
N01.0	Rapidly progressive nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N01.1	Rapidly progressive nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N01.2	Rapidly progressive nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N01.3	Rapidly progressive nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N01.4	Rapidly progressive nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N01.5	Rapidly progressive nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N01.6	Rapidly progressive nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N01.7	Rapidly progressive nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N01.8	Rapidly progressive nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N01.9	Rapidly progressive nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N01.A	Rapidly progressive nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N02.0	Recurrent and persistent hematuria with minor glomerular abnormality	Diagnosis	ICD-10-CM
N02.1	Recurrent and persistent hematuria with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N02.2	Recurrent and persistent hematuria with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N02.3	Recurrent and persistent hematuria with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.4	Recurrent and persistent hematuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.5	Recurrent and persistent hematuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N02.6	Recurrent and persistent hematuria with dense deposit disease	Diagnosis	ICD-10-CM
N02.7	Recurrent and persistent hematuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N02.8	Recurrent and persistent hematuria with other morphologic changes	Diagnosis	ICD-10-CM
N02.9	Recurrent and persistent hematuria with unspecified morphologic changes	Diagnosis	ICD-10-CM
N02.A	Recurrent and persistent hematuria with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N03.0	Chronic nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N03.1	Chronic nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
N03.2	Chronic nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N03.3	Chronic nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.4	Chronic nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.5	Chronic nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N03.6	Chronic nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N03.7	Chronic nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N03.8	Chronic nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N03.9	Chronic nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N03.A	Chronic nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N04.0	Nephrotic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N04.1	Nephrotic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N04.2	Nephrotic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N04.3	Nephrotic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.4	Nephrotic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.5	Nephrotic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N04.6	Nephrotic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N04.7	Nephrotic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N04.8	Nephrotic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N04.9	Nephrotic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N04.A	Nephrotic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N05.0	Unspecified nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N05.1	Unspecified nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N05.2	Unspecified nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N05.3	Unspecified nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N05.4	Unspecified nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N05.5	Unspecified nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N05.6	Unspecified nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N05.7	Unspecified nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N05.8	Unspecified nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N05.9	Unspecified nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N05.A	Unspecified nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N06.0	Isolated proteinuria with minor glomerular abnormality	Diagnosis	ICD-10-CM
N06.1	Isolated proteinuria with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N06.2	Isolated proteinuria with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N06.3	Isolated proteinuria with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N06.4	Isolated proteinuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N06.5	Isolated proteinuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N06.6	Isolated proteinuria with dense deposit disease	Diagnosis	ICD-10-CM
N06.7	Isolated proteinuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N06.8	Isolated proteinuria with other morphologic lesion	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
N06.9	Isolated proteinuria with unspecified morphologic lesion	Diagnosis	ICD-10-CM
N06.A	Isolated proteinuria with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N07.0	Hereditary nephropathy, not elsewhere classified with minor glomerular abnormality	Diagnosis	ICD-10-CM
N07.1	Hereditary nephropathy, not elsewhere classified with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N07.2	Hereditary nephropathy, not elsewhere classified with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N07.3	Hereditary nephropathy, not elsewhere classified with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N07.4	Hereditary nephropathy, not elsewhere classified with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N07.5	Hereditary nephropathy, not elsewhere classified with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N07.6	Hereditary nephropathy, not elsewhere classified with dense deposit disease	Diagnosis	ICD-10-CM
N07.7	Hereditary nephropathy, not elsewhere classified with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N07.8	Hereditary nephropathy, not elsewhere classified with other morphologic lesions	Diagnosis	ICD-10-CM
N07.9	Hereditary nephropathy, not elsewhere classified with unspecified morphologic lesions	Diagnosis	ICD-10-CM
N07.A	Hereditary nephropathy, not elsewhere classified with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N08	Glomerular disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N14.0	Analgesic nephropathy	Diagnosis	ICD-10-CM
N14.1	Nephropathy induced by other drugs, medicaments and biological substances	Diagnosis	ICD-10-CM
N14.2	Nephropathy induced by unspecified drug, medicament or biological substance	Diagnosis	ICD-10-CM
N14.3	Nephropathy induced by heavy metals	Diagnosis	ICD-10-CM
N14.4	Toxic nephropathy, not elsewhere classified	Diagnosis	ICD-10-CM
N15.0	Balkan nephropathy	Diagnosis	ICD-10-CM
N15.8	Other specified renal tubulo-interstitial diseases	Diagnosis	ICD-10-CM
N15.9	Renal tubulo-interstitial disease, unspecified	Diagnosis	ICD-10-CM
N16	Renal tubulo-interstitial disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N18.1	Chronic kidney disease, stage 1	Diagnosis	ICD-10-CM
N18.2	Chronic kidney disease, stage 2 (mild)	Diagnosis	ICD-10-CM
N18.3	Chronic kidney disease, stage 3 (moderate)	Diagnosis	ICD-10-CM
N18.30	Chronic kidney disease, stage 3 unspecified	Diagnosis	ICD-10-CM
N18.31	Chronic kidney disease, stage 3a	Diagnosis	ICD-10-CM
N18.32	Chronic kidney disease, stage 3b	Diagnosis	ICD-10-CM
N18.4	Chronic kidney disease, stage 4 (severe)	Diagnosis	ICD-10-CM
N18.5	Chronic kidney disease, stage 5	Diagnosis	ICD-10-CM
N18.6	End stage renal disease	Diagnosis	ICD-10-CM
N18.9	Chronic kidney disease, unspecified	Diagnosis	ICD-10-CM
N25.1	Nephrogenic diabetes insipidus	Diagnosis	ICD-10-CM
N25.89	Other disorders resulting from impaired renal tubular function	Diagnosis	ICD-10-CM
N25.9	Disorder resulting from impaired renal tubular function, unspecified	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
N26.1	Atrophy of kidney (terminal)	Diagnosis	ICD-10-CM
N26.9	Renal sclerosis, unspecified	Diagnosis	ICD-10-CM
N99.0	Postprocedural (acute) (chronic) kidney failure	Diagnosis	ICD-10-CM
Q61.02	Congenital multiple renal cysts	Diagnosis	ICD-10-CM
Q61.11	Cystic dilatation of collecting ducts	Diagnosis	ICD-10-CM
Q61.19	Other polycystic kidney, infantile type	Diagnosis	ICD-10-CM
Q61.2	Polycystic kidney, adult type	Diagnosis	ICD-10-CM
Q61.3	Polycystic kidney, unspecified	Diagnosis	ICD-10-CM
Q61.4	Renal dysplasia	Diagnosis	ICD-10-CM
Q61.5	Medullary cystic kidney	Diagnosis	ICD-10-CM
Q61.8	Other cystic kidney diseases	Diagnosis	ICD-10-CM
Chronic Obstructive Pulmonary Disorder			
J40	Bronchitis, not specified as acute or chronic	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
J43.9	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
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
J98.2	Interstitial emphysema	Diagnosis	ICD-10-CM
J98.3	Compensatory emphysema	Diagnosis	ICD-10-CM
Depression/Bipolar or Other Mood Disorders			
F06.31	Mood disorder due to known physiological condition with depressive features	Diagnosis	ICD-10-CM
F06.32	Mood disorder due to known physiological condition with major depressive-like episode	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, severe	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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 features	Diagnosis	ICD-10-CM
F31.64	Bipolar disorder, current episode mixed, severe, with psychotic features	Diagnosis	ICD-10-CM
F31.71	Bipolar disorder, in partial remission, most recent episode hypomanic	Diagnosis	ICD-10-CM
F31.73	Bipolar disorder, in partial remission, most recent episode manic	Diagnosis	ICD-10-CM
F31.75	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
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
F32.8	Other depressive episodes	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
F32.A	Depression, 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
F34.0	Cyclothymic disorder	Diagnosis	ICD-10-CM
F34.1	Dysthymic disorder	Diagnosis	ICD-10-CM
F43.21	Adjustment disorder with depressed mood	Diagnosis	ICD-10-CM
F43.23	Adjustment disorder with mixed anxiety and depressed mood	Diagnosis	ICD-10-CM
Diabetes			
E08.00	Diabetes mellitus due to underlying condition with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E08.01	Diabetes mellitus due to underlying condition with hyperosmolarity with coma	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E08.21	Diabetes mellitus due to underlying condition with diabetic nephropathy	Diagnosis	ICD-10-CM
E08.22	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication	Diagnosis	ICD-10-CM
E08.311	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.319	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.321	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.3211	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
E08.3219	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.329	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.3291	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
E08.3299	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.331	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.3311	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
E08.3319	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.339	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.3391	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 E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E08.3393	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	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
E08.341	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema	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
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
E08.3419	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.349	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.3491	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
E08.3499	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.351	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema	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
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
E08.3519	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, 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 eye	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
E08.3529	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E08.3531	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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
E08.3539	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E08.3541	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
E08.3549	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
E08.3551	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
E08.3559	Diabetes mellitus due to underlying condition with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E08.359	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema	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
E08.3599	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.36	Diabetes mellitus due to underlying condition with diabetic cataract	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E08.37X9	Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E08.39	Diabetes mellitus due to underlying condition with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E08.40	Diabetes mellitus due to underlying condition with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E08.41	Diabetes mellitus due to underlying condition with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E08.42	Diabetes mellitus due to underlying condition with diabetic polyneuropathy	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
E08.49	Diabetes mellitus due to underlying condition with other diabetic neurological complication	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
E08.59	Diabetes mellitus due to underlying condition with other circulatory complications	Diagnosis	ICD-10-CM
E08.610	Diabetes mellitus due to underlying condition with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E08.618	Diabetes mellitus due to underlying condition with other diabetic arthropathy	Diagnosis	ICD-10-CM
E08.620	Diabetes mellitus due to underlying condition with diabetic dermatitis	Diagnosis	ICD-10-CM
E08.621	Diabetes mellitus due to underlying condition with foot ulcer	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
E08.630	Diabetes mellitus due to underlying condition with periodontal disease	Diagnosis	ICD-10-CM
E08.638	Diabetes mellitus due to underlying condition with other oral complications	Diagnosis	ICD-10-CM
E08.641	Diabetes mellitus due to underlying condition with hypoglycemia with coma	Diagnosis	ICD-10-CM
E08.649	Diabetes mellitus due to underlying condition with hypoglycemia without coma	Diagnosis	ICD-10-CM
E08.65	Diabetes mellitus due to underlying condition with hyperglycemia	Diagnosis	ICD-10-CM
E08.69	Diabetes mellitus due to underlying condition with other specified complication	Diagnosis	ICD-10-CM
E08.8	Diabetes mellitus due to underlying condition with unspecified complications	Diagnosis	ICD-10-CM
E08.9	Diabetes mellitus due to underlying condition without complications	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
E09.10	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
E09.21	Drug or chemical induced diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E09.22	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E09.311	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E09.319	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.321	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3211	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
E09.3219	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.329	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3291	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
E09.3299	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.331	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3311	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
E09.3319	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.339	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3391	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
E09.3399	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.341	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E09.3411	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
E09.3419	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.349	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3491	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
E09.3499	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.351	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema	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
E09.3519	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, 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 eye	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
E09.3529	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E09.3531	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
E09.3539	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E09.3541	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
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
E09.3549	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
E09.3551	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
E09.3559	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E09.359	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema	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
E09.3593	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	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
E09.36	Drug or chemical induced diabetes mellitus with diabetic cataract	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
E09.37X9	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E09.39	Drug or chemical induced diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E09.40	Drug or chemical induced diabetes mellitus with neurological complications with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E09.41	Drug or chemical induced diabetes mellitus with neurological complications with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E09.42	Drug or chemical induced diabetes mellitus with neurological complications with diabetic polyneuropathy	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
E09.49	Drug or chemical induced diabetes mellitus with neurological complications with other diabetic neurological complication	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
E09.59	Drug or chemical induced diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E09.610	Drug or chemical induced diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E09.618	Drug or chemical induced diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E09.620	Drug or chemical induced diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E09.621	Drug or chemical induced diabetes mellitus with foot ulcer	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
E09.630	Drug or chemical induced diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E09.638	Drug or chemical induced diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E09.641	Drug or chemical induced diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E09.649	Drug or chemical induced diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E09.65	Drug or chemical induced diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E09.69	Drug or chemical induced diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E09.8	Drug or chemical induced diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E09.9	Drug or chemical induced diabetes mellitus without complications	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
E10.321	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3211	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3212	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E10.349	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3491	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3492	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3493	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3499	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.351	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3511	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3512	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3513	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3519	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3521	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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
E10.3553	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E10.3559	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E10.359	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3591	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3592	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3593	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3599	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.36	Type 1 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E10.37X1	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 gangrene	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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
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
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
E11.10	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
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.321	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3211	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3212	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3213	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3219	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.329	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3291	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3292	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3293	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3299	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.331	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3311	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3312	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E11.3313	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3319	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.339	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3391	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3392	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3393	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3399	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.341	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3411	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3412	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3413	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3419	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.349	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3491	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3492	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3493	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3499	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.351	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema	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
E11.3519	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E11.3521	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E11.3522	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E11.3523	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E11.3529	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E11.3531	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E11.3532	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E11.3533	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E11.3539	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E11.3541	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E11.3542	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E11.3543	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E11.3549	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E11.3551	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E11.3552	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E11.3553	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E11.3559	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E11.359	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3591	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3592	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3593	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3599	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.36	Type 2 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E11.37X1	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E11.37X2	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E11.37X3	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E11.37X9	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E11.39	Type 2 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E11.40	Type 2 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E11.43	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E11.44	Type 2 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E11.51	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
E11.59	Type 2 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E11.610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E11.618	Type 2 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E11.620	Type 2 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E11.621	Type 2 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E11.622	Type 2 diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E11.628	Type 2 diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E11.630	Type 2 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E11.638	Type 2 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E11.641	Type 2 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E11.649	Type 2 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E11.69	Type 2 diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E11.8	Type 2 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E11.9	Type 2 diabetes mellitus without complications	Diagnosis	ICD-10-CM
E13.00	Other specified diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E13.01	Other specified diabetes mellitus with hyperosmolarity with coma	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
E13.21	Other specified diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E13.311	Other specified diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.319	Other specified diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.321	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E13.3211	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3212	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3213	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3219	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.329	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3291	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3292	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3293	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3299	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.331	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.3311	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3312	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3313	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3319	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.339	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3391	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3392	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3393	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3399	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.341	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.3411	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3412	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E13.3413	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3419	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.349	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3491	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3492	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3493	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3499	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.351	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.3511	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3512	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3513	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3519	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.3521	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E13.3522	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E13.3523	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E13.3529	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E13.3531	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E13.3532	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E13.3533	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E13.3539	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E13.3541	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E13.3542	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E13.3543	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E13.3549	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E13.3551	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E13.3552	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E13.3553	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E13.3559	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E13.359	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3591	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3592	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3593	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3599	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.36	Other specified diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E13.39	Other specified diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E13.40	Other specified diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E13.41	Other specified diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E13.42	Other specified diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E13.43	Other specified diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E13.44	Other specified diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E13.49	Other specified diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E13.51	Other specified diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E13.52	Other specified diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E13.59	Other specified diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E13.610	Other specified diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E13.618	Other specified diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E13.620	Other specified diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E13.621	Other specified diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E13.622	Other specified diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E13.628	Other specified diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E13.630	Other specified diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E13.638	Other specified diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E13.641	Other specified diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E13.649	Other specified diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E13.65	Other specified diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E13.69	Other specified diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E13.8	Other specified diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E13.9	Other specified diabetes mellitus without complications	Diagnosis	ICD-10-CM
Glaucoma			
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
H40.019	Open angle with borderline findings, low 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
H40.029	Open angle with borderline findings, high risk, 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
H40.049	Steroid responder, 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
H40.059	Ocular hypertension, unspecified eye	Diagnosis	ICD-10-CM
H40.10X0	Unspecified open-angle glaucoma, stage unspecified	Diagnosis	ICD-10-CM
H40.10X1	Unspecified open-angle glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.10X2	Unspecified open-angle glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.10X3	Unspecified open-angle glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.10X4	Unspecified open-angle glaucoma, indeterminate stage	Diagnosis	ICD-10-CM
H40.1110	Primary open-angle glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1111	Primary open-angle glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1112	Primary open-angle glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1113	Primary open-angle glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1114	Primary open-angle glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1120	Primary open-angle glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1121	Primary open-angle glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1122	Primary open-angle glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1123	Primary open-angle glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1124	Primary open-angle glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1130	Primary open-angle glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1131	Primary open-angle glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
H40.1132	Primary open-angle glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1133	Primary open-angle glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1134	Primary open-angle glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1190	Primary open-angle glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1191	Primary open-angle glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1192	Primary open-angle glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1193	Primary open-angle glaucoma, unspecified eye, severe 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
H40.11X1	Primary open-angle glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.11X2	Primary open-angle glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.11X3	Primary open-angle glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.11X4	Primary open-angle glaucoma, indeterminate stage	Diagnosis	ICD-10-CM
H40.1210	Low-tension glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1211	Low-tension glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1212	Low-tension glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1213	Low-tension glaucoma, right eye, severe 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
H40.1221	Low-tension glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1222	Low-tension glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1223	Low-tension glaucoma, left eye, severe 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
H40.1231	Low-tension glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1232	Low-tension glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1233	Low-tension glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1234	Low-tension glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1290	Low-tension glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1291	Low-tension glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1292	Low-tension glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1293	Low-tension glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1294	Low-tension glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1310	Pigmentary glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1311	Pigmentary glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1312	Pigmentary glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1313	Pigmentary glaucoma, right eye, severe 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
H40.1321	Pigmentary glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1322	Pigmentary glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1323	Pigmentary glaucoma, left eye, severe 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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
H40.1331	Pigmentary glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1332	Pigmentary glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1333	Pigmentary glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1334	Pigmentary glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1390	Pigmentary glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1391	Pigmentary glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1392	Pigmentary glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1393	Pigmentary glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1394	Pigmentary glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1410	Capsular glaucoma with pseudoexfoliation of lens, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1411	Capsular glaucoma with pseudoexfoliation of lens, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1412	Capsular glaucoma with pseudoexfoliation of lens, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1413	Capsular glaucoma with pseudoexfoliation of lens, right eye, severe 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
H40.1421	Capsular glaucoma with pseudoexfoliation of lens, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1422	Capsular glaucoma with pseudoexfoliation of lens, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1423	Capsular glaucoma with pseudoexfoliation of lens, left eye, severe 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
H40.1431	Capsular glaucoma with pseudoexfoliation of lens, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1432	Capsular glaucoma with pseudoexfoliation of lens, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1433	Capsular glaucoma with pseudoexfoliation of lens, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1434	Capsular glaucoma with pseudoexfoliation of lens, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1490	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1491	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1492	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1493	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1494	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, indeterminate stage	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
H40.159	Residual stage of open-angle glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.20X0	Unspecified primary angle-closure glaucoma, stage unspecified	Diagnosis	ICD-10-CM
H40.20X1	Unspecified primary angle-closure glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.20X2	Unspecified primary angle-closure glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.20X3	Unspecified primary angle-closure glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.20X4	Unspecified primary angle-closure glaucoma, indeterminate stage	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
H40.219	Acute angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
H40.2210	Chronic angle-closure glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2211	Chronic angle-closure glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.2212	Chronic angle-closure glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.2213	Chronic angle-closure glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.2214	Chronic angle-closure glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.2220	Chronic angle-closure glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2221	Chronic angle-closure glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.2222	Chronic angle-closure glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.2223	Chronic angle-closure glaucoma, left eye, severe 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
H40.2231	Chronic angle-closure glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.2232	Chronic angle-closure glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.2233	Chronic angle-closure glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.2234	Chronic angle-closure glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.2290	Chronic angle-closure glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2291	Chronic angle-closure glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.2292	Chronic angle-closure glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.2293	Chronic angle-closure glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.2294	Chronic angle-closure glaucoma, unspecified eye, indeterminate stage	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
H40.239	Intermittent 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
H40.249	Residual stage of angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.30X0	Glaucoma secondary to eye trauma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.30X1	Glaucoma secondary to eye trauma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.30X2	Glaucoma secondary to eye trauma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.30X3	Glaucoma secondary to eye trauma, unspecified eye, severe 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
H40.31X1	Glaucoma secondary to eye trauma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.31X2	Glaucoma secondary to eye trauma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.31X3	Glaucoma secondary to eye trauma, right eye, severe 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
H40.32X1	Glaucoma secondary to eye trauma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.32X2	Glaucoma secondary to eye trauma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.32X3	Glaucoma secondary to eye trauma, left eye, severe 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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
H40.33X1	Glaucoma secondary to eye trauma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.33X2	Glaucoma secondary to eye trauma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.33X3	Glaucoma secondary to eye trauma, bilateral, severe 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
H40.40X1	Glaucoma secondary to eye inflammation, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.40X2	Glaucoma secondary to eye inflammation, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.40X3	Glaucoma secondary to eye inflammation, unspecified eye, severe 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
H40.41X1	Glaucoma secondary to eye inflammation, right eye, mild stage	Diagnosis	ICD-10-CM
H40.41X2	Glaucoma secondary to eye inflammation, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.41X3	Glaucoma secondary to eye inflammation, right eye, severe 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
H40.42X1	Glaucoma secondary to eye inflammation, left eye, mild stage	Diagnosis	ICD-10-CM
H40.42X2	Glaucoma secondary to eye inflammation, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.42X3	Glaucoma secondary to eye inflammation, left eye, severe 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
H40.43X1	Glaucoma secondary to eye inflammation, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.43X2	Glaucoma secondary to eye inflammation, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.43X3	Glaucoma secondary to eye inflammation, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.43X4	Glaucoma secondary to eye inflammation, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.50X0	Glaucoma secondary to other eye disorders, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.50X1	Glaucoma secondary to other eye disorders, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.50X2	Glaucoma secondary to other eye disorders, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.50X3	Glaucoma secondary to other eye disorders, unspecified eye, severe 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
H40.51X1	Glaucoma secondary to other eye disorders, right eye, mild stage	Diagnosis	ICD-10-CM
H40.51X2	Glaucoma secondary to other eye disorders, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.51X3	Glaucoma secondary to other eye disorders, right eye, severe stage	Diagnosis	ICD-10-CM
H40.51X4	Glaucoma secondary to other eye disorders, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.52X0	Glaucoma secondary to other eye disorders, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.52X1	Glaucoma secondary to other eye disorders, left eye, mild stage	Diagnosis	ICD-10-CM
H40.52X2	Glaucoma secondary to other eye disorders, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.52X3	Glaucoma secondary to other eye disorders, left eye, severe 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
H40.53X1	Glaucoma secondary to other eye disorders, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.53X2	Glaucoma secondary to other eye disorders, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.53X3	Glaucoma secondary to other eye disorders, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.53X4	Glaucoma secondary to other eye disorders, bilateral, indeterminate stage	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
H40.60X0	Glaucoma secondary to drugs, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.60X1	Glaucoma secondary to drugs, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.60X2	Glaucoma secondary to drugs, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.60X3	Glaucoma secondary to drugs, unspecified eye, severe 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
H40.61X1	Glaucoma secondary to drugs, right eye, mild stage	Diagnosis	ICD-10-CM
H40.61X2	Glaucoma secondary to drugs, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.61X3	Glaucoma secondary to drugs, right eye, severe 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
H40.62X1	Glaucoma secondary to drugs, left eye, mild stage	Diagnosis	ICD-10-CM
H40.62X2	Glaucoma secondary to drugs, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.62X3	Glaucoma secondary to drugs, left eye, severe 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
H40.63X1	Glaucoma secondary to drugs, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.63X2	Glaucoma secondary to drugs, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.63X3	Glaucoma secondary to drugs, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.63X4	Glaucoma secondary to drugs, bilateral, indeterminate stage	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
H40.819	Glaucoma with increased episcleral venous pressure, 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
H40.829	Hypersecretion glaucoma, unspecified eye	Diagnosis	ICD-10-CM
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
H40.839	Aqueous misdirection, unspecified eye	Diagnosis	ICD-10-CM
H40.89	Other specified glaucoma	Diagnosis	ICD-10-CM
H40.9	Unspecified glaucoma	Diagnosis	ICD-10-CM
H42	Glaucoma in diseases classified elsewhere	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
H44.519	Absolute glaucoma, 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
H47.239	Glaucomatous optic atrophy, unspecified eye	Diagnosis	ICD-10-CM
Q15.0	Congenital glaucoma	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
Heart Failure and Non-Ischemic Heart Disease			
I09.81	Rheumatic heart failure	Diagnosis	ICD-10-CM
I11.0	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.2	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
I42.0	Dilated cardiomyopathy	Diagnosis	ICD-10-CM
I42.5	Other restrictive cardiomyopathy	Diagnosis	ICD-10-CM
I42.6	Alcoholic cardiomyopathy	Diagnosis	ICD-10-CM
I42.7	Cardiomyopathy due to drug and external agent	Diagnosis	ICD-10-CM
I42.8	Other cardiomyopathies	Diagnosis	ICD-10-CM
I43	Cardiomyopathy in diseases classified elsewhere	Diagnosis	ICD-10-CM
I50.1	Left ventricular failure, unspecified	Diagnosis	ICD-10-CM
I50.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.30	Unspecified diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.31	Acute diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.32	Chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.33	Acute on chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.42	Chronic combined systolic (congestive) and 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
I50.810	Right heart failure, unspecified	Diagnosis	ICD-10-CM
I50.811	Acute right heart failure	Diagnosis	ICD-10-CM
I50.812	Chronic right heart failure	Diagnosis	ICD-10-CM
I50.813	Acute on chronic right heart failure	Diagnosis	ICD-10-CM
I50.814	Right heart failure due to left heart failure	Diagnosis	ICD-10-CM
I50.82	Biventricular heart failure	Diagnosis	ICD-10-CM
I50.83	High output heart failure	Diagnosis	ICD-10-CM
I50.84	End stage heart failure	Diagnosis	ICD-10-CM
I50.89	Other heart failure	Diagnosis	ICD-10-CM
I50.9	Heart failure, unspecified	Diagnosis	ICD-10-CM
P29.0	Neonatal cardiac failure	Diagnosis	ICD-10-CM
Hip/Pelvic Fracture			
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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M80.059A	Age-related 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
M80.859A	Other osteoporosis with current pathological fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.350A	Stress fracture, pelvis, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.351A	Stress fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.352A	Stress fracture, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.353A	Stress fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.359A	Stress fracture, hip, unspecified, 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
M84.453A	Pathological fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.459A	Pathological fracture, hip, unspecified, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.550A	Pathological fracture in neoplastic disease, pelvis, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.551A	Pathological fracture in neoplastic disease, right femur, 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
M84.553A	Pathological fracture in neoplastic disease, unspecified 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
M84.650A	Pathological fracture in other disease, pelvis, 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
M84.652A	Pathological fracture in other disease, left femur, 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
M84.659A	Pathological fracture in other disease, hip, unspecified, initial encounter for 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
S32.301A	Unspecified fracture of right ilium, 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
S32.302A	Unspecified fracture of left ilium, 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
S32.309A	Unspecified fracture of unspecified ilium, 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
S32.311A	Displaced avulsion fracture of right ilium, 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
S32.312A	Displaced avulsion fracture of left ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S32.312B	Displaced avulsion fracture of left 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
S32.313B	Displaced avulsion fracture of unspecified 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
S32.314B	Nondisplaced avulsion fracture of right 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
S32.315B	Nondisplaced avulsion fracture of left 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
S32.316B	Nondisplaced avulsion fracture of unspecified 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
S32.391B	Other fracture of right 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
S32.392B	Other fracture of left 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
S32.399B	Other fracture of unspecified ilium, 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
S32.401B	Unspecified fracture of right 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
S32.402B	Unspecified fracture of left 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
S32.409B	Unspecified fracture of unspecified 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
S32.411B	Displaced fracture of anterior wall of right 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
S32.412B	Displaced fracture of anterior wall of left 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
S32.413B	Displaced fracture of anterior wall of unspecified 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
S32.414B	Nondisplaced fracture of anterior wall of right 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 E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S32.415B	Nondisplaced fracture of anterior wall of left 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
S32.416B	Nondisplaced fracture of anterior wall of unspecified 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
S32.421B	Displaced fracture of posterior wall of right 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
S32.422B	Displaced fracture of posterior wall of left 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
S32.423B	Displaced fracture of posterior wall of unspecified 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
S32.424B	Nondisplaced fracture of posterior wall of right 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
S32.425B	Nondisplaced fracture of posterior wall of left 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
S32.426B	Nondisplaced fracture of posterior wall of unspecified 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
S32.431B	Displaced fracture of anterior column [iliopubic] of right 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
S32.432B	Displaced fracture of anterior column [iliopubic] of left 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
S32.433B	Displaced fracture of anterior column [iliopubic] of unspecified 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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S32.434B	Nondisplaced fracture of anterior column [iliopubic] of right 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
S32.435B	Nondisplaced fracture of anterior column [iliopubic] of left 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
S32.436B	Nondisplaced fracture of anterior column [iliopubic] of unspecified 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
S32.441B	Displaced fracture of posterior column [ilioischial] of right 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
S32.442B	Displaced fracture of posterior column [ilioischial] of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.443A	Displaced fracture of posterior column [ilioischial] of unspecified 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
S32.444A	Nondisplaced fracture of posterior column [ilioischial] of right 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
S32.445A	Nondisplaced fracture of posterior column [ilioischial] of left 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
S32.446A	Nondisplaced fracture of posterior column [ilioischial] of unspecified 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
S32.451A	Displaced transverse fracture of right 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
S32.452A	Displaced transverse fracture of left 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
S32.453A	Displaced transverse fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S32.453B	Displaced transverse fracture of unspecified 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
S32.454B	Nondisplaced transverse fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.455A	Nondisplaced transverse fracture of left 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
S32.456A	Nondisplaced transverse fracture of unspecified acetabulum, 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
S32.461A	Displaced associated transverse-posterior fracture of right 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
S32.462A	Displaced associated transverse-posterior fracture of left 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
S32.463A	Displaced associated transverse-posterior fracture of unspecified acetabulum, 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
S32.464A	Nondisplaced associated transverse-posterior fracture of right 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
S32.465A	Nondisplaced associated transverse-posterior fracture of left 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
S32.466A	Nondisplaced associated transverse-posterior fracture of unspecified acetabulum, 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
S32.471A	Displaced fracture of medial wall of right 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
S32.472A	Displaced fracture of medial wall of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S32.472B	Displaced fracture of medial wall of left 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
S32.473B	Displaced fracture of medial wall of unspecified 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
S32.474B	Nondisplaced fracture of medial wall of right 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
S32.475B	Nondisplaced fracture of medial wall of left 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
S32.476B	Nondisplaced fracture of medial wall of unspecified 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
S32.481B	Displaced dome fracture of right 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
S32.482B	Displaced dome fracture of left 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
S32.483B	Displaced dome fracture of unspecified 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
S32.484B	Nondisplaced dome fracture of right 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
S32.485B	Nondisplaced dome fracture of left 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
S32.486B	Nondisplaced dome fracture of unspecified 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
S32.491B	Other specified fracture of right 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
S32.492B	Other specified fracture of left 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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S32.499B	Other specified fracture of unspecified acetabulum, 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
S32.501B	Unspecified fracture of right 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
S32.502B	Unspecified fracture of left 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
S32.509B	Unspecified fracture of unspecified 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
S32.511B	Fracture of superior rim of right 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
S32.512B	Fracture of superior rim of left pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.519A	Fracture of superior rim of unspecified pubis, 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
S32.591A	Other specified fracture of right pubis, 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
S32.592A	Other specified fracture of left pubis, 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
S32.599A	Other specified fracture of unspecified pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.599B	Other specified fracture of unspecified pubis, 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
S32.601B	Unspecified fracture of right 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
S32.602B	Unspecified fracture of left 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
S32.609B	Unspecified fracture of unspecified 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
S32.611B	Displaced avulsion fracture of right 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
S32.612B	Displaced avulsion fracture of left ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.613A	Displaced avulsion fracture of unspecified ischium, 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
S32.614A	Nondisplaced avulsion fracture of right ischium, 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
S32.615A	Nondisplaced avulsion fracture of left ischium, 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
S32.616A	Nondisplaced avulsion fracture of unspecified ischium, 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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S32.691A	Other specified fracture of right ischium, 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
S32.692A	Other specified fracture of left ischium, 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
S32.699A	Other specified fracture of unspecified ischium, 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
S32.810A	Multiple fractures of pelvis with stable 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
S32.811A	Multiple fractures of pelvis with unstable 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
S32.82XA	Multiple fractures of pelvis without disruption of pelvic ring, 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
S32.89XA	Fracture of other parts of pelvis, 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
S32.9XXA	Fracture of unspecified parts of lumbosacral spine and pelvis, 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
S72.001A	Fracture of unspecified part of neck of right femur, initial encounter for closed fracture	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
S72.001C	Fracture of unspecified part of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.002A	Fracture of unspecified part of neck of left femur, initial encounter for closed fracture	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
S72.002C	Fracture of unspecified part of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.009A	Fracture of unspecified part of neck of unspecified femur, initial encounter for closed fracture	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
S72.009C	Fracture of unspecified part of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S72.011A	Unspecified intracapsular fracture of right femur, initial encounter for closed fracture	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
S72.011C	Unspecified intracapsular fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.012A	Unspecified intracapsular fracture of left femur, initial encounter for closed fracture	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
S72.012C	Unspecified intracapsular fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.019A	Unspecified intracapsular fracture of unspecified femur, initial encounter for closed fracture	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
S72.019C	Unspecified intracapsular fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.021A	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.021B	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type I or II	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
S72.022A	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for closed fracture	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
S72.022C	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.023A	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for closed fracture	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
S72.023C	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.024A	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for closed fracture	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
S72.024C	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.025A	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S72.025B	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.025C	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.026A	Nondisplaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for closed fracture	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
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
S72.031A	Displaced midcervical fracture of right femur, initial encounter for closed fracture	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
S72.031C	Displaced midcervical fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.032A	Displaced midcervical fracture of left femur, initial encounter for closed fracture	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
S72.032C	Displaced midcervical fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.033A	Displaced midcervical fracture of unspecified femur, initial encounter for closed fracture	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
S72.033C	Displaced midcervical fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.034A	Nondisplaced midcervical fracture of right femur, initial encounter for closed fracture	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
S72.034C	Nondisplaced midcervical fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.035A	Nondisplaced midcervical fracture of left femur, initial encounter for closed fracture	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
S72.035C	Nondisplaced midcervical fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.036A	Nondisplaced midcervical fracture of unspecified femur, initial encounter for closed fracture	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
S72.036C	Nondisplaced midcervical fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S72.041A	Displaced fracture of base of neck of right femur, initial encounter for closed fracture	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
S72.041C	Displaced fracture of base of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.042A	Displaced fracture of base of neck of left femur, initial encounter for closed fracture	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
S72.042C	Displaced fracture of base of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.043A	Displaced fracture of base of neck of unspecified femur, initial encounter for closed fracture	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
S72.043C	Displaced fracture of base of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.044A	Nondisplaced fracture of base of neck of right femur, initial encounter for closed fracture	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
S72.044C	Nondisplaced fracture of base of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.045A	Nondisplaced fracture of base of neck of left femur, initial encounter for closed fracture	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
S72.045C	Nondisplaced fracture of base of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.046A	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for closed fracture	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
S72.046C	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.051A	Unspecified fracture of head of right femur, initial encounter for closed fracture	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
S72.051C	Unspecified fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.052A	Unspecified fracture of head of left femur, initial encounter for closed fracture	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S72.052C	Unspecified fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.059A	Unspecified fracture of head of unspecified femur, initial encounter for closed fracture	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
S72.059C	Unspecified fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.061A	Displaced articular fracture of head of right femur, initial encounter for closed fracture	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
S72.061C	Displaced articular fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.062A	Displaced articular fracture of head of left femur, initial encounter for closed fracture	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
S72.062C	Displaced articular fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.063A	Displaced articular fracture of head of unspecified femur, initial encounter for closed fracture	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
S72.063C	Displaced articular fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.064A	Nondisplaced articular fracture of head of right femur, initial encounter for closed fracture	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
S72.064C	Nondisplaced articular fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.065A	Nondisplaced articular fracture of head of left femur, initial encounter for closed fracture	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
S72.065C	Nondisplaced articular fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.066A	Nondisplaced articular fracture of head of unspecified femur, initial encounter for closed fracture	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
S72.066C	Nondisplaced articular fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S72.091A	Other fracture of head and neck of right femur, initial encounter for closed fracture	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
S72.091C	Other fracture of head and neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.092A	Other fracture of head and neck of left femur, initial encounter for closed fracture	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
S72.092C	Other fracture of head and neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.099A	Other fracture of head and neck of unspecified femur, initial encounter for closed fracture	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
S72.099C	Other fracture of head and neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.101A	Unspecified trochanteric fracture of right femur, initial encounter for closed fracture	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
S72.101C	Unspecified trochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.102A	Unspecified trochanteric fracture of left femur, initial encounter for closed fracture	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
S72.102C	Unspecified trochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.109A	Unspecified trochanteric fracture of unspecified femur, initial encounter for closed fracture	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
S72.109C	Unspecified trochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.111A	Displaced fracture of greater trochanter of right femur, initial encounter for closed fracture	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
S72.111C	Displaced fracture of greater trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.112A	Displaced fracture of greater trochanter of left femur, initial encounter for closed fracture	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S72.112C	Displaced fracture of greater trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.113A	Displaced fracture of greater trochanter of unspecified femur, initial encounter for closed fracture	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
S72.113C	Displaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.114A	Nondisplaced fracture of greater trochanter of right femur, initial encounter for closed fracture	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
S72.114C	Nondisplaced fracture of greater trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.115A	Nondisplaced fracture of greater trochanter of left femur, initial encounter for closed fracture	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
S72.115C	Nondisplaced fracture of greater trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.116A	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for closed fracture	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
S72.116C	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.121A	Displaced fracture of lesser trochanter of right femur, initial encounter for closed fracture	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
S72.121C	Displaced fracture of lesser trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.122A	Displaced fracture of lesser trochanter of left femur, initial encounter for closed fracture	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
S72.122C	Displaced fracture of lesser trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.123A	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for closed fracture	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
S72.123C	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S72.124A	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for closed fracture	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
S72.124C	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.125A	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for closed fracture	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
S72.125C	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.126A	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for closed fracture	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
S72.126C	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.131A	Displaced apophyseal fracture of right femur, initial encounter for closed fracture	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
S72.131C	Displaced apophyseal fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.132A	Displaced apophyseal fracture of left femur, initial encounter for closed fracture	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
S72.132C	Displaced apophyseal fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.133A	Displaced apophyseal fracture of unspecified femur, initial encounter for closed fracture	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
S72.133C	Displaced apophyseal fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.134A	Nondisplaced apophyseal fracture of right femur, initial encounter for closed fracture	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
S72.134C	Nondisplaced apophyseal fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.135A	Nondisplaced apophyseal fracture of left femur, initial encounter for closed fracture	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S72.135C	Nondisplaced apophyseal fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.136A	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for closed fracture	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
S72.136C	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.141A	Displaced intertrochanteric fracture of right femur, initial encounter for closed fracture	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
S72.141C	Displaced intertrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.142A	Displaced intertrochanteric fracture of left femur, initial encounter for closed fracture	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
S72.142C	Displaced intertrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.143A	Displaced intertrochanteric fracture of unspecified femur, initial encounter for closed fracture	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
S72.143C	Displaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.144A	Nondisplaced intertrochanteric fracture of right femur, initial encounter for closed fracture	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
S72.144C	Nondisplaced intertrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.145A	Nondisplaced intertrochanteric fracture of left femur, initial encounter for closed fracture	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
S72.145C	Nondisplaced intertrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.146A	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for closed fracture	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
S72.146C	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S72.21XA	Displaced subtrochanteric fracture of right femur, initial encounter for closed fracture	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
S72.21XC	Displaced subtrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.22XA	Displaced subtrochanteric fracture of left femur, initial encounter for closed fracture	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
S72.22XC	Displaced subtrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.23XA	Displaced subtrochanteric fracture of unspecified femur, initial encounter for closed fracture	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
S72.23XC	Displaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.24XA	Nondisplaced subtrochanteric fracture of right femur, initial encounter for closed fracture	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
S72.24XC	Nondisplaced subtrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.25XA	Nondisplaced subtrochanteric fracture of left femur, initial encounter for closed fracture	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
S72.25XC	Nondisplaced subtrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.26XA	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for closed fracture	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
S72.26XC	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	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
S79.009A	Unspecified 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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
S79.012A	Salter-Harris Type I physeal fracture of upper end of left femur, initial encounter for closed 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
S79.091A	Other physeal fracture of upper end of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.092A	Other physeal fracture of upper end of left femur, 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
Hyperlipidemia			
E78.0	Pure hypercholesterolemia	Diagnosis	ICD-10-CM
E78.00	Pure hypercholesterolemia, unspecified	Diagnosis	ICD-10-CM
E78.01	Familial hypercholesterolemia	Diagnosis	ICD-10-CM
E78.1	Pure hyperglyceridemia	Diagnosis	ICD-10-CM
E78.2	Mixed hyperlipidemia	Diagnosis	ICD-10-CM
E78.3	Hyperchylomicronemia	Diagnosis	ICD-10-CM
E78.4	Other hyperlipidemia	Diagnosis	ICD-10-CM
E78.41	Elevated Lipoprotein(a)	Diagnosis	ICD-10-CM
E78.49	Other hyperlipidemia	Diagnosis	ICD-10-CM
E78.5	Hyperlipidemia, unspecified	Diagnosis	ICD-10-CM
Hypertension			
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
H35.039	Hypertensive retinopathy, unspecified eye	Diagnosis	ICD-10-CM
I10	Essential (primary) hypertension	Diagnosis	ICD-10-CM
I11.0	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM
I11.9	Hypertensive heart disease without heart failure	Diagnosis	ICD-10-CM
I12.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease	Diagnosis	ICD-10-CM
I12.9	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I15.0	Renovascular hypertension	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
I15.8	Other secondary hypertension	Diagnosis	ICD-10-CM
I15.9	Secondary hypertension, unspecified	Diagnosis	ICD-10-CM
I67.4	Hypertensive encephalopathy	Diagnosis	ICD-10-CM
N26.2	Page kidney	Diagnosis	ICD-10-CM
Hypothyroidism			
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
E00.9	Congenital iodine-deficiency syndrome, unspecified	Diagnosis	ICD-10-CM
E01.8	Other iodine-deficiency related thyroid disorders and allied conditions	Diagnosis	ICD-10-CM
E02	Subclinical iodine-deficiency hypothyroidism	Diagnosis	ICD-10-CM
E03.0	Congenital hypothyroidism with diffuse goiter	Diagnosis	ICD-10-CM
E03.1	Congenital hypothyroidism without goiter	Diagnosis	ICD-10-CM
E03.2	Hypothyroidism due to medicaments and other exogenous substances	Diagnosis	ICD-10-CM
E03.3	Postinfectious hypothyroidism	Diagnosis	ICD-10-CM
E03.4	Atrophy of thyroid (acquired)	Diagnosis	ICD-10-CM
E03.8	Other specified hypothyroidism	Diagnosis	ICD-10-CM
E03.9	Hypothyroidism, unspecified	Diagnosis	ICD-10-CM
E89.0	Postprocedural hypothyroidism	Diagnosis	ICD-10-CM
Ischemic Heart Disease			
I20.0	Unstable angina	Diagnosis	ICD-10-CM
I20.1	Angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I20.8	Other forms of angina pectoris	Diagnosis	ICD-10-CM
I24.0	Acute coronary thrombosis not resulting in myocardial infarction	Diagnosis	ICD-10-CM
I24.1	Dressler's syndrome	Diagnosis	ICD-10-CM
I24.8	Other forms of acute ischemic heart disease	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
I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.3	Aneurysm of heart	Diagnosis	ICD-10-CM
I25.41	Coronary artery aneurysm	Diagnosis	ICD-10-CM
I25.42	Coronary artery dissection	Diagnosis	ICD-10-CM
I25.5	Ischemic cardiomyopathy	Diagnosis	ICD-10-CM
I25.6	Silent myocardial ischemia	Diagnosis	ICD-10-CM
I25.700	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.710	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.711	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.720	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.721	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.729	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.730	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.739	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.750	Atherosclerosis of native coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
I25.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.760	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
I25.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.790	Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
I25.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.810	Atherosclerosis of coronary artery bypass graft(s) without angina pectoris	Diagnosis	ICD-10-CM
I25.811	Atherosclerosis of native coronary artery of transplanted heart without angina pectoris	Diagnosis	ICD-10-CM
I25.812	Atherosclerosis of bypass graft of coronary artery of transplanted heart without angina pectoris	Diagnosis	ICD-10-CM
I25.82	Chronic total occlusion of coronary artery	Diagnosis	ICD-10-CM
I25.83	Coronary atherosclerosis due to lipid rich plaque	Diagnosis	ICD-10-CM
I25.84	Coronary atherosclerosis due to calcified coronary lesion	Diagnosis	ICD-10-CM
I25.89	Other forms of chronic ischemic heart disease	Diagnosis	ICD-10-CM
I25.9	Chronic ischemic heart disease, unspecified	Diagnosis	ICD-10-CM
Non-Alzheimer's Dementia			
F01.50	Vascular dementia, unspecified severity, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F01.51	Vascular dementia, unspecified severity, with behavioral disturbance	Diagnosis	ICD-10-CM
F02.80	Dementia in other diseases classified elsewhere, unspecified severity, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F02.81	Dementia in other diseases classified elsewhere, unspecified severity, with behavioral disturbance	Diagnosis	ICD-10-CM
F03.90	Unspecified dementia, unspecified severity, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F03.91	Unspecified dementia, unspecified severity, with behavioral disturbance	Diagnosis	ICD-10-CM
F05	Delirium due to known physiological condition	Diagnosis	ICD-10-CM
G13.8	Systemic atrophy primarily affecting central nervous system in other diseases classified elsewhere	Diagnosis	ICD-10-CM
G31.01	Pick's disease	Diagnosis	ICD-10-CM
G31.09	Other frontotemporal neurocognitive disorder	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
G31.83	Neurocognitive disorder with Lewy bodies	Diagnosis	ICD-10-CM
G94	Other disorders of brain in diseases classified elsewhere	Diagnosis	ICD-10-CM
R41.81	Age-related cognitive decline	Diagnosis	ICD-10-CM
Osteoporosis			
M80.00XA	Age-related osteoporosis with current pathological fracture, unspecified site, 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
M80.012A	Age-related osteoporosis with current pathological fracture, left shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M80.019A	Age-related osteoporosis with current pathological fracture, unspecified shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.021A	Age-related osteoporosis with current pathological fracture, right humerus, 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
M80.029A	Age-related osteoporosis with current pathological fracture, unspecified humerus, 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
M80.032A	Age-related osteoporosis with current pathological fracture, left forearm, 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
M80.041A	Age-related osteoporosis with current pathological fracture, right hand, 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
M80.049A	Age-related osteoporosis with current pathological fracture, unspecified hand, 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
M80.059A	Age-related osteoporosis with current pathological fracture, unspecified femur, 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
M80.062A	Age-related osteoporosis with current pathological fracture, left lower leg, 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
M80.071A	Age-related osteoporosis with current pathological fracture, right ankle and foot, 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
M80.079A	Age-related osteoporosis with current pathological fracture, unspecified ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.08XA	Age-related osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture	Diagnosis	ICD-10-CM
M80.0AXA	Age-related osteoporosis with current pathological fracture, other site, 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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M80.811A	Other osteoporosis with current pathological fracture, right shoulder, 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
M80.819A	Other osteoporosis with current pathological fracture, unspecified shoulder, 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
M80.822A	Other osteoporosis with current pathological fracture, left humerus, 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
M80.831A	Other osteoporosis with current pathological fracture, right forearm, 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
M80.839A	Other osteoporosis with current pathological fracture, unspecified forearm, 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
M80.842A	Other osteoporosis with current pathological fracture, left hand, 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
M80.851A	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
M80.859A	Other osteoporosis with current pathological fracture, unspecified femur, 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
M80.862A	Other osteoporosis with current pathological fracture, left lower leg, 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
M80.871A	Other osteoporosis with current pathological fracture, right ankle and foot, 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
M80.879A	Other osteoporosis with current pathological fracture, unspecified ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.88XA	Other osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M80.8AXA	Other osteoporosis with current pathological fracture, other site, initial encounter for fracture	Diagnosis	ICD-10-CM
M81.0	Age-related osteoporosis without current pathological fracture	Diagnosis	ICD-10-CM
M81.6	Localized osteoporosis [Lequesne]	Diagnosis	ICD-10-CM
M81.8	Other osteoporosis without current pathological fracture	Diagnosis	ICD-10-CM
Parkinson's Disease and Secondary Parkinsonism			
G20	Parkinson's disease	Diagnosis	ICD-10-CM
G21.11	Neuroleptic induced parkinsonism	Diagnosis	ICD-10-CM
G21.19	Other drug induced secondary parkinsonism	Diagnosis	ICD-10-CM
G21.3	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
G31.83	Neurocognitive disorder with Lewy bodies	Diagnosis	ICD-10-CM
Rheumatoid Arthritis/Osteoarthritis			
L40.50	Arthropathic psoriasis, unspecified	Diagnosis	ICD-10-CM
L40.51	Distal interphalangeal psoriatic arthropathy	Diagnosis	ICD-10-CM
L40.54	Psoriatic juvenile arthropathy	Diagnosis	ICD-10-CM
L40.59	Other psoriatic arthropathy	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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 shoulder	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
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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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
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 foot	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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
M05.532	Rheumatoid polyneuropathy with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.539	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified wrist	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 hand	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 knee	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M05.649	Rheumatoid arthritis of unspecified hand 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
M05.652	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
M05.749	Rheumatoid arthritis with rheumatoid factor of unspecified hand without organ or systems involvement	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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
M05.7A	Rheumatoid arthritis with rheumatoid factor of other specified site 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 shoulder	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
M05.879	Other rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M05.89	Other rheumatoid arthritis with rheumatoid factor of multiple sites	Diagnosis	ICD-10-CM
M05.8A	Other rheumatoid arthritis with rheumatoid factor of other specified site	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
M06.0A	Rheumatoid arthritis without rheumatoid factor, other specified site	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
M06.252	Rheumatoid bursitis, left hip	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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
M06.80	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
M06.839	Other specified rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M06.841	Other specified rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
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
M06.8A	Other specified rheumatoid arthritis, other specified site	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
M08.0A	Unspecified juvenile rheumatoid arthritis, other specified site	Diagnosis	ICD-10-CM
M08.1	Juvenile ankylosing spondylitis	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M08.219	Juvenile rheumatoid arthritis with systemic onset, unspecified shoulder	Diagnosis	ICD-10-CM
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
M08.2A	Juvenile rheumatoid arthritis with systemic onset, other specified site	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M08.479	Pauciarticular juvenile rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.48	Pauciarticular juvenile rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M08.4A	Pauciarticular juvenile rheumatoid arthritis, other specified site	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M08.962	Juvenile arthritis, unspecified, left knee	Diagnosis	ICD-10-CM
M08.969	Juvenile arthritis, unspecified, unspecified knee	Diagnosis	ICD-10-CM
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
M08.9A	Juvenile arthritis, unspecified, other specified site	Diagnosis	ICD-10-CM
M15.0	Primary generalized (osteo)arthritis	Diagnosis	ICD-10-CM
M15.1	Heberden's nodes (with arthropathy)	Diagnosis	ICD-10-CM
M15.2	Bouchard's nodes (with arthropathy)	Diagnosis	ICD-10-CM
M15.3	Secondary multiple arthritis	Diagnosis	ICD-10-CM
M15.4	Erosive (osteo)arthritis	Diagnosis	ICD-10-CM
M15.8	Other polyosteoarthritis	Diagnosis	ICD-10-CM
M15.9	Polyosteoarthritis, unspecified	Diagnosis	ICD-10-CM
M16.0	Bilateral primary osteoarthritis of hip	Diagnosis	ICD-10-CM
M16.10	Unilateral primary osteoarthritis, unspecified hip	Diagnosis	ICD-10-CM
M16.11	Unilateral primary osteoarthritis, right hip	Diagnosis	ICD-10-CM
M16.12	Unilateral primary osteoarthritis, left hip	Diagnosis	ICD-10-CM
M16.2	Bilateral osteoarthritis resulting from hip dysplasia	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
M16.4	Bilateral post-traumatic osteoarthritis of hip	Diagnosis	ICD-10-CM
M16.50	Unilateral post-traumatic osteoarthritis, unspecified hip	Diagnosis	ICD-10-CM
M16.51	Unilateral post-traumatic osteoarthritis, right hip	Diagnosis	ICD-10-CM
M16.52	Unilateral post-traumatic osteoarthritis, left hip	Diagnosis	ICD-10-CM
M16.6	Other bilateral secondary osteoarthritis of hip	Diagnosis	ICD-10-CM
M16.7	Other unilateral secondary osteoarthritis of hip	Diagnosis	ICD-10-CM
M16.9	Osteoarthritis of hip, unspecified	Diagnosis	ICD-10-CM
M17.0	Bilateral primary osteoarthritis of knee	Diagnosis	ICD-10-CM
M17.10	Unilateral primary osteoarthritis, unspecified knee	Diagnosis	ICD-10-CM
M17.11	Unilateral primary osteoarthritis, right knee	Diagnosis	ICD-10-CM
M17.12	Unilateral primary osteoarthritis, left knee	Diagnosis	ICD-10-CM
M17.2	Bilateral post-traumatic osteoarthritis of knee	Diagnosis	ICD-10-CM
M17.30	Unilateral post-traumatic osteoarthritis, unspecified knee	Diagnosis	ICD-10-CM
M17.31	Unilateral post-traumatic osteoarthritis, right knee	Diagnosis	ICD-10-CM
M17.32	Unilateral post-traumatic osteoarthritis, left knee	Diagnosis	ICD-10-CM
M17.4	Other bilateral secondary osteoarthritis of knee	Diagnosis	ICD-10-CM
M17.5	Other unilateral secondary osteoarthritis of knee	Diagnosis	ICD-10-CM
M17.9	Osteoarthritis of knee, unspecified	Diagnosis	ICD-10-CM
M18.0	Bilateral primary osteoarthritis of first carpometacarpal joints	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

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M18.12	Unilateral primary osteoarthritis of first carpometacarpal joint, left hand	Diagnosis	ICD-10-CM
M18.2	Bilateral post-traumatic osteoarthritis of first carpometacarpal joints	Diagnosis	ICD-10-CM
	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, unspecified		
M18.30	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
M18.4	Other bilateral secondary osteoarthritis of first carpometacarpal joints	Diagnosis	ICD-10-CM
	Other unilateral secondary osteoarthritis of first carpometacarpal joint, unspecified		
M18.50	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
M18.9	Osteoarthritis of first carpometacarpal joint, unspecified	Diagnosis	ICD-10-CM
M19.011	Primary osteoarthritis, right shoulder	Diagnosis	ICD-10-CM
M19.012	Primary osteoarthritis, left shoulder	Diagnosis	ICD-10-CM
M19.019	Primary osteoarthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M19.021	Primary osteoarthritis, right elbow	Diagnosis	ICD-10-CM
M19.022	Primary osteoarthritis, left elbow	Diagnosis	ICD-10-CM
M19.029	Primary osteoarthritis, unspecified elbow	Diagnosis	ICD-10-CM
M19.031	Primary osteoarthritis, right wrist	Diagnosis	ICD-10-CM
M19.032	Primary osteoarthritis, left wrist	Diagnosis	ICD-10-CM
M19.039	Primary osteoarthritis, unspecified wrist	Diagnosis	ICD-10-CM
M19.041	Primary osteoarthritis, right hand	Diagnosis	ICD-10-CM
M19.042	Primary osteoarthritis, left hand	Diagnosis	ICD-10-CM
M19.049	Primary osteoarthritis, unspecified hand	Diagnosis	ICD-10-CM
M19.071	Primary osteoarthritis, right ankle and foot	Diagnosis	ICD-10-CM
M19.072	Primary osteoarthritis, left ankle and foot	Diagnosis	ICD-10-CM
M19.079	Primary osteoarthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M19.09	Primary osteoarthritis, other specified site	Diagnosis	ICD-10-CM
M19.111	Post-traumatic osteoarthritis, right shoulder	Diagnosis	ICD-10-CM
M19.112	Post-traumatic osteoarthritis, left shoulder	Diagnosis	ICD-10-CM
M19.119	Post-traumatic osteoarthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M19.121	Post-traumatic osteoarthritis, right elbow	Diagnosis	ICD-10-CM
M19.122	Post-traumatic osteoarthritis, left elbow	Diagnosis	ICD-10-CM
M19.129	Post-traumatic osteoarthritis, unspecified elbow	Diagnosis	ICD-10-CM
M19.131	Post-traumatic osteoarthritis, right wrist	Diagnosis	ICD-10-CM
M19.132	Post-traumatic osteoarthritis, left wrist	Diagnosis	ICD-10-CM
M19.139	Post-traumatic osteoarthritis, unspecified wrist	Diagnosis	ICD-10-CM
M19.141	Post-traumatic osteoarthritis, right hand	Diagnosis	ICD-10-CM
M19.142	Post-traumatic osteoarthritis, left hand	Diagnosis	ICD-10-CM
M19.149	Post-traumatic osteoarthritis, unspecified hand	Diagnosis	ICD-10-CM
M19.171	Post-traumatic osteoarthritis, right ankle and foot	Diagnosis	ICD-10-CM
M19.172	Post-traumatic osteoarthritis, left ankle and foot	Diagnosis	ICD-10-CM
M19.179	Post-traumatic osteoarthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M19.19	Post-traumatic osteoarthritis, other specified site	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M19.211	Secondary osteoarthritis, right shoulder	Diagnosis	ICD-10-CM
M19.212	Secondary osteoarthritis, left shoulder	Diagnosis	ICD-10-CM
M19.219	Secondary osteoarthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M19.221	Secondary osteoarthritis, right elbow	Diagnosis	ICD-10-CM
M19.222	Secondary osteoarthritis, left elbow	Diagnosis	ICD-10-CM
M19.229	Secondary osteoarthritis, unspecified elbow	Diagnosis	ICD-10-CM
M19.231	Secondary osteoarthritis, right wrist	Diagnosis	ICD-10-CM
M19.232	Secondary osteoarthritis, left wrist	Diagnosis	ICD-10-CM
M19.239	Secondary osteoarthritis, unspecified wrist	Diagnosis	ICD-10-CM
M19.241	Secondary osteoarthritis, right hand	Diagnosis	ICD-10-CM
M19.242	Secondary osteoarthritis, left hand	Diagnosis	ICD-10-CM
M19.249	Secondary osteoarthritis, unspecified hand	Diagnosis	ICD-10-CM
M19.271	Secondary osteoarthritis, right ankle and foot	Diagnosis	ICD-10-CM
M19.272	Secondary osteoarthritis, left ankle and foot	Diagnosis	ICD-10-CM
M19.279	Secondary osteoarthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M19.29	Secondary osteoarthritis, other specified site	Diagnosis	ICD-10-CM
M19.90	Unspecified osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M19.91	Primary osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M19.92	Post-traumatic osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M19.93	Secondary osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M45.0	Ankylosing spondylitis of multiple sites in spine	Diagnosis	ICD-10-CM
M45.1	Ankylosing spondylitis of occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M45.2	Ankylosing spondylitis of cervical region	Diagnosis	ICD-10-CM
M45.3	Ankylosing spondylitis of cervicothoracic region	Diagnosis	ICD-10-CM
M45.4	Ankylosing spondylitis of thoracic region	Diagnosis	ICD-10-CM
M45.5	Ankylosing spondylitis of thoracolumbar region	Diagnosis	ICD-10-CM
M45.6	Ankylosing spondylitis lumbar region	Diagnosis	ICD-10-CM
M45.7	Ankylosing spondylitis of lumbosacral 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.A0	Non-radiographic axial spondyloarthritis of unspecified sites in spine	Diagnosis	ICD-10-CM
M45.A1	Non-radiographic axial spondyloarthritis of occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M45.A2	Non-radiographic axial spondyloarthritis of cervical region	Diagnosis	ICD-10-CM
M45.A3	Non-radiographic axial spondyloarthritis of cervicothoracic region	Diagnosis	ICD-10-CM
M45.A4	Non-radiographic axial spondyloarthritis of thoracic region	Diagnosis	ICD-10-CM
M45.A5	Non-radiographic axial spondyloarthritis of thoracolumbar region	Diagnosis	ICD-10-CM
M45.A6	Non-radiographic axial spondyloarthritis of lumbar region	Diagnosis	ICD-10-CM
M45.A7	Non-radiographic axial spondyloarthritis of lumbosacral region	Diagnosis	ICD-10-CM
M45.A8	Non-radiographic axial spondyloarthritis of sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M45.AB	Non-radiographic axial spondyloarthritis of multiple sites in spine	Diagnosis	ICD-10-CM
M46.80	Other specified inflammatory spondylopathies, site unspecified	Diagnosis	ICD-10-CM
M46.81	Other specified inflammatory spondylopathies, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M46.82	Other specified inflammatory spondylopathies, cervical region	Diagnosis	ICD-10-CM
M46.83	Other specified inflammatory spondylopathies, cervicothoracic region	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M46.84	Other specified inflammatory spondylopathies, thoracic region	Diagnosis	ICD-10-CM
M46.85	Other specified inflammatory spondylopathies, thoracolumbar region	Diagnosis	ICD-10-CM
M46.86	Other specified inflammatory spondylopathies, lumbar region	Diagnosis	ICD-10-CM
M46.87	Other specified inflammatory spondylopathies, lumbosacral region	Diagnosis	ICD-10-CM
M46.88	Other specified inflammatory spondylopathies, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M46.89	Other specified inflammatory spondylopathies, multiple sites in spine	Diagnosis	ICD-10-CM
M46.90	Unspecified inflammatory spondylopathy, site unspecified	Diagnosis	ICD-10-CM
M46.91	Unspecified inflammatory spondylopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M46.92	Unspecified inflammatory spondylopathy, cervical region	Diagnosis	ICD-10-CM
M46.93	Unspecified inflammatory spondylopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M46.94	Unspecified inflammatory spondylopathy, thoracic region	Diagnosis	ICD-10-CM
M46.95	Unspecified inflammatory spondylopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M46.96	Unspecified inflammatory spondylopathy, lumbar region	Diagnosis	ICD-10-CM
M46.97	Unspecified inflammatory spondylopathy, lumbosacral region	Diagnosis	ICD-10-CM
M46.98	Unspecified inflammatory spondylopathy, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M46.99	Unspecified inflammatory spondylopathy, multiple sites in spine	Diagnosis	ICD-10-CM
M47.011	Anterior spinal artery compression syndromes, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.012	Anterior spinal artery compression syndromes, cervical region	Diagnosis	ICD-10-CM
M47.013	Anterior spinal artery compression syndromes, cervicothoracic region	Diagnosis	ICD-10-CM
M47.014	Anterior spinal artery compression syndromes, thoracic region	Diagnosis	ICD-10-CM
M47.015	Anterior spinal artery compression syndromes, thoracolumbar region	Diagnosis	ICD-10-CM
M47.016	Anterior spinal artery compression syndromes, lumbar region	Diagnosis	ICD-10-CM
M47.019	Anterior spinal 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
M47.029	Vertebral artery compression syndromes, site unspecified	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
M47.12	Other spondylosis with myelopathy, cervical region	Diagnosis	ICD-10-CM
M47.13	Other spondylosis with myelopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M47.14	Other spondylosis with myelopathy, thoracic region	Diagnosis	ICD-10-CM
M47.15	Other spondylosis with myelopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M47.16	Other spondylosis with myelopathy, lumbar region	Diagnosis	ICD-10-CM
M47.20	Other spondylosis with radiculopathy, site unspecified	Diagnosis	ICD-10-CM
M47.21	Other spondylosis with radiculopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.22	Other spondylosis with radiculopathy, cervical region	Diagnosis	ICD-10-CM
M47.23	Other spondylosis with radiculopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M47.24	Other spondylosis with radiculopathy, thoracic region	Diagnosis	ICD-10-CM
M47.25	Other spondylosis with radiculopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M47.26	Other spondylosis with radiculopathy, lumbar region	Diagnosis	ICD-10-CM
M47.27	Other spondylosis with radiculopathy, lumbosacral region	Diagnosis	ICD-10-CM
M47.28	Other spondylosis with radiculopathy, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M47.811	Spondylosis without myelopathy or radiculopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.812	Spondylosis without myelopathy or radiculopathy, cervical region	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
M47.813	Spondylosis without myelopathy or radiculopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M47.814	Spondylosis without myelopathy or radiculopathy, thoracic region	Diagnosis	ICD-10-CM
M47.815	Spondylosis without myelopathy or radiculopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M47.816	Spondylosis without myelopathy or radiculopathy, lumbar region	Diagnosis	ICD-10-CM
M47.817	Spondylosis without myelopathy or radiculopathy, lumbosacral region	Diagnosis	ICD-10-CM
M47.818	Spondylosis without myelopathy or radiculopathy, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M47.819	Spondylosis without myelopathy or radiculopathy, site unspecified	Diagnosis	ICD-10-CM
M47.891	Other spondylosis, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.892	Other spondylosis, cervical region	Diagnosis	ICD-10-CM
M47.893	Other spondylosis, cervicothoracic region	Diagnosis	ICD-10-CM
M47.894	Other spondylosis, thoracic region	Diagnosis	ICD-10-CM
M47.895	Other spondylosis, thoracolumbar region	Diagnosis	ICD-10-CM
M47.896	Other spondylosis, lumbar region	Diagnosis	ICD-10-CM
M47.897	Other spondylosis, lumbosacral region	Diagnosis	ICD-10-CM
M47.898	Other spondylosis, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M47.899	Other spondylosis, site unspecified	Diagnosis	ICD-10-CM
M47.9	Spondylosis, unspecified	Diagnosis	ICD-10-CM
M48.8X1	Other specified spondylopathies, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M48.8X2	Other specified spondylopathies, cervical region	Diagnosis	ICD-10-CM
M48.8X3	Other specified spondylopathies, cervicothoracic region	Diagnosis	ICD-10-CM
M48.8X4	Other specified spondylopathies, thoracic region	Diagnosis	ICD-10-CM
M48.8X5	Other specified spondylopathies, thoracolumbar region	Diagnosis	ICD-10-CM
M48.8X6	Other specified spondylopathies, lumbar region	Diagnosis	ICD-10-CM
M48.8X7	Other specified spondylopathies, lumbosacral region	Diagnosis	ICD-10-CM
M48.8X8	Other specified spondylopathies, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M48.8X9	Other specified spondylopathies, site unspecified	Diagnosis	ICD-10-CM
Stroke/Transient Ischemic Attack			
G45.0	Vertebro-basilar artery syndrome	Diagnosis	ICD-10-CM
G45.1	Carotid artery syndrome (hemispheric)	Diagnosis	ICD-10-CM
G45.2	Multiple and bilateral precerebral artery syndromes	Diagnosis	ICD-10-CM
G45.3	Amaurosis fugax	Diagnosis	ICD-10-CM
G45.8	Other transient cerebral ischemic attacks and related syndromes	Diagnosis	ICD-10-CM
G45.9	Transient cerebral ischemic attack, unspecified	Diagnosis	ICD-10-CM
G46.0	Middle cerebral artery syndrome	Diagnosis	ICD-10-CM
G46.1	Anterior cerebral artery syndrome	Diagnosis	ICD-10-CM
G46.2	Posterior cerebral artery syndrome	Diagnosis	ICD-10-CM
G46.3	Brain stem stroke syndrome	Diagnosis	ICD-10-CM
G46.4	Cerebellar stroke syndrome	Diagnosis	ICD-10-CM
G46.5	Pure motor lacunar syndrome	Diagnosis	ICD-10-CM
G46.6	Pure sensory lacunar syndrome	Diagnosis	ICD-10-CM
G46.7	Other lacunar syndromes	Diagnosis	ICD-10-CM
G46.8	Other vascular syndromes of brain in cerebrovascular diseases	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
G97.31	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating a nervous system procedure	Diagnosis	ICD-10-CM
G97.32	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating other procedure	Diagnosis	ICD-10-CM
I60.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.10	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I60.11	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery	Diagnosis	ICD-10-CM
I60.12	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery	Diagnosis	ICD-10-CM
I60.2	Nontraumatic subarachnoid hemorrhage from anterior communicating artery	Diagnosis	ICD-10-CM
I60.20	Nontraumatic subarachnoid hemorrhage from unspecified anterior communicating artery	Diagnosis	ICD-10-CM
I60.21	Nontraumatic subarachnoid hemorrhage from right anterior communicating artery	Diagnosis	ICD-10-CM
I60.22	Nontraumatic subarachnoid hemorrhage from left anterior communicating artery	Diagnosis	ICD-10-CM
I60.30	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery	Diagnosis	ICD-10-CM
I60.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery	Diagnosis	ICD-10-CM
I60.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery	Diagnosis	ICD-10-CM
I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery	Diagnosis	ICD-10-CM
I60.50	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery	Diagnosis	ICD-10-CM
I60.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery	Diagnosis	ICD-10-CM
I60.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery	Diagnosis	ICD-10-CM
I60.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries	Diagnosis	ICD-10-CM
I60.7	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery	Diagnosis	ICD-10-CM
I60.8	Other nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I60.9	Nontraumatic subarachnoid hemorrhage, unspecified	Diagnosis	ICD-10-CM
I61.0	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical	Diagnosis	ICD-10-CM
I61.1	Nontraumatic intracerebral hemorrhage in hemisphere, cortical	Diagnosis	ICD-10-CM
I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified	Diagnosis	ICD-10-CM
I61.3	Nontraumatic intracerebral hemorrhage in brain stem	Diagnosis	ICD-10-CM
I61.4	Nontraumatic intracerebral hemorrhage in cerebellum	Diagnosis	ICD-10-CM
I61.5	Nontraumatic intracerebral hemorrhage, intraventricular	Diagnosis	ICD-10-CM
I61.6	Nontraumatic intracerebral hemorrhage, multiple localized	Diagnosis	ICD-10-CM
I61.8	Other nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I61.9	Nontraumatic intracerebral hemorrhage, unspecified	Diagnosis	ICD-10-CM
I62.00	Nontraumatic subdural hemorrhage, unspecified	Diagnosis	ICD-10-CM
I62.01	Nontraumatic acute subdural hemorrhage	Diagnosis	ICD-10-CM
I62.02	Nontraumatic subacute subdural hemorrhage	Diagnosis	ICD-10-CM
I62.9	Nontraumatic intracranial hemorrhage, unspecified	Diagnosis	ICD-10-CM
I63.00	Cerebral infarction due to thrombosis of unspecified precerebral artery	Diagnosis	ICD-10-CM
I63.011	Cerebral infarction due to thrombosis of right vertebral artery	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
I63.012	Cerebral infarction due to thrombosis of left vertebral artery	Diagnosis	ICD-10-CM
I63.013	Cerebral infarction due to thrombosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.019	Cerebral infarction due to thrombosis of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.02	Cerebral infarction due to thrombosis of basilar artery	Diagnosis	ICD-10-CM
I63.031	Cerebral infarction due to thrombosis of right carotid artery	Diagnosis	ICD-10-CM
I63.032	Cerebral infarction due to thrombosis of left carotid artery	Diagnosis	ICD-10-CM
I63.033	Cerebral infarction due to thrombosis of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.039	Cerebral infarction due to thrombosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.09	Cerebral infarction due to thrombosis of other precerebral artery	Diagnosis	ICD-10-CM
I63.10	Cerebral infarction due to embolism of unspecified precerebral artery	Diagnosis	ICD-10-CM
I63.111	Cerebral infarction due to embolism of right vertebral artery	Diagnosis	ICD-10-CM
I63.112	Cerebral infarction due to embolism of left vertebral artery	Diagnosis	ICD-10-CM
I63.113	Cerebral infarction due to embolism of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.119	Cerebral infarction due to embolism of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.12	Cerebral infarction due to embolism of basilar artery	Diagnosis	ICD-10-CM
I63.131	Cerebral infarction due to embolism of right carotid artery	Diagnosis	ICD-10-CM
I63.132	Cerebral infarction due to embolism of left carotid artery	Diagnosis	ICD-10-CM
I63.133	Cerebral infarction due to embolism of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.139	Cerebral infarction due to embolism of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.19	Cerebral infarction due to embolism of other precerebral artery	Diagnosis	ICD-10-CM
I63.20	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries	Diagnosis	ICD-10-CM
I63.211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral artery	Diagnosis	ICD-10-CM
I63.212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral artery	Diagnosis	ICD-10-CM
I63.213	Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.22	Cerebral infarction due to unspecified occlusion or stenosis of basilar artery	Diagnosis	ICD-10-CM
I63.231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries	Diagnosis	ICD-10-CM
I63.232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries	Diagnosis	ICD-10-CM
I63.233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.29	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries	Diagnosis	ICD-10-CM
I63.30	Cerebral infarction due to thrombosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.311	Cerebral infarction due to thrombosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.312	Cerebral infarction due to thrombosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.313	Cerebral infarction due to thrombosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
I63.321	Cerebral infarction due to thrombosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.322	Cerebral infarction due to thrombosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.323	Cerebral infarction due to thrombosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.331	Cerebral infarction due to thrombosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.332	Cerebral infarction due to thrombosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.333	Cerebral infarction due to thrombosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.341	Cerebral infarction due to thrombosis of right cerebellar artery	Diagnosis	ICD-10-CM
I63.342	Cerebral infarction due to thrombosis of left cerebellar artery	Diagnosis	ICD-10-CM
I63.343	Cerebral infarction due to thrombosis of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.349	Cerebral infarction due to thrombosis of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.39	Cerebral infarction due to thrombosis of other cerebral artery	Diagnosis	ICD-10-CM
I63.40	Cerebral infarction due to embolism of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.411	Cerebral infarction due to embolism of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.412	Cerebral infarction due to embolism of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.413	Cerebral infarction due to embolism of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.419	Cerebral infarction due to embolism of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.421	Cerebral infarction due to embolism of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.422	Cerebral infarction due to embolism of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.423	Cerebral infarction due to embolism of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.429	Cerebral infarction due to embolism of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.431	Cerebral infarction due to embolism of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.432	Cerebral infarction due to embolism of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.433	Cerebral infarction due to embolism of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.439	Cerebral infarction due to embolism of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.441	Cerebral infarction due to embolism of right cerebellar artery	Diagnosis	ICD-10-CM
I63.442	Cerebral infarction due to embolism of left cerebellar artery	Diagnosis	ICD-10-CM
I63.443	Cerebral infarction due to embolism of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.449	Cerebral infarction due to embolism of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.49	Cerebral infarction due to embolism of other cerebral artery	Diagnosis	ICD-10-CM
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.513	Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.519	Cerebral infarction due to unspecified occlusion or stenosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
I63.522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.523	Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.529	Cerebral infarction due to unspecified occlusion or stenosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery	Diagnosis	ICD-10-CM
I63.542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery	Diagnosis	ICD-10-CM
I63.543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery	Diagnosis	ICD-10-CM
I63.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic	Diagnosis	ICD-10-CM
I63.8	Other cerebral infarction	Diagnosis	ICD-10-CM
I63.81	Other cerebral infarction due to occlusion or stenosis of small artery	Diagnosis	ICD-10-CM
I63.89	Other cerebral infarction	Diagnosis	ICD-10-CM
I63.9	Cerebral infarction, unspecified	Diagnosis	ICD-10-CM
I67.841	Reversible cerebrovascular vasoconstriction syndrome	Diagnosis	ICD-10-CM
I67.848	Other cerebrovascular vasospasm and vasoconstriction	Diagnosis	ICD-10-CM
I67.89	Other cerebrovascular disease	Diagnosis	ICD-10-CM
I97.810	Intraoperative cerebrovascular infarction during cardiac surgery	Diagnosis	ICD-10-CM
I97.811	Intraoperative cerebrovascular infarction during other surgery	Diagnosis	ICD-10-CM
I97.820	Postprocedural cerebrovascular infarction following cardiac surgery	Diagnosis	ICD-10-CM
I97.821	Postprocedural cerebrovascular infarction following other surgery	Diagnosis	ICD-10-CM
Hepatic Disorders			
06L20ZZ	Occlusion of Gastric Vein, Open Approach	Procedure	ICD-10-PCS
06L23ZZ	Occlusion of Gastric Vein, Percutaneous 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
06L33ZZ	Occlusion of Esophageal Vein, Percutaneous Approach	Procedure	ICD-10-PCS
06L34ZZ	Occlusion of Esophageal Vein, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9S30Z	Drainage of Greater Omentum with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
0D9S3ZZ	Drainage of Greater Omentum, Percutaneous Approach	Procedure	ICD-10-PCS
0D9S40Z	Drainage of Greater Omentum with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9S4ZZ	Drainage of Greater Omentum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9T30Z	Drainage of Lesser Omentum with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0D9T3ZZ	Drainage of Lesser Omentum, Percutaneous Approach	Procedure	ICD-10-PCS
0D9T40Z	Drainage of Lesser Omentum with Drainage Device, Percutaneous Endoscopic 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
0D9V3ZZ	Drainage of Mesentery, Percutaneous Approach	Procedure	ICD-10-PCS
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
0D9W30Z	Drainage of Peritoneum with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0D9W3ZZ	Drainage of Peritoneum, 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
0DL57DZ	Occlusion of Esophagus with Intraluminal Device, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0DL58DZ	Occlusion of Esophagus with Intraluminal Device, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0W9F30Z	Drainage of Abdominal Wall with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0W9F3ZZ	Drainage of Abdominal Wall, Percutaneous Approach	Procedure	ICD-10-PCS
0W9F40Z	Drainage of Abdominal Wall with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0W9F4ZZ	Drainage of Abdominal Wall, 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
0W9G40Z	Drainage of Peritoneal Cavity with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0W9G4ZZ	Drainage of Peritoneal Cavity, Percutaneous Endoscopic 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
B15.0	Hepatitis A with hepatic coma	Diagnosis	ICD-10-CM
B15.9	Hepatitis A without hepatic coma	Diagnosis	ICD-10-CM
B16.0	Acute hepatitis B with delta-agent with hepatic coma	Diagnosis	ICD-10-CM
B16.1	Acute hepatitis B with delta-agent without 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
B17.0	Acute delta-(super) infection of hepatitis B carrier	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
B17.2	Acute hepatitis E	Diagnosis	ICD-10-CM
B17.8	Other specified acute viral hepatitis	Diagnosis	ICD-10-CM
B17.9	Acute viral hepatitis, unspecified	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
B18.0	Chronic viral hepatitis B with delta-agent	Diagnosis	ICD-10-CM
B18.1	Chronic viral hepatitis B without delta-agent	Diagnosis	ICD-10-CM
B18.2	Chronic viral hepatitis C	Diagnosis	ICD-10-CM
B18.8	Other chronic viral hepatitis	Diagnosis	ICD-10-CM
B18.9	Chronic viral hepatitis, unspecified	Diagnosis	ICD-10-CM
B19.0	Unspecified viral hepatitis 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
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
B19.9	Unspecified viral hepatitis without hepatic coma	Diagnosis	ICD-10-CM
K70.0	Alcoholic fatty liver	Diagnosis	ICD-10-CM
K70.10	Alcoholic hepatitis without ascites	Diagnosis	ICD-10-CM
K70.11	Alcoholic hepatitis with ascites	Diagnosis	ICD-10-CM
K70.2	Alcoholic fibrosis and sclerosis of 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
K70.40	Alcoholic hepatic failure without coma	Diagnosis	ICD-10-CM
K70.41	Alcoholic hepatic failure with coma	Diagnosis	ICD-10-CM
K70.9	Alcoholic liver disease, unspecified	Diagnosis	ICD-10-CM
K71.0	Toxic liver disease with cholestasis	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
K71.8	Toxic liver disease with other disorders of liver	Diagnosis	ICD-10-CM
K71.9	Toxic liver disease, unspecified	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
K72.10	Chronic hepatic failure without coma	Diagnosis	ICD-10-CM
K72.11	Chronic hepatic failure with coma	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
K74.0	Hepatic fibrosis	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
K74.1	Hepatic sclerosis	Diagnosis	ICD-10-CM
K74.2	Hepatic fibrosis with hepatic sclerosis	Diagnosis	ICD-10-CM
K74.3	Primary biliary cirrhosis	Diagnosis	ICD-10-CM
K74.4	Secondary biliary cirrhosis	Diagnosis	ICD-10-CM
K74.5	Biliary cirrhosis, unspecified	Diagnosis	ICD-10-CM
K74.60	Unspecified cirrhosis of liver	Diagnosis	ICD-10-CM
K74.69	Other cirrhosis of liver	Diagnosis	ICD-10-CM
K75.0	Abscess of liver	Diagnosis	ICD-10-CM
K75.1	Phlebitis of portal vein	Diagnosis	ICD-10-CM

Appendix E. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
K75.81	Nonalcoholic steatohepatitis (NASH)	Diagnosis	ICD-10-CM
K75.89	Other specified inflammatory liver diseases	Diagnosis	ICD-10-CM
K75.9	Inflammatory liver disease, unspecified	Diagnosis	ICD-10-CM
K76.0	Fatty (change of) liver, not elsewhere classified	Diagnosis	ICD-10-CM
K76.1	Chronic passive congestion of liver	Diagnosis	ICD-10-CM
K76.2	Central hemorrhagic necrosis of liver	Diagnosis	ICD-10-CM
K76.3	Infarction of liver	Diagnosis	ICD-10-CM
K76.5	Hepatic veno-occlusive disease	Diagnosis	ICD-10-CM
K76.6	Portal hypertension	Diagnosis	ICD-10-CM
K76.7	Hepatorenal syndrome	Diagnosis	ICD-10-CM
K76.81	Hepatopulmonary syndrome	Diagnosis	ICD-10-CM
K76.82	Hepatic encephalopathy	Diagnosis	ICD-10-CM
K76.89	Other specified diseases of liver	Diagnosis	ICD-10-CM
K76.9	Liver disease, unspecified	Diagnosis	ICD-10-CM
K77	Liver disorders in diseases classified elsewhere	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
K83.0	Cholangitis	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
Z22.50	Carrier of unspecified viral hepatitis	Diagnosis	ICD-10-CM
Z22.51	Carrier of viral hepatitis B	Diagnosis	ICD-10-CM
Z22.52	Carrier of viral hepatitis C	Diagnosis	ICD-10-CM
Z22.59	Carrier of other viral hepatitis	Diagnosis	ICD-10-CM
Z48.23	Encounter for aftercare following liver transplant	Diagnosis	ICD-10-CM
Z94.4	Liver transplant status	Diagnosis	ICD-10-CM

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

Generic Name	Brand Name
Tildrakizumab	
tildrakizumab-asmn	Ilumya
Secukinumab	
secukinumab	Cosentyx
secukinumab	Cosentyx (2 Syringes)
secukinumab	Cosentyx Pen
secukinumab	Cosentyx Pen (2 Pens)
secukinumab	Cosentyx UnoReady Pen
Ustekinumab	
ustekinumab	Stelara
Ixekizumab	
ixekizumab	Taltz Autoinjector
ixekizumab	Taltz Autoinjector (2 Pack)
ixekizumab	Taltz Autoinjector (3 Pack)
ixekizumab	Taltz Syringe
Brodalumab	
brodalumab	Siliq
Topical Treatments	
HYDROCORTISONE	First-Hydrocortisone
alclometasone dipropionate	alclometasone
alitretinoin	Panretin
amcinonide	amcinonide
benzoyl peroxide/hydrocortisone	Vanoxide-HC
betamethasone dipropionate	Sernivo
betamethasone dipropionate	betamethasone dipropionate
betamethasone dipropionate	betamethasone, augmented
betamethasone dipropionate/propylene glycol	Diprolene (augmented)
betamethasone dipropionate/propylene glycol	betamethasone, augmented
betamethasone valerate	Luxiq
betamethasone valerate	betamethasone valerate
calcipotriene	Dovonex
calcipotriene	Sorilux
calcipotriene	calcipotriene
calcipotriene/betamethasone dipropionate	Enstilar
calcipotriene/betamethasone dipropionate	Taclonex
calcipotriene/betamethasone dipropionate	Wynzora
calcipotriene/betamethasone dipropionate	calcipotriene-betamethasone
calcipotriene/dimethicone	NuDermRxPAK
calcipotriene/niacinamide	Diooxia
calcipotriene/transparent dressing	Trionex
clindamycin phosphate/tretinoin	Veltin
clindamycin phosphate/tretinoin	Ziana
clindamycin phosphate/tretinoin	clindamycin-tretinoin
clobetasol propionate	Clobex
clobetasol propionate	Clodan
clobetasol propionate	Cormax
clobetasol propionate	Impeklo
clobetasol propionate	Impoyz

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

Generic Name	Brand Name
clobetasol propionate	Olux
clobetasol propionate	Temovate
clobetasol propionate	clobetasol
clobetasol propionate/emollient base	Olux-E
clobetasol propionate/emollient base	Tovet Emollient
clobetasol propionate/emollient base	clobetasol-emollient
clobetasol propionate/emollient combination no.65	Tovet Kit
clobetasol propionate/gauze bandage/silicone, adhesive	Tasoprol
clobetasol propionate/hydrocolloid dressing	Clobetavix
clobetasol propionate/niacinamide	Chlooxia
clobetasol propionate/niacinamide	Oxiachlo
clobetasol propionate/niacinamide	clobetasol-niacinamide
clobetasol propionate/skin cleanser combination no.28	Clodan Kit
clocortolone pivalate	Cloderm
clocortolone pivalate	clocortolone pivalate
coal tar	Oxipor VHC
coal tar	Psoriasin
desonide	DesOwen
desonide	DesRx
desonide	Desonate
desonide	Tridesilon
desonide	Verdeso
desonide	desonide
desoximetasone	Topicort
desoximetasone	desoximetasone
desoximetasone/niacinamide	Fluoxia
desoximetasone/niacinamide	desoximetasone-niacinamide
diflorasone diacetate	Psorcon
diflorasone diacetate	diflorasone
diflorasone diacetate/emollient base	ApexiCon E
fluocinolone acetone	Capex
fluocinolone acetone	Derma-Smoother/FS Body Oil
fluocinolone acetone	Synalar
fluocinolone acetone	fluocinolone
fluocinolone acetone/emollient combination no.65	Synalar Cream Kit
fluocinolone acetone/emollient combination no.65	Synalar Ointment Kit
fluocinolone acetone/niacinamide	Tetoxia
fluocinolone acetone/niacinamide	fluocinolone-niacinamide
fluocinolone acetone/shower cap	Derma-Smoother/FS Scalp Oil
fluocinolone acetone/shower cap	fluocinolone and shower cap
fluocinolone acetone/skin cleanser comb no.28	Synalar TS
fluocinolone acetone/skin cleanser no.10/silicone, tape	Xilapak
fluocinolone acetone/tretinoin/hydroquinone	Tri-Luma
fluocinolone acetone/urea/silicone, adhesive	Noxipak
fluocinonide	Vanos
fluocinonide	fluocinonide
fluocinonide/dimethicone	Fluopar
fluocinonide/emollient base	Fluocinonide-E

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

Generic Name	Brand Name
fluocinonide/emollient base	fluocinonide-emollient
fluocinonide/silicone, adhesive	Fluovix
fluocinonide/silicone, adhesive	Fluovix Plus
flurandrenolide	Cordran
flurandrenolide	Cordran Tape Large Roll
flurandrenolide	Nolix
flurandrenolide	flurandrenolide
fluticasone propionate	Beser
fluticasone propionate	Cutivate
fluticasone propionate	fluticasone propionate
fluticasone propionate/emollient combination no.65	Beser Kit
halcinonide	Halog
halcinonide	halcinonide
halobetasol propionate	Bryhali
halobetasol propionate	Lexette
halobetasol propionate	Ultravate
halobetasol propionate	halobetasol propionate
halobetasol propionate/lactic acid	Ultravate X
halobetasol propionate/tazarotene	Duobrii
hydrocortisone	Advanced Allergy Collect Kit
hydrocortisone	Ala-Cort
hydrocortisone	Ala-Scalp
hydrocortisone	Anusol-HC
hydrocortisone	Procto-Med HC
hydrocortisone	Proctocort
hydrocortisone	Proctosol HC
hydrocortisone	Proctozone-HC
hydrocortisone	Scalacort
hydrocortisone	Texacort
hydrocortisone	hydrocortisone
hydrocortisone acetate	MiCort-HC
hydrocortisone acetate/aloe vera	Nucort
hydrocortisone acetate/iodoquinol/aloe polysaccharides no.2	Alcortin A
hydrocortisone acetate/iodoquinol/aloe polysaccharides no.2	hydrocortisone-iodoquinol-aloe2
hydrocortisone acetate/iodoquinol/aloe vera	Vytone
hydrocortisone acetate/iodoquinol/aloe vera	hydrocortisone-iodoquinol-aloe
hydrocortisone acetate/pramoxine HCl	Analpram-HC
hydrocortisone acetate/pramoxine HCl	Epifoam
hydrocortisone acetate/pramoxine HCl	Novacort
hydrocortisone acetate/pramoxine HCl	Pramosone
hydrocortisone acetate/pramoxine HCl	hydrocortisone-pramoxine
hydrocortisone acetate/pramoxine HCl/emollient base	Pramosone E
hydrocortisone butyrate	Locoid
hydrocortisone butyrate	hydrocortisone butyrate
hydrocortisone butyrate/emollient base	Locoid Lipocream
hydrocortisone butyrate/emollient base	hydrocortisone butyr-emollient
hydrocortisone probutate	Pandel
hydrocortisone valerate	hydrocortisone valerate

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

Generic Name	Brand Name
hydrocortisone/iodoquinol	Corti-Sav
hydrocortisone/iodoquinol	Dermazene
hydrocortisone/iodoquinol	hydrocortisone-iodoquinol
hydrocortisone/mineral oil/petrolatum, white	hydrocortisone-min oil-wht pet
hydrocortisone/pramoxine HCl/chloroxylenol	Cortane-B
hydrocortisone/salicylic acid/sulfur/shampoo no. 1	Scalacort DK
hydrocortisone/skin cleanser combination no.25	Aqua Glycolic HC
hydrocortisone/skin cleanser combination no.35	Dermasorb HC Complete Kit
hydroquinone/tretinoin/hydrocortisone	Katarya
hydroquinone/tretinoin/hydrocortisone	Kataryaxn
hydroquinone/tretinoin/hydrocortisone	Ketarya
hydroquinone/tretinoin/hydrocortisone	Kevarya
hydroquinone/tretinoin/hydrocortisone	Kutaryaxm
hydroquinone/tretinoin/hydrocortisone	Kutaryaxmpa
hydroquinone/tretinoin/hydrocortisone	Kuvarya
hydroquinone/tretinoin/hydrocortisone	Kuvarye
imiquimod/tretinoin/levocetirizine dihydrochloride	Quihoxvar
lidocaine HCl/hydrocortisone acetate	Lidocort
lidocaine HCl/hydrocortisone acetate	lidocaine HCl-hydrocortison ac
mometasone furoate	Elocon
mometasone furoate	mometasone
mometasone furoate/ammonium lactate	Quinosone
mometasone furoate/dimethicone	Quinixil
pimecrolimus	Elidel
pimecrolimus	pimecrolimus
prednicarbate	Dermatop
prednicarbate	prednicarbate
tacrolimus	Nujo
tacrolimus	Protopic
tacrolimus	tacrolimus
tacrolimus in vehicle base no.238	Nuju
tacrolimus in vehicle base no.238	tacrolimus-vehicle base no.238
tacrolimus/hyaluronate sodium/niacinamide	Oxianujo (with hyaluronate)
tacrolimus/hyaluronate sodium/niacinamide	tacrolimus-hyaluronate-niacin
tacrolimus/niacinamide	Oxianuji
tacrolimus/niacinamide	Oxianujo
tacrolimus/niacinamide	tacrolimus-niacinamide
tazarotene	Arazlo
tazarotene	Fabior
tazarotene	Tazorac
tazarotene	tazarotene
tazarotene/niacinamide	Ethoxia
tazarotene/niacinamide	Ithoxia
tretinoin	Altreno
tretinoin	Atralin
tretinoin	Avita
tretinoin	Retin-A
tretinoin	tretinoin

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

Generic Name	Brand Name
tretinoin microspheres	Retin-A Micro
tretinoin microspheres	Retin-A Micro Pump
tretinoin microspheres	tretinoin microspheres
tretinoin/benzoyl peroxide	Twynéo
tretinoin/clindamycin phosphate/niacinamide	Tardeoxia
tretinoin/emollient base	Refissa
tretinoin/emollient base	Renova
tretinoin/emollient base	tretinoin (emollient)
tretinoin/hyaluronate sodium/niacinamide	Oxiatar
tretinoin/hyaluronate sodium/niacinamide	Oxiavarry
tretinoin/hyaluronate sodium/niacinamide	Oxiazar
tretinoin/niacinamide	Saroxia
tretinoin/niacinamide	Taroxia
tretinoin/niacinamide	Varoxia
tretinoin/spironolactone/niacinamide	Tardimaxia
tretinoin/spironolactone/niacinamide	Vardimaxia
triamcinolone acetonide	Kenalog
triamcinolone acetonide	Trianex
triamcinolone acetonide	Triderm
triamcinolone acetonide	Tritocin
triamcinolone acetonide	triamcinolone acetonide
triamcinolone acetonide/dimethicone	Ellzia Pak
triamcinolone acetonide/dimethicone/silicone, adhesive	DermaWerx SDS
triamcinolone acetonide/dimethicone/silicone, adhesive	DermacinRx SilaPak
triamcinolone acetonide/dimethicone/silicone, adhesive	NuTriaRx
triamcinolone acetonide/dimethicone/silicone, adhesive	Sure Result Tac Pak
triamcinolone acetonide/dimethicone/silicone, adhesive	Tri-Sila
triamcinolone acetonide/dimethicone/silicone, adhesive	TriHeal-80
triamcinolone acetonide/dimethicone/silicone, adhesive	TriaDime
triamcinolone acetonide/dimethicone/silicone, adhesive	TriaDime-80
triamcinolone acetonide/dimethicone/silicone, adhesive	Trivix
triamcinolone acetonide/dimethicone/silicone, adhesive	Whytederm TDPak
triamcinolone acetonide/dimethicone/silicone, adhesive	Whytederm Trilasil Pak
triamcinolone acetonide/emollient combination no.86	Dermasorb TA Complete Kit
triamcinolone acetonide/gauze bandage/silicone, adhesive	Sila III
triamcinolone acetonide/gauze bandage/silicone, adhesive	Triasil
triamcinolone acetonide/niacinamide	triamcinolone-niacinamide
triamcinolone acetonide/silicones	DermacinRx SilaZone
triamcinolone acetonide/silicones	Dermazone
triamcinolone acetonide/silicones	SilaLite Pak
triamcinolone acetonide/silicones	Silazone-II
Systemic Non-Biologic Treatments	
acitretin	Soriatane
acitretin	acitretin
acitretin/emollient combination no. 26	Soriatane CK
apremilast	Otezla
apremilast	Otezla Starter
cyclosporine	Sandimmune

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

Generic Name	Brand Name
cyclosporine	cyclosporine
cyclosporine, modified	Gengraf
cyclosporine, modified	Neoral
cyclosporine, modified	cyclosporine modified
deucravacitinib	Sotyktu
dimethyl fumarate	Tecfidera
dimethyl fumarate	dimethyl fumarate
dimethyl fumarate	dimethyl fumarate (bulk)
methotrexate	Xatmep
methotrexate sodium	Methotrexate (Anti-Rheumatic)
methotrexate sodium	Rheumatrex
methotrexate sodium	Trexall
methotrexate sodium	methotrexate sodium
Systemic Biologic Anti-TNF Treatments	
adalimumab	Humira
adalimumab	Humira Pediatric Crohns Start
adalimumab	Humira Pen
adalimumab	Humira Pen Crohns-UC-HS Start
adalimumab	Humira Pen Psor-Uveits-Adol HS
adalimumab	Humira(CF)
adalimumab	Humira(CF) Pedi Crohns Starter
adalimumab	Humira(CF) Pen
adalimumab	Humira(CF) Pen Crohns-UC-HS
adalimumab	Humira(CF) Pen Psor-Uv-Adol HS
certolizumab pegol	Cimzia
certolizumab pegol	Cimzia Powder for Reconst
certolizumab pegol	Cimzia Starter Kit
etanercept	Enbrel
etanercept	Enbrel Mini
etanercept	Enbrel SureClick
infliximab	Remicade
infliximab-abda	Renflexis
infliximab-axxq	Avsola
infliximab-dyyb	Inflectra

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
DP01	K50	CROHNS DISEASE REGIONAL ENTERITIS	DX	10	Often	4.335
DP01	K50	CROHNS DISEASE REGIONAL ENTERITIS	DX	10	Frequent	4.208
DP01	J3380	INJECTION VEDOLIZUMAB 1 MG	PX	HCPCS	Frequent	3.087
DP01	K50	CROHNS DISEASE REGIONAL ENTERITIS	DX	10	Any	2.897
DP01	J3380	INJECTION VEDOLIZUMAB 1 MG	PX	HCPCS	Any	2.53
DP01	J3380	INJECTION VEDOLIZUMAB 1 MG	PX	HCPCS	Often	2.355
DP01	C742	Gene Therapy Agents - Factor VIII Deficiency	RX	CLASS	Any	2.209
DP01	3E0436Z	INTRODUCTION NUTRITION SUBSTANCE CNTRL VEIN PERQ	PX	10	Any	2.186
DP01	J1756	INJECTION IRON SUCROSE 1 MG	PX	HCPCS	Frequent	2.186
DP01	C742	Gene Therapy Agents - Factor VIII Deficiency	RX	CLASS	Often	1.967
DP01	0DBP8ZX	EXCISION RECTUM VIA NAT OR ART OPENING ENDO DX	PX	10	Any	1.924
DP01	0BQT4ZZ	REPAIR DIAPHRAGM PERCUTANEOUS ENDOSCOPIC APPR	PX	10	Any	1.765
DP01	0DB68ZX	EXCISION STOMACH VIA NATURAL/ART OPENING ENDO DX	PX	10	Any	1.7
DP01	J1756	INJECTION IRON SUCROSE 1 MG	PX	HCPCS	Often	1.613
DP01	C505	Dermatological - Antiparasitics Other	RX	CLASS	Frequent	1.598
DP01	C742	Gene Therapy Agents - Factor VIII Deficiency	RX	CLASS	Frequent	1.543
DP01	02HK3JZ	INSERTION PACEMAKER LEAD RT VENTRICLE PERQ APPR	PX	10	Any	1.478
DP01	0JH606Z	INSERT PM DUAL CHAMB CHEST SUBQ TISS FASCIA OPEN	PX	10	Any	1.478
DP01	5A09357	ASSISTANCE RESPIRATORY VENT < 24 CONSEC HR CPAP	PX	10	Any	1.413
DP01	G1004	CLINICAL DEC SUPP MECH NDSC DEFINED MCR AUC PROG	PX	HCPCS	Frequent	1.295
DP01	0DBL8ZX	EXCISION TRANSVERSE COLON NAT/ART OPNG ENDO DX	PX	10	Any	1.23
DP01	3E013GC	INTRODUCTION OTH THERAP SUBSTANCE SUBQ TISS PERQ	PX	10	Any	1.23
DP01	J1756	INJECTION IRON SUCROSE 1 MG	PX	HCPCS	Any	1.201
DP01	02HV33Z	INSERTION INFUSION DEVC SUPERIOR VENA CAVA PERQ	PX	10	Any	1.147
DP01	45380	COLONOSCOPY W/BIOPSY SINGLE/MULTIPLE	PX	CPT	Often	1.134
DP01	0DBB8ZX	EXCISION ILEUM VIA NATURAL/ARTFICL OPEN ENDO DX	PX	10	Any	1.125
DP01	K52	OTH & UNS NONINFECTIVE GASTROENTERITIS & COLITIS	DX	10	Frequent	1.114
DP01	K63	OTHER DISEASES OF INTESTINE	DX	10	Frequent	1.076
DP01	009U3ZX	DRAINAGE SPINAL CANAL PERCUTANEOUS APPROACH DX	PX	10	Any	1.072
DP01	01NB0ZZ	RELEASE LUMBAR NERVE OPEN APPROACH	PX	10	Any	1.072
DP01	02100Z9	BYPASS COR ART 1 ARTERY LT INTERNAL MAMMARY OPEN	PX	10	Any	1.072
DP01	02H63JZ	INSERTION PACEMAKER LEAD RT ATRIUM PERQ APPR	PX	10	Any	1.072
DP01	02L73DK	OCCLUSION LT ATRIAL APPENDAGE INTRALUM DEVC PERQ	PX	10	Any	1.072
DP01	0DB78ZX	EXCISION STOMACH PYLORUS NAT/ART OPENING ENDO	PX	10	Any	1.072
DP01	0DBF8ZX	EXCISION RT LARGE INTESTINE NAT/ART OPEN ENDO DX	PX	10	Any	1.072
DP01	0SG0071	FUS LV JNT AUTO TISS SUB POST APPR POST COLM OPN	PX	10	Any	1.072
DP01	0SG00AJ	FUSION LV JOINT IF DEVC POST APPR ANT COLM OPEN	PX	10	Any	1.072
DP01	0ST20ZZ	RESECTION OF LUMBAR VERTEBRAL DISC OPEN APPROACH	PX	10	Any	1.072
DP01	4A023N8	MEASUREMENT CARDIAC SAMPLING PRESSURE BILAT	PX	10	Any	1.072
DP01	5A1221Z	PERFORMANCE OF CARDIAC OUTPUT CONTINUOUS	PX	10	Any	1.072
DP01	C146	Anticonvulsant - Iminostilbene Derivatives / Anticonvulsant Others	RX	CLASS	Frequent	1.072
DP01	45380	COLONOSCOPY W/BIOPSY SINGLE/MULTIPLE	PX	CPT	Any	1.062
DP01	K52	OTH & UNS NONINFECTIVE GASTROENTERITIS & COLITIS	DX	10	Often	1.05

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
DP01	K63	OTHER DISEASES OF INTESTINE	DX	10	Often	0.979
DP01	L40	PSORIASIS	DX	10	Any	0.955
DP01	J1745	INJECTION INFLIXIMAB EXCLUDES BIOSIMILAR 10 MG	PX	HCPCS	Often	0.943
DP01	B2111ZZ	FLUORO MULTI CORONARY ARTERIES LOW OSMOLAR	PX	10	Any	0.918
DP01	4A023N7	MEASUREMENT CARDIAC SAMPLING PRESS LT HEART	PX	10	Any	0.89
DP01	K52	OTH & UNS NONINFECTIVE GASTROENTERITIS & COLITIS	DX	10	Any	0.876
DP01	G8482	INFLUENZA IMMUNIZATION ADMIN/PREVIOUSLY	PX	HCPCS	Any	0.866
DP01	K63	OTHER DISEASES OF INTESTINE	DX	10	Any	0.844
DP01	C561	Dermatological - Local Anesthetic Gas Single Agents	RX	CLASS	Frequent	0.828
DP01	85652	SEDIMENTATION RATE RBC AUTOMATED	PX	CPT	Frequent	0.817
DP01	G0299	DIRECT SNS RN HOME HEALTH/HOSPICE SET EA 15 MIN	PX	HCPCS	Frequent	0.8
DP01	03HY32Z	INSERTION MONITOR DEVICE UPPER ARTERY PERQ APPR	PX	10	Any	0.785
DP01	S9083	GLOBAL FEE URGENT CARE CENTERS	PX	HCPCS	Any	0.736
DP01	0DBE0ZZ	EXCISION OF LARGE INTESTINE OPEN	PX	10	Any	0.72
DP01	0DJ08ZZ	INSPECTION UP INTEST TRACT NAT/ART OPENING ENDO	PX	10	Any	0.72
DP01	0DNW4ZZ	RELEASE PERITONEUM PERQ ENDOSCOPIC APPROACH	PX	10	Any	0.72
DP01	0T778DZ	DILATION LT URETER INTRALUM DEV NAT/ART OPN ENDO	PX	10	Any	0.72
DP01	D50	IRON DEFICIENCY ANEMIA	DX	10	Frequent	0.72
DP01	J1745	INJECTION INFLIXIMAB EXCLUDES BIOSIMILAR 10 MG	PX	HCPCS	Any	0.72
DP01	J2785	INJ METHYLPREDNISOLONE SODIUM SUCCNAT TO 125 MG	PX	HCPCS	Any	0.708
DP01	C221	Antihyperlipidemic - ATP-Citrate Lyase (ACLY) Inhibitor	RX	CLASS	Often	0.704
DP01	J2795	INJECTION ROPIVACAINE HYDROCHLORIDE 1 MG	PX	HCPCS	Any	0.704
DP01	C221	Antihyperlipidemic - ATP-Citrate Lyase (ACLY) Inhibitor	RX	CLASS	Any	0.667
DP01	82565	CREATININE BLOOD	PX	CPT	Frequent	0.644
DP01	85652	SEDIMENTATION RATE RBC AUTOMATED	PX	CPT	Any	0.635
		Anticonvulsant - Iminostilbene Derivatives / Anticonvulsant				
DP01	C146	Others	RX	CLASS	Often	0.635
DP01	30233N1	TRANSFUSION NONAUTO RED BLD CELLS PERIPH VN PERQ	PX	10	Any	0.633
DP01	J3475	INJECTION MAGNESIUM SULPHATE PER 500 MG	PX	HCPCS	Any	0.61
DP01	C339	Antiparkinson's Adjuvants	RX	CLASS	Frequent	0.593
DP01	C133	Anticonvulsant - Carbamates	RX	CLASS	Often	0.589
DP01	G0299	DIRECT SNS RN HOME HEALTH/HOSPICE SET EA 15 MIN	PX	HCPCS	Often	0.576
DP01	Q9966	LOCM 200-299 MG/ML IODINE CONCENTRATION PER ML	PX	HCPCS	Any	0.567
DP01	C336	Antiparkinson Therapy - Dopaminergic	RX	CLASS	Any	0.565
		Diluents - Sodium Chloride / Pharmaceutical Adjuvant -				
DP01	C672	Liquid Vehicles / Sodium Chloride Flushes	RX	CLASS	Often	0.561
DP01	M47	SPONDYLOSIS	DX	10	Frequent	0.561
DP01	J1040	INJECTION METHYLPREDNISOLONE ACETATE 80 MG	PX	HCPCS	Any	0.547
DP01	C1087	Plasma Fractions	RX	CLASS	Any	0.546
DP01	C1087	Plasma Fractions	RX	CLASS	Often	0.543
		Disease Modifying Anti-Rheumatoid Drugs (DMARD) /				
DP01	C682	Inflammatory Bowel Agent - Janus Kinase (JAK) Inhibitors	RX	CLASS	Frequent	0.539
DP01	8E0ZY6	ISOLATION	PX	10	Any	0.537
DP01	B2151ZZ	FLUOROSCOPY LEFT HEART LOW OSMOLAR CONTRAST	PX	10	Any	0.533

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
DP01	86140	C-REACTIVE PROTEIN	PX	CPT	Frequent	0.52
		Anticonvulsant - Iminostilbene Derivatives / Anticonvulsant				
DP01	C146	Others	RX	CLASS	Any	0.52
DP01	M62	OTHER DISORDERS OF MUSCLE	DX	10	Frequent	0.52
DP01	86431	RHEUMATOID FACTOR QUANTITATIVE	PX	CPT	Any	0.512
		Multivitamin and Mineral Combinations / Vitamins - Oil				
DP01	C914	Soluble	RX	CLASS	Frequent	0.511
DP01	D04_INT_UNIQ_		PX	10	Q4ServiceInt	0.508
DP01	J2920	INJ METHYLPRDNISOLONE SODIUM SUCCNAT TO 40 MG	PX	HCPCS	Frequent	0.508
DP01	A9575	INJECTION GADOTERATE MEGLUMINE 0.1 ML	PX	HCPCS	Any	0.507
DP01	C921	Musculoskeletal Therapy Agent - Viscosupplements	RX	CLASS	Frequent	0.5
DP01	C694	Diuretic - Thiazides and Related, and Combinations	RX	CLASS	Frequent	0.492
DP01	C1125	Renin-Angiotensin-Aldosterone System (RAAS) Hormones	RX	CLASS	Frequent	0.491
DP01	C133	Anticonvulsant - Carbamates	RX	CLASS	Frequent	0.484
		LHRH (GnRH) Agonist Analog Pituitary Supp. and Progestin				
DP01	C816	Comb.	RX	CLASS	Any	0.483
DP01	M19	OTHER AND UNSPECIFIED OSTEOARTHRITIS	DX	10	Frequent	0.483
		Antidepressant - Serotonin-2 Antagonist-Reuptake				
DP01	C170	Inhibitors (SARIs) / Antidepressant Combinations	RX	CLASS	Frequent	0.482
DP01	C505	Dermatological - Antiparasitics Other	RX	CLASS	Often	0.481
DP02	K50	CROHNS DISEASE REGIONAL ENTERITIS	DX	10	Often	3.316
DP02	K50	CROHNS DISEASE REGIONAL ENTERITIS	DX	10	Any	1.874
DP02	009U3ZX	DRAINAGE SPINAL CANAL PERCUTANEOUS APPROACH DX	PX	10	Any	1.808
		Diuretic - Arginine Vasopressin (AVP) Receptor Antagonists				
		/ Polycystic Kidney Disease - Vasopressin V2 Receptor				
DP02	C686	Antagonists	RX	CLASS	Frequent	1.488
DP02	C440	Chelating Agents - Others	RX	CLASS	Frequent	1.45
DP02	E0570	NEBULIZER WITH COMPRESSOR	PX	HCPCS	Frequent	1.45
DP02	E0570	NEBULIZER WITH COMPRESSOR	PX	HCPCS	Often	1.37
DP02	J3370	INJECTION VANCOMYCIN HCL 500 MG	PX	HCPCS	Frequent	1.188
DP02	Q3014	TELEHEALTH ORIGINATING SITE FACILITY FEE	PX	HCPCS	Frequent	1.188
DP02	04QK0ZZ	REPAIR RIGHT FEMORAL ARTERY OPEN APPROACH	PX	10	Any	1.115
DP02	0F798DZ	DILATION COMN BILE DUCT INT DEVC NAT/ART OP ENDO	PX	10	Any	1.115
DP02	0FC98ZZ	EXTIRPATION MATTER CMN BILE DUCT NAT/ART OP ENDO	PX	10	Any	1.115
DP02	0T768DZ	DILAT RT URETER INTRALUM DEVC NAT/ART OPEN ENDO	PX	10	Any	1.115
DP02	0W9G3ZZ	DRAINAGE PERITONEAL CAVITY PERCUTANEOUS	PX	10	Any	1.115
DP02	3E033XZ	INTRODUCTION VASOPRESSOR PERIPHERAL VEIN PERQ	PX	10	Any	1.115
DP02	5A1223Z	PERFORMANCE OF CARDIAC PACING CONTINUOUS	PX	10	Any	1.115
DP02	8E0YXBZ	COMPUTER ASSISTED PROCEDURE OF LOWER EXTREMITY	PX	10	Any	1.115
DP02	B246ZZZ	ULTRASONOGRAPHY OF RIGHT AND LEFT HEART	PX	10	Any	1.115
DP02	B41F1ZZ	FLUORO RT LOWER EXTREM ART LOW OSMOLAR CONTRST	PX	10	Any	1.115
DP02	BF101ZZ	FLUOROSCOPY BILE DUCTS LOW OSMOLAR CONTRAST	PX	10	Any	1.115
DP02	GZHZZZZ	GROUP PSYCHOTHERAPY	PX	10	Any	1.115
DP02	K0553	SUPPLY ALLOW FOR TX CGM1 MO SPL = 1 U OF SERVICE	PX	HCPCS	Often	1.083

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
DP02	C440	Chelating Agents - Others	RX	CLASS	Often	1.006
DP02	G0103	PROSTATE CANCER SCREENING; PSA TEST	PX	HCPCS	Any	1.002
DP02	96361	IV INFUSION HYDRATION EACH ADDITIONAL HOUR	PX	CPT	Frequent	0.996
DP02	30233N1	TRANSFUSION NONAUTO RED BLD CELLS PERIPH VN PERQ	PX	10	Any	0.965
DP02	E1392	PORTABLE OXYGEN CONCENTRATOR RENTAL	PX	HCPCS	Often	0.965
DP02	G0279	DIAGNOSTIC DIGITAL BREAST TOMOSYNTHESIS UNI/BIL	PX	HCPCS	Often	0.965
DP02	88312	SPECIAL STAIN GROUP 1 MICROORGANISMS I&R	PX	CPT	Frequent	0.922
DP02	E0570	NEBULIZER WITH COMPRESSOR	PX	HCPCS	Any	0.914
DP02	85652	SEDIMENTATION RATE RBC AUTOMATED	PX	CPT	Frequent	0.889
DP02	K59	OTHER FUNCTIONAL INTESTINAL DISORDERS	DX	10	Frequent	0.887
DP02	96365	IV INFUSION THERAPY/PROPHYLAXIS /DX 1ST TO 1 HR	PX	CPT	Frequent	0.878
DP02	J1200	INJECTION DIPHENHYDRAMINE HCL UP TO 50 MG	PX	HCPCS	Frequent	0.863
DP02	C396	B-Complex Vitamins and Combinations	RX	CLASS	Frequent	0.852
DP02	L40	PSORIASIS	DX	10	Any	0.844
DP02	99233	SBSQ HOSPITAL IP/OBS CARE HIGH MDM 50 MINUTES	PX	CPT	Frequent	0.831
DP02	G0299	DIRECT SNS RN HOME HEALTH/HOSPICE SET EA 15 MIN	PX	HCPCS	Frequent	0.831
DP02	C460	Contraceptives Intrauterine Device - IUD	RX	CLASS	Any	0.814
DP02	C216	Antifungal other / Pharmaceutical Adjuvant - Preservatives	RX	CLASS	Frequent	0.795
DP02	M06	OTHER RHEUMATOID ARTHRITIS	DX	10	Often	0.787
DP02	G0152	SERVICE OCCUP THERAP HOME HLTH/HOSPICE EA 15 MIN	PX	HCPCS	Frequent	0.778
DP02	G0481	DRUG TEST DEFINITV DR ID METH P DAY 8-14 DRUG CL	PX	HCPCS	Frequent	0.778
DP02	R21	RASH AND OTHER NONSPECIFIC SKIN ERUPTION	DX	10	Frequent	0.757
DP02	K0553	SUPPLY ALLOW FOR TX CGM1 MO SPL = 1 U OF SERVICE	PX	HCPCS	Any	0.738
DP02	86140	C-REACTIVE PROTEIN	PX	CPT	Frequent	0.732
DP02	C407	Bipolar Therapy Agents - Lithium	RX	CLASS	Frequent	0.731
DP02	S0621	ROUTINE OPTH EXAM INCL REFRACTION; EST PT	PX	HCPCS	Any	0.727
DP02	M06	OTHER RHEUMATOID ARTHRITIS	DX	10	Frequent	0.725
DP02	C1894	INTRUDCR/SHEATH NOT GUID INTRACARD EP NON-LASR	PX	HCPCS	Any	0.718
DP02	G0180	PHYS/ALLOWED PRAC CERT MCR-COV HHS UNDER HH POC	PX	HCPCS	Any	0.718
DP02	XW033E5	INTROD REMDESIVIR IN PERIPH VEIN PERC NEW TECH 5	PX	10	Any	0.709
DP02	J2785	INJ METHYLPRDNISOLONE SODIUM SUCCNAT TO 125 MG	PX	HCPCS	Any	0.705
DP02	V2200	SPHERE BIFOCL PLANO TO PLUS/MINUS 4.00D PER LENS	PX	HCPCS	Any	0.701
DP02	M06	OTHER RHEUMATOID ARTHRITIS	DX	10	Any	0.7
DP02	C490	Dermatological - Antibacterials	RX	CLASS	Often	0.684
DP02	4A023N7	MEASUREMENT CARDIAC SAMPLING PRESS LT HEART	PX	10	Any	0.677
DP02	V2100	SPHERE SINGLE VISION PLANO +/- 4.00 PER LENS	PX	HCPCS	Any	0.677
DP02	G2023	SPEC CLCT FOR SARS-COV-2 COVID-19 ANY SPEC SRC	PX	HCPCS	Any	0.668
DP02	C921	Musculoskeletal Therapy Agent - Viscosupplements	RX	CLASS	Frequent	0.645
DP02	C1010	Ophthalmic Anti-infective Combinations	RX	CLASS	Frequent	0.635
DP02	B35	DERMATOPHYTOSIS	DX	10	Any	0.633
DP02	Z90	ACQUIRED ABSENCE OF ORGANS NEC	DX	10	Often	0.627
DP02	G0151	SERVICE PHYS THERAP HOME HLTH/HOSPICE EA 15 MIN	PX	HCPCS	Frequent	0.622
DP02	J7050	INFUSION NORMAL SALINE SOLUTION 250 CC	PX	HCPCS	Frequent	0.62
DP02	K0553	SUPPLY ALLOW FOR TX CGM1 MO SPL = 1 U OF SERVICE	PX	HCPCS	Frequent	0.62

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
DP02	G0482	DRUG TEST DEFINITV DR ID METH P DAY 15-21 DR CL	PX	HCPCS	Any	0.608
DP02	C348	Antipsychotic - Dopamine-Serotonin Antagonists	RX	CLASS	Any	0.604
DP02	HZ2ZZZZ	DETOXIFICATION SERVICES SUBSTANCE ABUSE TREATMNT	PX	10	Any	0.604
DP02	M48	OTHER SPONDYLOPATHIES	DX	10	Frequent	0.604
DP02	C194	Antidote - Cholinesterase Reactivating Agent and Muscarinic Antagonist	RX	CLASS	Frequent	0.576
DP02	J1885	INJECTION KETOROLAC TROMETHAMINE PER 15 MG	PX	HCPCS	Frequent	0.576
DP02	Q9966	LOCM 200-299 MG/ML IODINE CONCENTRATION PER ML	PX	HCPCS	Any	0.576
DP02	C490	Dermatological - Antibacterials	RX	CLASS	Frequent	0.569
DP02	G0299	DIRECT SNS RN HOME HEALTH/HOSPICE SET EA 15 MIN	PX	HCPCS	Often	0.567
DP02	C481	Dental Product - Rinses	RX	CLASS	Any	0.559
DP02	G0467	FEDERALLY QUALIFIED HEALTH CENTER VISIT ESTAB PT	PX	HCPCS	Frequent	0.559
DP02	G0483	DRUG TST DEFINITV DR ID METH P DAY 22/MORE DR CL	PX	HCPCS	Frequent	0.559
DP02	J1644	INJECTION HEPARIN SODIUM PER 1000 UNITS	PX	HCPCS	Any	0.559
DP02	E1390	O2 CONC 1 DEL PORT 85%/>O2 CONC AT PRSC FLW RATE	PX	HCPCS	Often	0.555
DP02	C694	Diuretic - Thiazides and Related, and Combinations	RX	CLASS	Frequent	0.544
DP02	E1392	PORTABLE OXYGEN CONCENTRATOR RENTAL	PX	HCPCS	Any	0.544
DP02	C1105	Pleuromutilin Antibiotics	RX	CLASS	Often	0.536
DP02	C862	Minerals and Electrolytes - Hydrochloric Acid	RX	CLASS	Often	0.525
DP02	M85	OTHER DISORDERS OF BONE DENSITY AND STRUCTURE	DX	10	Frequent	0.522
DP02	A7031	FACE MASK INTERFACE REPLCMT FULL FACE MASK EA	PX	HCPCS	Often	0.52
DP02	Z20	CONTACT W/ AND EXPOSURE TO COMMUNICABLE	DX	10	Frequent	0.517
DP02	L57	SKIN CHANGES D/T CHRON EXPOS TO NONIONIZING RAD	DX	10	Frequent	0.509
DP02	A0427	AMB SERVICE ALS EMERGENCY TRANSPORT LEVEL 1	PX	HCPCS	Any	0.507
DP02	C1178	Vaginal Antibacterials	RX	CLASS	Any	0.501
DP02	G0152	SERVICE OCCUP THERAP HOME HLTH/HOSPICE EA 15 MIN	PX	HCPCS	Any	0.501
DP02	C536	Dermatological - Emollients / Dermatological - Keratolytic-Antimitotic Single Agents	RX	CLASS	Frequent	0.498
DP02	A7037	TUBING USED WITH POSITIVE AIRWAY PRESSURE DEVICE	PX	HCPCS	Frequent	0.495
DP02	B35	DERMATOPHYTOSIS	DX	10	Frequent	0.495
DP02	C1104	Platelet Aggregation Inhibitors - Thienopyridine Agents	RX	CLASS	Any	0.495
DP02	C1769	GUIDE WIRE	PX	HCPCS	Any	0.495
DP02	C339	Antiparkinson's Adjuvants	RX	CLASS	Frequent	0.495
DP02	C862	Minerals and Electrolytes - Hydrochloric Acid	RX	CLASS	Frequent	0.495
DP02	J1650	INJECTION ENOXAPARIN SODIUM 10 MG	PX	HCPCS	Frequent	0.495
DP02	J44	OTHER CHRONIC OBSTRUCTIVE PULMONARY DISEASE	DX	10	Frequent	0.495
DP03	K50	CROHNS DISEASE REGIONAL ENTERITIS	DX	10	Frequent	4.686
DP03	K50	CROHNS DISEASE REGIONAL ENTERITIS	DX	10	Often	4.09
DP03	K50	CROHNS DISEASE REGIONAL ENTERITIS	DX	10	Any	2.633
DP03	C742	Gene Therapy Agents - Factor VIII Deficiency	RX	CLASS	Frequent	2.568
DP03	C742	Gene Therapy Agents - Factor VIII Deficiency	RX	CLASS	Any	2.514
DP03	C742	Gene Therapy Agents - Factor VIII Deficiency	RX	CLASS	Often	2.514
DP03	3E0T3BZ	INTRODUCTION ANESTH AGT PERIPHERAL NRV&PLEXI PC	PX	10	Any	2.168

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
		Diluents - Sodium Chloride with Phenol / Minerals and Electrolytes - Sodium Chloride / Sodium Chloride, Parenteral	RX	CLASS	Frequent	1.986
DP03	C674		RX	CLASS	Frequent	1.986
DP03	G9744	PATIENT NOT ELIGIBLE D/T ACTIVE DX HYPERTENSION	PX	HCPCS	Frequent	1.763
DP03	J1602	INJECTION GOLIMUMAB 1 MG FOR INTRAVENOUS USE	PX	HCPCS	Often	1.629
DP03	A7036	CHINSTRAP USED W/POSITIVE AIRWAY PRESSURE DEVICE	PX	HCPCS	Any	1.6
DP03	10E0XZZ	DELIVERY PRODUCTS OF CONCEPTION EXTERNAL	PX	10	Any	1.475
DP03	J1602	INJECTION GOLIMUMAB 1 MG FOR INTRAVENOUS USE	PX	HCPCS	Frequent	1.475
DP03	M06	OTHER RHEUMATOID ARTHRITIS	DX	10	Frequent	1.455
DP03	C133	Anticonvulsant - Carbamates	RX	CLASS	Frequent	1.426
DP03	M06	OTHER RHEUMATOID ARTHRITIS	DX	10	Often	1.268
DP03	C133	Anticonvulsant - Carbamates	RX	CLASS	Often	1.264
DP03	M06	OTHER RHEUMATOID ARTHRITIS	DX	10	Any	1.26
DP03	ODJ08ZZ	INSPECTION UP INTEST TRACT NAT/ART OPENING ENDO	PX	10	Any	1.233
		Diluents - Sodium Chloride with Phenol / Minerals and Electrolytes - Sodium Chloride / Sodium Chloride, Parenteral	RX	CLASS	Any	1.231
DP03	C674		RX	CLASS	Any	1.231
DP03	S9123	NURSING CARE THE HOME; REGISTERED NURSE PER HOUR	PX	HCPCS	Frequent	1.224
DP03	J1602	INJECTION GOLIMUMAB 1 MG FOR INTRAVENOUS USE	PX	HCPCS	Any	1.203
		Diluents - Sodium Chloride with Phenol / Minerals and Electrolytes - Sodium Chloride / Sodium Chloride, Parenteral	RX	CLASS	Often	1.144
DP03	C674		RX	CLASS	Often	1.144
DP03	C335	Antiparkinson Therapy - Anticholinergic Agents	RX	CLASS	Any	1.126
DP03	OSRD0J9	REPLACE LT KNEE JOINT SYNTH SUBST CEMENTED OPEN	PX	10	Any	1.07
DP03	10907ZC	DRAINAGE AMNIOTIC FLUID THERAPEUT POC NAT/ART OP	PX	10	Any	1.07
DP03	3E0T3BZ	INTRODUCTION ANESTH AGT PERIPHERAL NRV&PLEXI PC	PX	10	Frequent	1.07
		ULTRASONOGRAPHY HEART WITH AORTA				
DP03	B24BZZ4	TRANSESOPHAGEAL	PX	10	Any	1.07
DP03	B548ZZA	ULTRASONOGRAPHY OF SUPERIOR VENA CAVA GUIDANCE	PX	10	Often	1.07
		Anticonvulsant - Iminostilbene Derivatives / Anticonvulsant Others	RX	CLASS	Frequent	1.07
DP03	C146		RX	CLASS	Frequent	1.07
DP03	C335	Antiparkinson Therapy - Anticholinergic Agents	RX	CLASS	Frequent	1.07
DP03	G8541	FCN OUTCOME ASMT STD TOOL NOT DOC RSN NOT GIVEN	PX	HCPCS	Frequent	1.07
DP03	GZHZZZ	GROUP PSYCHOTHERAPY	PX	10	Any	1.07
DP03	85652	SEDIMENTATION RATE RBC AUTOMATED	PX	CPT	Frequent	1.065
DP03	C335	Antiparkinson Therapy - Anticholinergic Agents	RX	CLASS	Often	1.044
DP03	0DBB0ZZ	EXCISION OF ILEUM OPEN APPROACH	PX	10	Any	1.01
DP03	0DBN8ZX	EXCISION SIGMOID COLON NAT/ART OPEN ENDO DX	PX	10	Any	1.01
DP03	30233N1	TRANSFUSION NONAUTO RED BLD CELLS PERIPH VN PERQ	PX	10	Any	1.01
		Acne Therapy Topical / Dermatological - Rosacea Therapy, Topical	RX	CLASS	Frequent	1.01
DP03	C9		RX	CLASS	Frequent	1.01
DP03	XW033E5	INTROD REMDESIVIR IN PERIPH VEIN PERC NEW TECH 5	PX	10	Any	1.01
DP03	K52	OTH & UNS NONINFECTIVE GASTROENTERITIS & COLITIS	DX	10	Frequent	0.989
DP03	K63	OTHER DISEASES OF INTESTINE	DX	10	Frequent	0.977

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
DP03	J3490	UNCLASSIFIED DRUGS	PX	HCPCS	Frequent	0.887
DP03	M47	SPONDYLOSIS	DX	10	Frequent	0.883
DP03	M19	OTHER AND UNSPECIFIED OSTEOARTHRITIS	DX	10	Often	0.875
DP03	A9500	TECHNETIUM TC-99M SESTAMIBI DX PER STUDY DOSE	PX	HCPCS	Any	0.869
DP03	C133	Anticonvulsant - Carbamates	RX	CLASS	Any	0.857
DP03	L40	PSORIASIS	DX	10	Any	0.831
DP03	E0562	HUMDIFIR HEATED USED W/POS ARWAY PRESSURE	PX	HCPCS	Frequent	0.828
DP03	J2930	INJ METHYLPRDNISOLONE SODIUM SUCCNAT TO 125 MG	PX	HCPCS	Any	0.828
DP03	G0480	DRUG TEST DEFINITV DR ID METH P DAY 1-7 DRUG CL	PX	HCPCS	Any	0.818
DP03	86140	C-REACTIVE PROTEIN	PX	CPT	Frequent	0.817
DP03	C146	Anticonvulsant - Iminostilbene Derivatives / Anticonvulsant Others	RX	CLASS	Any	0.813
DP03	C672	Diluents - Sodium Chloride / Pharmaceutical Adjuvant - Liquid Vehicles / Sodium Chloride Flushes	RX	CLASS	Often	0.791
DP03	8E0W4CZ	ROBOTIC ASSISTED PROC TRUNK REGION PERQ ENDO	PX	10	Any	0.782
DP03	G9744	PATIENT NOT ELIGIBLE D/T ACTIVE DX HYPERTENSION	PX	HCPCS	Any	0.782
DP03	G9902	PATIENT SCR TOBACCO USE & ID AS TOBACCO USER	PX	HCPCS	Frequent	0.782
DP03	S9123	NURSING CARE THE HOME; REGISTERED NURSE PER HOUR	PX	HCPCS	Often	0.782
DP03	K63	OTHER DISEASES OF INTESTINE	DX	10	Often	0.776
DP03	C146	Anticonvulsant - Iminostilbene Derivatives / Anticonvulsant Others	RX	CLASS	Often	0.771
DP03	A7039	FILTER NON DISPBL USED W/POS ARWAY PRESS DEVICE	PX	HCPCS	Any	0.77
DP03	C914	Multivitamin and Mineral Combinations / Vitamins - Oil Soluble	RX	CLASS	Frequent	0.769
DP03	85652	SEDIMENTATION RATE RBC AUTOMATED	PX	CPT	Any	0.756
DP03	A7032	CUSHN NASAL MASK INTERFACE REPLACEMENT ONLY	PX	HCPCS	Any	0.738
DP03	C1132	Salicylate Analgesic and Salicylate Combinations	RX	CLASS	Frequent	0.727
DP03	0DBN8ZX	EXCISION SIGMOID COLON NAT/ART OPEN ENDO DX	PX	10	Often	0.722
DP03	8E0ZXY6	ISOLATION	PX	10	Any	0.722
DP03	D04_INT_UNIQ_		PX	10	Q4ServiceInt	0.722
DP03	HZ2ZZZZ	DETOXIFICATION SERVICES SUBSTANCE ABUSE TREATMNT	PX	10	Often	0.722
DP03	K52	OTH & UNS NONINFECTIVE GASTROENTERITIS & COLITIS	DX	10	Any	0.716
DP03	C862	Minerals and Electrolytes - Hydrochloric Acid	RX	CLASS	Frequent	0.713
DP03	G0483	DRUG TST DEFINITV DR ID METH P DAY 22/MORE DR CL	PX	HCPCS	Frequent	0.695
DP03	R76	OTHER ABNORMAL IMMUNOLOGICAL FINDINGS IN SERUM	DX	10	Frequent	0.693
DP03	C672	Diluents - Sodium Chloride / Pharmaceutical Adjuvant - Liquid Vehicles / Sodium Chloride Flushes	RX	CLASS	Any	0.684
DP03	D04_INT_ALL_Q		PX	10	Q4ServiceInt	0.673
DP03	I25	CHRONIC ISCHEMIC HEART DISEASE	DX	10	Frequent	0.672
DP03	M19	OTHER AND UNSPECIFIED OSTEOARTHRITIS	DX	10	Any	0.671
DP03	86140	C-REACTIVE PROTEIN	PX	CPT	Any	0.666
DP03	A0428	AMBULANCE SERVICE BLS NONEMERGENCY TRANSPORT	PX	HCPCS	Any	0.665
DP03	G0442	ANNUAL ALCOHOL MISUSE SCREENING 5 TO 15 MINUTES	PX	HCPCS	Any	0.664
DP03	J1030	INJECTION METHYLPREDNISOLONE ACETATE 40 MG	PX	HCPCS	Any	0.664

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
		Antidepressant - Serotonin-2 Antagonist-Reuptake				
DP03	C170	Inhibitors (SARIs) / Antidepressant Combinations	RX	CLASS	Frequent	0.656
DP03	K52	OTH & UNS NONINFECTIVE GASTROENTERITIS & COLITIS	DX	10	Often	0.653
DP03	C505	Dermatological - Antiparasitics Other	RX	CLASS	Frequent	0.643
DP03	C58	Analgesic - Opioid Agonists and Combinations	RX	CLASS	Frequent	0.643
		Diluents - Sodium Chloride / Pharmaceutical Adjuvant -				
DP03	C672	Liquid Vehicles / Sodium Chloride Flushes	RX	CLASS	Frequent	0.643
DP03	K63	OTHER DISEASES OF INTESTINE	DX	10	Any	0.64
		Multivitamin and Mineral Combinations / Vitamins - Oil				
DP03	C914	Soluble	RX	CLASS	Often	0.636
DP03	K0553	SUPPLY ALLOW FOR TX CGM1 MO SPL = 1 U OF SERVICE	PX	HCPCS	Often	0.635
DP03	M17	OSTEOARTHRITIS OF KNEE	DX	10	Frequent	0.628
DP03	G0008	ADMINISTRATION OF INFLUENZA VIRUS VACCINE	PX	HCPCS	Any	0.627
DP03	E0562	HUMIDIFIR HEATED USED W/POS ARWAY PRESSURE	PX	HCPCS	Any	0.611
DP03	M79	OTHER SOFT TISSUE DISORDERS NEC	DX	10	Frequent	0.61
DP03	J3357	USTEKINUMAB FOR SUBCUTANEOUS INJECTION 1 MG	PX	HCPCS	Often	0.604
DP03	C148	Anticonvulsant - Monosaccharide Derivatives	RX	CLASS	Often	0.6
DP03	G9637	FINAL REPORT W/DOC 1/MORE DOSE REDUCTION TECH	PX	HCPCS	Any	0.6
DP03	J2920	INJ METHYLPRDNISOLONE SODIUM SUCCNAT TO 40 MG	PX	HCPCS	Frequent	0.6
DP03	G8420	BMI DOC W/I NORMAL PARAM & NO F/U PLAN REQUIRED	PX	HCPCS	Frequent	0.577
DP03	J2920	INJ METHYLPRDNISOLONE SODIUM SUCCNAT TO 40 MG	PX	HCPCS	Any	0.577
DP03	G0482	DRUG TEST DEFINITV DR ID METH P DAY 15-21 DR CL	PX	HCPCS	Any	0.567
DP04	85025	BLOOD COUNT COMPLETE AUTO&AUTO DIFRNTL WBC	PX	CPT	Frequent	2.218
DP04	85025	BLOOD COUNT COMPLETE AUTO&AUTO DIFRNTL WBC	PX	CPT	Often	2.218
DP04	99214	OFFICE/OUTPATIENT ESTABLISHED MOD MDM 30 MIN	PX	CPT	Frequent	2.064
DP04	99214	OFFICE/OUTPATIENT ESTABLISHED MOD MDM 30 MIN	PX	CPT	Often	1.813
DP04	80053	COMPREHENSIVE METABOLIC PANEL	PX	CPT	Any	1.776
DP04	80053	COMPREHENSIVE METABOLIC PANEL	PX	CPT	Often	1.739
DP04	85025	BLOOD COUNT COMPLETE AUTO&AUTO DIFRNTL WBC	PX	CPT	Any	1.659
DP04	A7032	CUSHN NASAL MASK INTERFACE REPLACEMENT ONLY	PX	HCPCS	Frequent	1.519
DP04	99214	OFFICE/OUTPATIENT ESTABLISHED MOD MDM 30 MIN	PX	CPT	Any	1.476
DP04	D01_INT_UNIQ_		DX	09	Q1ServiceInt	1.337
DP04	99213	OFFICE/OUTPATIENT ESTABLISHED LOW MDM 20 MIN	PX	CPT	Often	1.284
DP04	99213	OFFICE/OUTPATIENT ESTABLISHED LOW MDM 20 MIN	PX	CPT	Any	1.237
DP04	3078F	Most recent diastolic blood pressure < 80 mm Hg	PX	CPT	Often	1.12
DP04	02HV33Z	INSERTION INFUSION DEVC SUPERIOR VENA CAVA PERQ	PX	10	Any	1.114
DP04	90837	PSYCHOTHERAPY W/PATIENT 60 MINUTES	PX	CPT	Frequent	1.114
DP04	C854	Minerals and Electrolytes - Calcium and Combinations	RX	CLASS	Frequent	1.114
DP04	D2392	RESIN-BASED COMPOSITE - TWO SURFACES POSTERIOR	PX	HCPCS	Frequent	1.114
DP04	E1165	TYPE 2 DIABETES MELLITUS WITH HYPERGLYCEMIA	DX	10	Any	1.114
DP04	T1016	CASE MANAGEMENT EACH 15 MINS	PX	HCPCS	Often	1.114
		Antihyperlipidemic - Angiopoietin-like 3 (ANGPTL3)				
DP04	C222	Inhibitor, MAb	RX	CLASS	Frequent	1.061
DP04	E87	OTH D/O OF FLUID ELECTROLYTE & ACID-BASE BALANCE	DX	10	Often	1.053

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
DP04	E87	OTH D/O OF FLUID ELECTROLYTE & ACID-BASE BALANCE	DX	10	Frequent	1.026
DP04	C854	Minerals and Electrolytes - Calcium and Combinations	RX	CLASS	Often	1.015
DP04	A4253	BLD GLU TEST/REAGT STRIPS HOME BLD GLU MON-50	PX	HCPCS	Frequent	0.966
DP04	G0483	DRUG TST DEFINITV DR ID METH P DAY 22/MORE DR CL	PX	HCPCS	Frequent	0.966
DP04	S9083	GLOBAL FEE URGENT CARE CENTERS	PX	HCPCS	Frequent	0.966
DP04	C812	Ketolide Antibiotics	RX	CLASS	Frequent	0.906
DP04	J1170	INJECTION HYDROMORPHONE UP TO 4 MG	PX	HCPCS	Any	0.906
DP04	C339	Antiparkinson's Adjuvants	RX	CLASS	Frequent	0.891
DP04	J7050	INFUSION NORMAL SALINE SOLUTION 250 CC	PX	HCPCS	Any	0.891
DP04	T1016	CASE MANAGEMENT EACH 15 MINS	PX	HCPCS	Any	0.88
DP04	E0562	HUMIDIFIR HEATED USED W/POS ARWAY PRESSURE	PX	HCPCS	Frequent	0.832
DP04	ODB64Z3	EXCISION STOMACH PERQ ENDO APPROACH VERTICAL	PX	10	Any	0.826
DP04	D05_INT_UNIQ_		PX	10	Q2ServiceInt	0.826
DP04	G0480	DRUG TEST DEFINITV DR ID METH P DAY 1-7 DRUG CL	PX	HCPCS	Frequent	0.826
DP04	S5125	ATTENDANT CARE SERVICES; PER 15 MINUTES	PX	HCPCS	Any	0.826
DP04	S5125	ATTENDANT CARE SERVICES; PER 15 MINUTES	PX	HCPCS	Often	0.826
DP04	Q3014	TELEHEALTH ORIGINATING SITE FACILITY FEE	PX	HCPCS	Often	0.811
DP04	99213	OFFICE/OUTPATIENT ESTABLISHED LOW MDM 20 MIN	PX	CPT	Frequent	0.783
DP04	82947	GLUCOSE QUANTITATIVE BLOOD XCPT REAGENT STRIP	PX	CPT	Frequent	0.777
DP04	M47	SPONDYLOSIS	DX	10	Frequent	0.777
DP04	A4604	TUBING W/INTGR HEAT ELEM W/POS AIRWAY PRESS DEVC	PX	HCPCS	Any	0.769
DP04	L70	ACNE	DX	10	Frequent	0.769
DP04	C1155	Thrombolytic - Plasminogen Activators (Fibrin-Nonspecific)	RX	CLASS	Often	0.742
DP04	C6	Acne Therapy Topical	RX	CLASS	Frequent	0.726
DP04	G0483	DRUG TST DEFINITV DR ID METH P DAY 22/MORE DR CL	PX	HCPCS	Any	0.724
DP04	G8754	MOST RECENT DIASTOLIC BLOOD PRESSURE < 90MM HG	PX	HCPCS	Any	0.724
DP04	D05_INT_ALL_Q		PX	10	Q4ServiceInt	0.708
DP04	D2393	RESIN-BASED COMPOSITE - THREE SURFACES POSTERIOR	PX	HCPCS	Any	0.708
DP04	R68	OTHER GENERAL SYMPTOMS AND SIGNS	DX	10	Frequent	0.708
DP04	H0031	MENTAL HEALTH ASSESSMENT BY NON-PHYSICIAN	PX	HCPCS	Any	0.683
DP04	3078F	Most recent diastolic blood pressure < 80 mm Hg	PX	CPT	Frequent	0.678
DP04	A0120	NONEMERG TRNSPRT: MINI-BUS MTN AREA/OTH SYS	PX	HCPCS	Frequent	0.678
DP04	ATP14	Automated Test Panel, 14 Tests	PX	HCPCS	Frequent	0.678
DP04	C1122	Quinolone Antibiotics	RX	CLASS	Frequent	0.678
DP04	C169	Antidepressant - Serotonin-2 Antagonist-Reuptake Inhibitors (SARIs)	RX	CLASS	Frequent	0.672
DP04	C839	Metabolic Modifier - Urea Cycle Disorder Agents-Conjugating agents	RX	CLASS	Frequent	0.672
DP04	J2001	INJECTION LIDOCAINE HCL INTRAVENOUS INFUS 10 MG	PX	HCPCS	Any	0.672
DP04	C330	Antineoplastic-Alkylating Agent-Tetrahydroisoquinoline and Derivatives	RX	CLASS	Frequent	0.644
DP04	C862	Minerals and Electrolytes - Hydrochloric Acid	RX	CLASS	Frequent	0.644
DP04	S0215	NON-EMERGENCY TRANSPORTATION; PER MILE	PX	HCPCS	Often	0.644
DP04	C133	Anticonvulsant - Carbamates	RX	CLASS	Often	0.64
DP04	C258	Antineoplastic - Antibody-Drug Conjugates (ADCs)	RX	CLASS	Frequent	0.64

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
DP04	3078F	Most recent diastolic blood pressure < 80 mm Hg	PX	CPT	Any	0.629
DP04	R76	OTHER ABNORMAL IMMUNOLOGICAL FINDINGS IN SERUM Antihyperlipidemic - Angiopoietin-like 3 (ANGPTL3)	DX	10	Frequent	0.629
DP04	C222	Inhibitor, MAb	RX	CLASS	Often	0.621
DP04	A0100	NONEMERGENCY TRANSPORTATION; TAXI	PX	HCPCS	Frequent	0.615
DP04	B37	CANDIDIASIS	DX	10	Frequent	0.609
DP04	L70	ACNE	DX	10	Any	0.608
DP04	E03	OTHER HYPOTHYROIDISM	DX	10	Frequent	0.603
DP04	93010	ECG ROUTINE ECG W/LEAST 12 LDS I&R ONLY	PX	CPT	Frequent	0.594
DP04	90837	PSYCHOTHERAPY W/PATIENT 60 MINUTES	PX	CPT	Often	0.593
DP04	C764	Hematologic Agent In Vitro - Red Cell Preservation Agents	RX	CLASS	Frequent	0.591
DP04	J30	VASOMOTOR AND ALLERGIC RHINITIS	DX	10	Frequent	0.591
DP04	99232	SBSQ HOSPITAL IP/OBS CARE MOD MDM 35 MINUTES	PX	CPT	Frequent	0.583
DP04	97140	MANUAL THERAPY TQS 1/> REGIONS EACH 15 MINUTES	PX	CPT	Frequent	0.575
DP04	A0090	NONEMERG TRNSPRT-MILE-VEH PROV IND W/VESTED INT	PX	HCPCS	Frequent	0.575
DP04	D05_INT_UNIQ_		PX	10	Q4ServiceInt	0.575
DP04	J1030	INJECTION METHYLPREDNISOLONE ACETATE 40 MG	PX	HCPCS	Frequent	0.575
DP04	J7050	INFUSION NORMAL SALINE SOLUTION 250 CC	PX	HCPCS	Frequent	0.575
DP04	C1122	Quinolone Antibiotics	RX	CLASS	Often	0.56
DP04	C1155	Thrombolytic - Plasminogen Activators (Fibrin-Nonspecific)	RX	CLASS	Any	0.56
DP04	D05_INT_UNIQ_		PX	10	Q1ServiceInt	0.56
DP04	M99	BIOMECHANICAL LESIONS NOT ELSEWHERE CLASSIFIED	DX	10	Often	0.56
DP04	T2003	NON-EMERGENCY TRANSPORTATION; ENCOUNTER/TRIP	PX	HCPCS	Frequent	0.56
DP04	Z98	OTHER POSTPROCEDURAL STATES	DX	10	Frequent	0.554
DP04	86140	C-REACTIVE PROTEIN Antihyperlipidemic - Angiopoietin-like 3 (ANGPTL3)	PX	CPT	Frequent	0.55
DP04	C222	Inhibitor, MAb	RX	CLASS	Any	0.549
DP04	C812	Ketolide Antibiotics	RX	CLASS	Any	0.544
DP04	A0090	NONEMERG TRNSPRT-MILE-VEH PROV IND W/VESTED INT	PX	HCPCS	Often	0.539
DP04	D2392	RESIN-BASED COMPOSITE - TWO SURFACES POSTERIOR	PX	HCPCS	Any	0.539
DP04	G8427	ELIG CLIN ATTSTS DOC M REC OBTD UPD/REV PT MEDS	PX	HCPCS	Frequent	0.535
DP04	83735	ASSAY OF MAGNESIUM	PX	CPT	Frequent	0.524
DP04	E55	VITAMIN D DEFICIENCY	DX	10	Frequent	0.524
DP04	H0020	ALCOHL &OR RX SRVC; METHADONE ADMIN &OR SERVICE	PX	HCPCS	Often	0.524
DP04	J3490	UNCLASSIFIED DRUGS	PX	HCPCS	Frequent	0.524
DP04	R79	OTHER ABNORMAL FINDINGS OF BLOOD CHEMISTRY	DX	10	Frequent	0.524
DP04	87389	IAAD IA HIV-1 AG W/HIV-1 & HIV-2 ANTBDY SINGLE Metabolic Modifier - Urea Cycle Disorder Agents-	PX	CPT	Any	0.523
DP04	C839	Conjugating agents	RX	CLASS	Often	0.523
DP04	81025	URINE PREGNANCY TEST VISUAL COLOR CMPSRN METHS	PX	CPT	Frequent	0.516
DP05	K50	CROHNS DISEASE REGIONAL ENTERITIS	DX	10	Frequent	4.392
DP05	K50	CROHNS DISEASE REGIONAL ENTERITIS	DX	10	Often	3.833
DP05	K50	CROHNS DISEASE REGIONAL ENTERITIS	DX	10	Any	3.252

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
DP05	C505	Dermatological - Antiparasitics Other	RX	CLASS	Frequent	2.519
DP05	02HV33Z	INSERTION INFUSION DEVC SUPERIOR VENA CAVA PERQ	PX	10	Any	2.223
DP05	0BQT4ZZ	REPAIR DIAPHRAGM PERCUTANEOUS ENDOSCOPIC APPR	PX	10	Any	2.159
DP05	0DJ08ZZ	INSPECTION UP INTEST TRACT NAT/ART OPENING ENDO	PX	10	Any	1.936
DP05	B2111ZZ	FLUORO MULTI CORONARY ARTERIES LOW OSMOLAR	PX	10	Any	1.648
DP05	K63	OTHER DISEASES OF INTESTINE	DX	10	Frequent	1.477
DP05	J7050	INFUSION NORMAL SALINE SOLUTION 250 CC	PX	HCPCS	Frequent	1.348
DP05	0DB64Z3	EXCISION STOMACH PERQ ENDO APPROACH VERTICAL	PX	10	Any	1.242
DP05	4A023N7	MEASUREMENT CARDIAC SAMPLING PRESS LT HEART	PX	10	Any	1.242
DP05	4A11X4G	MONITOR PERIPH NERVOUS ELECTRIC ACT INTRAOP EXT	PX	10	Any	1.242
DP05	5A09357	ASSISTANCE RESPIRATORY VENT < 24 CONSEC HR CPAP	PX	10	Any	1.242
DP05	5A2204Z	RESTORATION OF CARDIAC RHYTHM SINGLE	PX	10	Any	1.242
DP05	B246ZZ4	ULTRASONOGRAPHY RIGHT & LT HEART	PX	10	Any	1.242
DP05	BT1D1ZZ	FLUORO RT KIDNEY URETER BLAD LOW OSMOLAR	PX	10	Any	1.242
DP05	C330	Antineoplastic-Alkylating Agent-Tetrahydroisoquinoline and Derivatives	RX	CLASS	Frequent	1.242
DP05	45380	COLONOSCOPY W/BIOPSY SINGLE/MULTIPLE	PX	CPT	Any	1.217
DP05	K52	OTH & UNS NONINFECTIVE GASTROENTERITIS & COLITIS	DX	10	Any	1.215
DP05	J3420	INJECTION VIT B-12 CYANOCOBALAMIN TO 1000 MCG	PX	HCPCS	Frequent	1.185
DP05	L40	PSORIASIS	DX	10	Any	1.132
DP05	B24BZZZ	ULTRASONOGRAPHY OF HEART WITH AORTA	PX	10	Any	1.06
DP05	K52	OTH & UNS NONINFECTIVE GASTROENTERITIS & COLITIS	DX	10	Frequent	1.036
DP05	A9575	INJECTION GADOTERATE MEGLUMINE 0.1 ML	PX	HCPCS	Any	0.973
DP05	K63	OTHER DISEASES OF INTESTINE	DX	10	Any	0.973
DP05	74177	CT ABDOMEN & PELVIS W/CONTRAST MATERIAL	PX	CPT	Frequent	0.955
DP05	D50	IRON DEFICIENCY ANEMIA	DX	10	Frequent	0.939
DP05	A7037	TUBING USED WITH POSITIVE AIRWAY PRESSURE DEVICE	PX	HCPCS	Frequent	0.894
DP05	3E03329	INTRODUCTION OTH ANTI-INFECTIVE PERIPH VEIN PERQ	PX	10	Any	0.837
DP05	8E0ZXY6	ISOLATION	PX	10	Any	0.837
DP05	C833	Local Anesthetic - Esters	RX	CLASS	Frequent	0.837
DP05	G8420	BMI DOC W/I NORMAL PARAM & NO F/U PLAN REQUIRED	PX	HCPCS	Frequent	0.837
DP05	D50	IRON DEFICIENCY ANEMIA	DX	10	Often	0.82
DP05	R19	OTH SX & SIGNS INVLV THE DIGESTIVE SYSTEM & ABD	DX	10	Frequent	0.804
DP05	M06	OTHER RHEUMATOID ARTHRITIS	DX	10	Often	0.792
DP05	G0151	SERVICE PHYS THERAP HOME HLTH/HOSPICE EA 15 MIN	PX	HCPCS	Frequent	0.772
DP05	J1885	INJECTION KETOROLAC TROMETHAMINE PER 15 MG	PX	HCPCS	Frequent	0.766
DP05	C505	Dermatological - Antiparasitics Other	RX	CLASS	Often	0.709
DP05	C330	Antineoplastic-Alkylating Agent-Tetrahydroisoquinoline and Derivatives	RX	CLASS	Any	0.708
DP05	C169	Antidepressant - Serotonin-2 Antagonist-Reuptake Inhibitors (SARIs)	RX	CLASS	Frequent	0.703
DP05	C216	Antifungal other / Pharmaceutical Adjuvant - Preservatives	RX	CLASS	Frequent	0.703
DP05	M06	OTHER RHEUMATOID ARTHRITIS	DX	10	Any	0.692

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
DP05	G0283	E-STIM 1/> AREAS OTH THAN WND CARE PART TX PLAN	PX	HCPCS	Frequent	0.683
DP05	G9903	PATIENT SCR TOBACCO USE & ID AS TOB NON-USER	PX	HCPCS	Frequent	0.674
		Multivitamin and Mineral Combinations / Vitamins - Oil				
DP05	C914	Soluble	RX	CLASS	Frequent	0.661
DP05	G8783	NORMAL BLOOD PRESS READING DOC F/U NOT REQUIRED	PX	HCPCS	Frequent	0.655
DP05	M19	OTHER AND UNSPECIFIED OSTEOARTHRITIS	DX	10	Frequent	0.639
DP05	G8420	BMI DOC W/I NORMAL PARAM & NO F/U PLAN REQUIRED	PX	HCPCS	Any	0.638
DP05	C343	Antipsychotic - Atypical Agents, General	RX	CLASS	Frequent	0.636
		Asthma/COPD Therapy - Anticholinergic Agents / Nasal				
DP05	C385	Anticholinergics	RX	CLASS	Frequent	0.636
		Antifungal - Fluorinated Pyrimidine-type Agents /				
DP05	C213	Antifungal other	RX	CLASS	Frequent	0.629
DP05	G0463	HOSPITAL OUTPATIENT CLIN VISIT ASSESS & MGMT PT	PX	HCPCS	Frequent	0.629
DP05	A7030	FULL FACE MASK USED W/POS ARWAY PRESS DEVICE EA	PX	HCPCS	Frequent	0.618
DP05	C396	B-Complex Vitamins and Combinations	RX	CLASS	Frequent	0.618
DP05	82728	ASSAY OF FERRITIN	PX	CPT	Frequent	0.61
		Asthma/COPD Therapy - Anticholinergic Agents / Nasal				
DP05	C385	Anticholinergics	RX	CLASS	Often	0.601
DP05	Z90	ACQUIRED ABSENCE OF ORGANS NEC	DX	10	Any	0.601
		Antineoplastic-Alkylating Agent-Tetrahydroisoquinoline				
DP05	C330	and Derivatives	RX	CLASS	Often	0.59
DP05	C862	Minerals and Electrolytes - Hydrochloric Acid	RX	CLASS	Frequent	0.59
DP05	M79	OTHER SOFT TISSUE DISORDERS NEC	DX	10	Frequent	0.589
DP05	A9585	INJECTION GADOBUTROL 0.1 ML	PX	HCPCS	Any	0.584
DP05	A7031	FACE MASK INTERFACE REPLCMT FULL FACE MASK EA	PX	HCPCS	Often	0.581
		Antihyperlipidemic - HMG CoA Reductase Inhibitors				
DP05	C225	(statins)	RX	CLASS	Often	0.581
DP05	J1030	INJECTION METHYLPREDNISOLONE ACETATE 40 MG	PX	HCPCS	Any	0.58
DP05	A7038	FILTER DISPBL USED W/POS ARWAY PRESSURE DEVICE	PX	HCPCS	Frequent	0.577
DP05	D50	IRON DEFICIENCY ANEMIA	DX	10	Any	0.571
DP05	J2930	INJ METHYLPRDNISOLONE SODIUM SUCCNAT TO 125 MG	PX	HCPCS	Any	0.566
DP05	85610	PROTHROMBIN TIME	PX	CPT	Frequent	0.565
DP05	D0330	PANORAMIC RADIOGRAPHIC IMAGE	PX	HCPCS	Any	0.563
DP05	009U3ZX	DRAINAGE SPINAL CANAL PERCUTANEOUS APPROACH DX	PX	10	Any	0.549
DP05	01NB0ZZ	RELEASE LUMBAR NERVE OPEN APPROACH	PX	10	Any	0.549
DP05	07DR3ZX	EXTRACTION OF ILIAC BONE MARROW PERQ DIAGNOSTIC	PX	10	Any	0.549
DP05	0BH17EZ	INSERT ENDOTRACHL AIRWAY TRACHEA NAT/ART	PX	10	Any	0.549
DP05	ODNU0ZZ	RELEASE OMENTUM OPEN APPROACH	PX	10	Any	0.549
DP05	0JBL0ZZ	EXCISION RT UPPER LEG SUBQ TISSUE & FASCIA OPEN	PX	10	Any	0.549
DP05	0SG00AJ	FUSION LV JOINT IF DEVC POST APPR ANT COLM OPEN	PX	10	Any	0.549
DP05	0T768DZ	DILAT RT URETER INTRALUM DEVC NAT/ART OPEN ENDO	PX	10	Any	0.549
DP05	0T778DZ	DILATION LT URETER INTRALUM DEV NAT/ART OPN ENDO	PX	10	Any	0.549
DP05	3E0333Z	INTRODUCTION ANTI-INFLAMMATORY PERIPH VEIN PERQ	PX	10	Any	0.549
DP05	4B02XTZ	MEASUREMENT CARDIAC DEFIBRILLATOR EXTERNAL	PX	10	Any	0.549

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
DP05	5A1945Z	RESPIRATORY VENTILATION 24-96 CONSECUTIVE HOURS	PX	10	Any	0.549
DP05	5A1D70Z	PERFORMANCE URINARY FILTRAT INTERMITTNT<6 HR/DAY	PX	10	Any	0.549
DP05	85652	SEDIMENTATION RATE RBC AUTOMATED	PX	CPT	Frequent	0.549
DP05	97140	MANUAL THERAPY TQS 1/> REGIONS EACH 15 MINUTES	PX	CPT	Frequent	0.549
DP05	B211YZZ	FLUORO MULTIPLE CORONARY ARTERIES OTHER	PX	10	Any	0.549
DP05	B2151ZZ	FLUOROSCOPY LEFT HEART LOW OSMOLAR CONTRAST	PX	10	Any	0.549
DP05	B241ZZ3	ULTRASONOGRAPHY MULTIPLE CORONARY ARTERIES IV	PX	10	Any	0.549
		ULTRASONOGRAPHY HEART WITH AORTA				
DP05	B24BZZ4	TRANSESOPHAGEAL	PX	10	Any	0.549
		Antihyperlipidemic - HMG CoA Reductase Inhibitors				
DP05	C225	(statins)	RX	CLASS	Frequent	0.549
DP05	G0480	DRUG TEST DEFINITV DR ID METH P DAY 1-7 DRUG CL	PX	HCPCS	Any	0.549
DP05	J3590	UNCLASSIFIED BIOLOGICS	PX	HCPCS	Frequent	0.549
DP05	86431	RHEUMATOID FACTOR QUANTITATIVE	PX	CPT	Any	0.542
		Multivitamin and Mineral Combinations / Vitamins - Oil				
DP05	C914	Soluble	RX	CLASS	Often	0.537
		Anticonvulsant - Functionalized Amino Acid /				
DP05	C138	Anticonvulsant Others	RX	CLASS	Frequent	0.535
DP05	Z90	ACQUIRED ABSENCE OF ORGANS NEC	DX	10	Frequent	0.532
DP05	C1178	Vaginal Antibacterials	RX	CLASS	Frequent	0.52
DP05	R19	OTH SX & SIGNS INVLV THE DIGESTIVE SYSTEM & ABD	DX	10	Any	0.519
DP05	83550	IRON BINDING CAPACITY	PX	CPT	Any	0.515
DP05	D05_INT_UNIQ_		PX	10	Q2ServiceInt	0.515
DP06	J3380	INJECTION VEDOLIZUMAB 1 MG	PX	HCPCS	Any	4.389
DP06	J3380	INJECTION VEDOLIZUMAB 1 MG	PX	HCPCS	Often	4.048
DP06	K50	CROHNS DISEASE REGIONAL ENTERITIS	DX	10	Often	3.817
DP06	K50	CROHNS DISEASE REGIONAL ENTERITIS	DX	10	Any	2.648
DP06	0DBB8ZX	EXCISION ILEUM VIA NATURAL/ARTIFCL OPEN ENDO DX	PX	10	Any	2.273
DP06	3E033GC	INTRODUCTION OTH THERAP SUBSTANCE PERIPH VN PERQ	PX	10	Any	2.109
DP06	3E0436Z	INTRODUCTION NUTRITION SUBSTANCE CNTRL VEIN PERQ	PX	10	Any	1.985
DP06	0DBL8ZX	EXCISION TRANSVERSE COLON NAT/ART OPNG ENDO DX	PX	10	Any	1.842
DP06	0DBM8ZX	EXCISION DESCEND COLON NAT OR ART OPEN ENDO DX	PX	10	Any	1.842
DP06	0DBP8ZX	EXCISION RECTUM VIA NAT OR ART OPENING ENDO DX	PX	10	Any	1.842
DP06	05HB33Z	INSERTION INFUSION DEVICE RT BASILIC VEIN PERQ	PX	10	Any	1.821
DP06	0SRD0J9	REPLACE LT KNEE JOINT SYNTH SUBST CEMENTED OPEN	PX	10	Any	1.821
DP06	0DBH8ZX	EXCISION CECUM VIA NAT/ART OPENING ENDO DX	PX	10	Any	1.58
DP06	B24BZZZ	ULTRASONOGRAPHY OF HEART WITH AORTA	PX	10	Any	1.58
DP06	L40	PSORIASIS	DX	10	Any	1.569
DP06	05HY33Z	INSERTION INFUS DEVICE INTO UPPER VN PERQ APPRCH	PX	10	Any	1.475
DP06	0DB78ZX	EXCISION STOMACH PYLORUS NAT/ART OPENING ENDO	PX	10	Any	1.475
DP06	0BJ08ZZ	INSPECT TRACHEOBRONCH TREE NAT/ART OPENING ENDO	PX	10	Any	1.223
DP06	C505	Dermatological - Antiparasitics Other	RX	CLASS	Frequent	1.206
DP06	02100Z9	BYPASS COR ART 1 ARTERY LT INTERNAL MAMMARY OPEN	PX	10	Any	1.128
DP06	02H63JZ	INSERTION PACEMAKER LEAD RT ATRIUM PERQ APPR	PX	10	Any	1.128

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
DP06	3E0G76Z	INTRODUCTION NUTRIT SUBSTANC UGI NAT/ART OPENING	PX	10	Any	1.128
DP06	0DBE8ZX	EXCISION OF LARGE INTESTINE NAT/ART OPEN ENDO DX	PX	10	Any	1.069
DP06	0DBN8ZX	EXCISION SIGMOID COLON NAT/ART OPEN ENDO DX	PX	10	Any	1.069
DP06	0DJD8ZZ	INSPECTION LOW INTEST TRACT NAT/ART OPENING ENDO	PX	10	Any	1.012
DP06	8E0ZXY6	ISOLATION	PX	10	Any	1.012
DP06	C221	Antihyperlipidemic - ATP-Citrate Lyase (ACLY) Inhibitor	RX	CLASS	Frequent	0.982
DP06	J3590	UNCLASSIFIED BIOLOGICS	PX	HCPCS	Often	0.976
DP06	96365	IV INFUSION THERAPY/PROPHYLAXIS /DX 1ST TO 1 HR	PX	CPT	Frequent	0.954
DP06	K1034	PROV COVID-19 TST NP SA & SELF-COLL 1 TST CNT	PX	HCPCS	Frequent	0.936
DP06	ODN80ZZ	RELEASE / SMALL INTESTINE / OPEN APPROACH	PX	10	Any	0.887
DP06	OW3P8ZZ	CONTROL GASTROINTESTINAL TRACT NAT/ART ENDO	PX	10	Any	0.887
DP06	3E0333Z	INTRODUCTION ANTI-INFLAMMATORY PERIPH VEIN PERQ	PX	10	Any	0.887
DP06	5A1955Z	RESPIRATORY VENTILATION > 96 CONSECUTIVE HOURS	PX	10	Any	0.887
DP06	J1745	INJECTION INFliximab EXCLUDES BIOSIMILAR 10 MG	PX	HCPCS	Often	0.887
DP06	96365	IV INFUSION THERAPY/PROPHYLAXIS /DX 1ST TO 1 HR	PX	CPT	Often	0.873
DP06	J3590	UNCLASSIFIED BIOLOGICS	PX	HCPCS	Any	0.867
DP06	J1200	INJECTION DIPHENHYDRAMINE HCL UP TO 50 MG	PX	HCPCS	Frequent	0.85
DP06	M06	OTHER RHEUMATOID ARTHRITIS	DX	10	Frequent	0.845
DP06	J1745	INJECTION INFliximab EXCLUDES BIOSIMILAR 10 MG	PX	HCPCS	Frequent	0.828
DP06	J3590	UNCLASSIFIED BIOLOGICS	PX	HCPCS	Frequent	0.794
DP06	K63	OTHER DISEASES OF INTESTINE	DX	10	Frequent	0.77
DP06	M06	OTHER RHEUMATOID ARTHRITIS	DX	10	Often	0.77
DP06	C221	Antihyperlipidemic - ATP-Citrate Lyase (ACLY) Inhibitor	RX	CLASS	Any	0.756
DP06	K1034	PROV COVID-19 TST NP SA & SELF-COLL 1 TST CNT	PX	HCPCS	Any	0.752
DP06	K63	OTHER DISEASES OF INTESTINE	DX	10	Often	0.75
DP06	K63	OTHER DISEASES OF INTESTINE	DX	10	Any	0.743
DP06	021109W	BYPASS COR ART 2 ART AORTA AUTO VEN TISSUE OPEN	PX	10	Any	0.723
DP06	02HK3JZ	INSERTION PACEMAKER LEAD RT VENTRICLE PERQ APPR	PX	10	Any	0.723
DP06	0SRC0J9	REPLACE RT KNEE JOINT SYNTH SUBST CEMENTED OPEN	PX	10	Any	0.723
DP06	B2131ZZ	FLUOROSCOPY MULTIPLE CABG LOW OSMOLAR CONTRAST	PX	10	Any	0.723
DP06	F07Z9ZZ	GAIT TRAINING FUNCTIONAL AMBULATION TREATMENT	PX	10	Any	0.723
DP06	G0283	E-STIM 1/> AREAS OTH THAN WND CARE PART TX PLAN	PX	HCPCS	Frequent	0.723
DP06	M06	OTHER RHEUMATOID ARTHRITIS	DX	10	Any	0.703
DP06	J1040	INJECTION METHYLPREDNISOLONE ACETATE 80 MG	PX	HCPCS	Frequent	0.675
DP06	J7050	INFUSION NORMAL SALINE SOLUTION 250 CC	PX	HCPCS	Frequent	0.675
DP06	02RF38Z	REPLACE AORTIC VALVE ZOOPLASTIC TISSUE PERQ APPR	PX	10	Any	0.664
DP06	ORT30ZZ	RESECTION CERVICAL VERTEBRAL DISC OPEN APPROACH	PX	10	Any	0.664
DP06	OST20ZZ	RESECTION OF LUMBAR VERTEBRAL DISC OPEN APPROACH	PX	10	Any	0.664
DP06	OT9B70Z	DRAINAGE BLADDER DRAIN DEVICE NAT/ART OPENING	PX	10	Any	0.664
DP06	3E043XZ	INTRODUCTION VASOPRESSOR CENTRAL VEIN PERQ APPR	PX	10	Any	0.664
DP06	5A0935A	ASSISTANCE RESP VENT < 24 CONSC HR H NSL FLW VEL	PX	10	Any	0.664
DP06	5A09557	ASSISTANCE RESPIRATORY VENT > 96 CONSEC HR CPAP	PX	10	Any	0.664
DP06	B241ZZ3	ULTRASONOGRAPHY MULTIPLE CORONARY ARTERIES IV	PX	10	Any	0.664

Appendix G. Top 100 Codes Ranked by Exposure Association Selected by the High Dimensional Propensity Score Algorithm for Risankizumab and Guselkumab Users - HDPS Analysis in the Sentinel Distributed Database from April 23, 2019 to September 30, 2023, by Data Partner (DP)

Masked DP ID	Code	Code Description	Code Category	Code Type	Frequency	Ranking
		Anticonvulsant - Iminostilbene Derivatives / Anticonvulsant				
DP06	C146	Others	RX	CLASS	Frequent	0.625
DP06	R19	OTH SX & SIGNS INVLV THE DIGESTIVE SYSTEM & ABD	DX	10	Frequent	0.616
DP06	85652	SEDIMENTATION RATE RBC AUTOMATED	PX	CPT	Frequent	0.572
DP06	82565	CREATININE BLOOD	PX	CPT	Frequent	0.564
		Diluents - Sodium Chloride / Pharmaceutical Adjuvant -				
DP06	C672	Liquid Vehicles / Sodium Chloride Flushes	RX	CLASS	Often	0.558
DP06	96365	IV INFUSION THERAPY/PROPHYLAXIS /DX 1ST TO 1 HR	PX	CPT	Any	0.535
DP06	C1121	Pyruvate Kinase (PK) Activators	RX	CLASS	Any	0.533
DP06	0JH63XZ	INSERT TUNNELED VASC ACSS DVC CHEST SQ TIS&FS PC	PX	10	Any	0.53
DP06	3E02340	INTRODUCTION INFLUENZA VACCINE INTO MUSCLE PERQ	PX	10	Any	0.53
DP06	5A1935Z	RESPIRATORY VENTILATION < 24 CONSECUTIVE HOURS	PX	10	Any	0.53
DP06	G8950	ELEVATED HTN BP READING DOC & INDICATED F/U DOC	PX	HCPCS	Frequent	0.529
DP06	73630	RADEX FOOT COMPLETE MINIMUM 3 VIEWS	PX	CPT	Frequent	0.524
DP06	G9744	PATIENT NOT ELIGIBLE D/T ACTIVE DX HYPERTENSION	PX	HCPCS	Frequent	0.518
		Antidepressant - Serotonin-2 Antagonist-Reuptake				
DP06	C170	Inhibitors (SARIs) / Antidepressant Combinations	RX	CLASS	Frequent	0.504
DP06	5A09457	ASSISTANCE RESPIRATORY VENT 24-96 CONSEC HR CPAP	PX	10	Any	0.5
		LHRH (GnRH) Agonist Analog Pituitary Supp. and Progestin				
DP06	C816	Comb.	RX	CLASS	Any	0.491
DP06	J7050	INFUSION NORMAL SALINE SOLUTION 250 CC	PX	HCPCS	Often	0.486
DP06	C719	Fluorouracil and Related Rescue Agents	RX	CLASS	Frequent	0.473
		Diluents - Sterile Water for Injection / Diluents - Vaccine				
DP06	C676	Diluents / Pharmaceutical Adjuvant - Liquid Vehicles	RX	CLASS	Frequent	0.47
DP06	D04_INT_UNIQ_		PX	10	Q4ServiceInt	0.47
DP06	U07	EMERGENCY USE OF U07	DX	10	Frequent	0.464
DP06	J3420	INJECTION VIT B-12 CYANOCOBALAMIN TO 1000 MCG	PX	HCPCS	Frequent	0.46
DP06	74177	CT ABDOMEN & PELVIS W/CONTRAST MATERIAL	PX	CPT	Any	0.457
		Diluents - Sodium Chloride / Pharmaceutical Adjuvant -				
DP06	C672	Liquid Vehicles / Sodium Chloride Flushes	RX	CLASS	Any	0.457
DP06	A9502	TECHNETIUM TC-99M TETROFOSMIN DX PER STUDY DOSE	PX	HCPCS	Any	0.454
DP06	G8419	BMI DOC OUT NML PARAM NO F/U PLN DOC NO RSN GVN	PX	HCPCS	Frequent	0.451
		Diluents - Sodium Chloride / Pharmaceutical Adjuvant -				
DP06	C672	Liquid Vehicles / Sodium Chloride Flushes	RX	CLASS	Frequent	0.45
DP06	D04_INT_ALL_Q		PX	10	Q4ServiceInt	0.45
DP06	73630	RADEX FOOT COMPLETE MINIMUM 3 VIEWS	PX	CPT	Any	0.449
DP06	A9575	INJECTION GADOTERATE MEGLUMINE 0.1 ML	PX	HCPCS	Any	0.443
DP06	J1745	INJECTION INFliximab EXCLUDES BIOSIMILAR 10 MG	PX	HCPCS	Any	0.438
DP06	02L73DK	OCCLUSION LT ATRIAL APPENDAGE INTRALUM DEVC PERQ	PX	10	Any	0.435
DP06	0T788DZ	DIL BIL URETERS INTRALUM DEV NAT/ART OPEN ENDO	PX	10	Any	0.435
DP06	HZ2ZZZZ	DETOXIFICATION SERVICES SUBSTANCE ABUSE TREATMNT	PX	10	Any	0.435
DP06	84460	TRANSFERASE ALANINE AMINO ALT SGPT	PX	CPT	Frequent	0.429
DP06	C1043	Parenteral Nutrition - Intravenous Fat Emulsions	RX	CLASS	Frequent	0.425

Appendix H. 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 I. Specifications Defining Parameters Used in this Request

Note: All parameters (except the Tree Analysis Group Labels) are same as for request id: cder_sir_wp008_nsdp_v01

This request executed the Cohort Identification and Descriptive Analysis (CIDA) tool [version 13.0.1] to perform a signal identification analysis on guselkumab compared to risankizumab in the Sentinel Distributed Database (SDD).

Query Period: April 23, 2019 - September 30, 2023
Coverage Requirement: Medical & Drug Coverage
Pre-index enrollment requirement: 400 days
Post-index enrollment requirement: 0 days
Post-episode requirement for Type 2 analyses: n/a
Enrollment gap: 45 days
Restrictions: Male and Female
Age groups: 18-39, 40-64, 65+ years
Stratifications: n/a
Envelope macro: *Reclassify encounters during inpatient stay as inpatient
Freeze data: M

	Risankizumab - Guselkumab	
Group	ris	gus
Drug/Exposure		
Index Exposure/Comparator	Risankizumab	Guselkumab
Cohort Definition	First valid exposure episodes during query period	
Incidence Exposure washout period	0 (done with exclusion criteria below)	
Incident w/ Respect to:	n/a	
Exclude evidence of days supply if exposure washout include dispensings	n/a	
Stockpiling	Default	
Build Episodes on Point Exposure?	Yes	
Incidence Criteria Care Setting	n/a	
Principal Diagnosis Position	n/a	
Create Baseline Table?	Yes	
Inclusion/Exclusion Criteria		
Inclusion/Exclusion group	Exposure (risankizumab or guselkumab) washout	
Type of criteria	Exclusion	
Evaluation Period Start	-183	
Evaluation Period End	-1	
Care Setting/PDX	Any	
Principal Diagnosis Position	Any	
Exclude evidence of days supply if inclusion/exclusion evaluation period includes dispensings	Yes (Date only = N)	
Number of instances the criteria should be found in the evaluation period	1	
	OR	
Inclusion/Exclusion group	Ongoing pregnancy	
Type of criteria	Exclusion	
Evaluation Period Start	-183	
Evaluation Period End	183	
Care Setting/PDX	Any	
Principal Diagnosis Position	Any	

Appendix I. Specifications Defining Parameters Used in this Request		
Exclude evidence of days supply if inclusion/exclusion evaluation period includes dispensings	n/a	
Number of instances the criteria should be found in the evaluation period	2	
	OR	
Inclusion/Exclusion group	Pregnancy Delivery	
Type of criteria	Exclusion	
Evaluation Period Start	0	
Evaluation Period End	183	
Care Setting/PDX	*Some codes inpatient (IP), some codes any care setting. See code list.	
Principal Diagnosis Position	n/a	
Exclude evidence of days supply if inclusion/exclusion evaluation period includes dispensings	n/a	
Number of instances the criteria should be found in the evaluation period	1	
At Risk Time		
Minimum exposure episode duration	n/a	
Maximum exposure episode duration	183	
Risk window interval start	1	
Censor treatment episode at evidence of:	*Death; *DP end date; *Query end date; *Evidence of guselkumab *Evidence of any other alternative biologic (tildrakizumab, ustekinumab, secukinumab, ixekizumab, broadlumab)	*Death; *DP end date; *Query end date; *Evidence of risankizumab *Evidence of any other alternative biologic (tildrakizumab, ustekinumab, secukinumab, ixekizumab, broadlumab)
Blackout Period	n/a	
Propensity Score Model Parameters		
PS Model Label	ris_gus_ps	ris_gus_hdps
Covariates	See Appendices E and F	See Appendices E and F
Firth Logistic Intercept Correct (FLIC) Method	No	No
High-dimensional Propensity Score	No	Yes
HDPS Evaluation Period	n/a	[-183, -1]
Number of covariates selected for HDPS model	n/a	300
Ranking used for HDPS covariate selection	n/a	Top k variables are selected as ranked by the exposure association (here k is the number of covariates selected)
Zero cell correction	n/a	Yes
Truncation for ICD-9 or ICD-10 diagnosis codes	n/a	3
Output Kaplan Meier Plot	No	No
PS Matching		
Ratio Type	Fixed ratio matching	
Matching Ratio	1:1	
Matching Caliper Settings	0.05	
Analysis Type	Conditional only	
Event/Tree File Parameters		

Appendix I. Specifications Defining Parameters Used in this Request

Tree Analysis Group Label	gus_ris_ps_iped, gus_ris_hdps_iped	gus_ris_ps_ipedav, gus_ris_hdps_ipedav
Event/Outcome	TreeScan	TreeScan
Care Setting	Inpatient hospital stay (IP*) Emergency department encounter (ED*)	IP* ED* (Ambulatory visit) AV*
Principal Diagnosis Position	Any	Any
Tree Incidence Level	3rd Level	3rd Level
Tree event washout period	400	400
Tree Washout Care Setting	Any	Any
Tree Washout Principal Diagnosis Position	Any	Any
TreeScan Software Parameters		
Type of Scan:	Tree Only	
Time Precision:	n/a	
Conditional Analysis:	No	
Probability Model:	Bernoulli	
Case Probability:	1/2	
Monte Carlo Replications	9999	
Tree Level Assessment:	3,4,5	

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), Current Procedural Terminology, Fourth Edition (CPT-4), and Healthcare Common Procedure Coding System, Level II (HCPCS) are provided by Optum360.

National Drug Codes (NDC) are checked against First Data Bank's National Drug Data File (NDDF®) Plus.

N/A: Not applicable

Appendix J. Specifications Defining Covariate Parameters Used in this Request

Note: All covariates used in this request are the same as in request id: cder_sir_wp008_nsdv_v01

Baseline Characteristics												
Covariate Number	Covariate	Include in Baseline Table?	Include in Propensity Score?	Include in High-Dimensional Propensity Score?	Care setting	Principal diagnosis position	Code definition	Code Category	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensings	Number of instances the covariate should be found in evaluation period
<i>Demographics and Index-Defining</i>												
N/A	Index Year	Y	Y	Y	N/A		Year of index	N/A	0	0	N/A	1
N/A	Age	Y	Y (as continuous)	Y (as continuous)	*Any care setting	N/A	Age at index	N/A	0	0	N/A	N/A
N/A	Sex	Y	Y	Y	*Any care setting	N/A	Sex	N/A	0	0	N/A	N/A
N/A	Race	Y	N	N	*Any care setting	N/A	Race	N/A	0	0	N/A	N/A
N/A	Ethnicity	Y	N	N	*Any care setting	N/A	Hispanic origin	N/A	0	0	N/A	N/A
<i>Indications</i>												
1	Any indication	Y	N	N	*Any care setting	N/A	As per SCRI	Diagnosis code	-400	0	N/A	1
2	Plaque psoriasis	Y	Y	Y	*Any care setting	N/A	As per SCRI	Diagnosis code	-400	0	N/A	1
3	Psoriatic arthritis	Y	Y	Y	*Any care setting	N/A	As per SCRI	Diagnosis code	-400	0	N/A	1
4	Crohn's Disease	Y	Y	Y	*Any care setting	N/A	As per SCRI	Diagnosis code	-400	0	N/A	1
44	No indication (NOT covar1)	Y	N	N	*Any care setting	N/A	As per SCRI	Combo covariate	N/A	N/A	N/A	1
<i>Concomitant Treatments</i>												

Appendix J. Specifications Defining Covariate Parameters Used in this Request

Note: All covariates used in this request are the same as in request id: cder_sir_wp008_nsdp_v01

Baseline Characteristics												
Covariate Number	Covariate	Include in Baseline Table?	Include in Propensity Score?	Include in High-Dimensional Propensity Score?	Care setting	Principal diagnosis position	Code definition	Code Category	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensings	Number of instances the covariate should be found in evaluation period
5	Topical treatments	Y	N	N	*Any care setting	n/a	As per SCRI	Drug Code Procedure Code	0	28	No, Evaluation period should search for evidence of days supply	1
6	Systemic non-biologic treatments	Y	N	N	*Any care setting	n/a	As per SCRI	Drug Code Procedure Code	0	28	No, Evaluation period should search for evidence of days supply	1
7	Systemic biologic anti-TNF treatments	Y	N	N	*Any care setting	n/a	As per SCRI	Drug Code Procedure Code	0	28	No, Evaluation period should search for evidence of days supply	1
Prior Treatments												
8	Any potential alternative biological treatment (IL13 and IL23 inhibitors: tildrakizumab, ustekinumab, secukinumab, ixekizumab, broadlumab)	Y	Y	Y	*Any care setting	n/a	As per SCRI (but dropping guselkumab)	Drug Code Procedure Code	-400	0	No, Evaluation period should search for evidence of days supply	1
9	Topical treatments	Y	Y	Y	*Any care setting	n/a	As per SCRI	Drug Code Procedure Code	-400	0	No, Evaluation period should search for evidence of days supply	1

Appendix J. Specifications Defining Covariate Parameters Used in this Request

Note: All covariates used in this request are the same as in request id: cder_sir_wp008_nsdp_v01

Baseline Characteristics												
Covariate Number	Covariate	Include in Baseline Table?	Include in Propensity Score?	Include in High-Dimensional Propensity Score?	Care setting	Principal diagnosis position	Code definition	Code Category	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensings	Number of instances the covariate should be found in evaluation period
10	Systemic non-biologic treatments	Y	Y	Y	*Any care setting	n/a	As per SCRI	Drug Code Procedure Code	-400	0	No, Evaluation period should search for evidence of days supply	1
11	Systemic biologic anti-TNF treatments	Y	Y	Y	*Any care setting	n/a	As per SCRI	Drug Code Procedure Code	-400	0	No, Evaluation period should search for evidence of days supply	1
Comorbid conditions												
12	Immunocompromised	Y	Y	Y	*Any care setting	n/a	As per SCRI	Diagnosis codes Procedure Code Drug Code	-400	0	n/a	1
Additional TreeScan Output Strata/Subgroups												
13	Systemic alternative treatment (tildrakizumab, ustekinumab, secukinumab, ixekizumab, brodalumab, systemic non-biologic treatments, systemic biologic anti-TNF treatments)	Y	N	N	*Any care setting	n/a	As per SCRI	Drug Code Procedure Code	0	56	Yes, evaluation period should search for evidence of a dispensing/procedure date	2

Appendix J. Specifications Defining Covariate Parameters Used in this Request

Note: All covariates used in this request are the same as in request id: cder_sir_wp008_nsdv_v01

Baseline Characteristics												
Covariate Number	Covariate	Include in Baseline Table?	Include in Propensity Score?	Include in High-Dimensional Propensity Score?	Care setting	Principal diagnosis position	Code definition	Code Category	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensings	Number of instances the covariate should be found in evaluation period
45	Plaque psoriasis AND NOT psoriatic arthritis or Crohn's disease (covar2 AND NOT covar3 OR covar4)	Y	N	N	*Any care setting	n/a	As per SCRI	Combo covariate	n/a	n/a	n/a	1
Chronic Conditions Assessed Days [-400, -1]												
N/A	Combined Comorbidity Score	Y	Y (as continuous)	Y (as continuous)	N/A	N/A	As per Sentinel standard	N/A	-400	-1	N/A	N/A
14	Acute Myocardial Infarction	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
15	Alzheimer's Disease	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
16	Anemia	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
17	Asthma	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
18	Atrial Fibrillation or Flutter	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
19	Benign Prostatic Hyperplasia	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
20	Breast Cancer	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
21	Colorectal Cancer	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1

Appendix J. Specifications Defining Covariate Parameters Used in this Request

Note: All covariates used in this request are the same as in request id: cder_sir_wp008_nsdv_v01

Baseline Characteristics												
Covariate Number	Covariate	Include in Baseline Table?	Include in Propensity Score?	Include in High-Dimensional Propensity Score?	Care setting	Principal diagnosis position	Code definition	Code Category	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensings	Number of instances the covariate should be found in evaluation period
22	Endometrial Cancer	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
23	Lung Cancer	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
24	Prostate Cancer	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
25	Urologic Cancer	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
26	Cataract	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
27	Chronic Kidney Disease	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
28	Chronic Obstructive Pulmonary Disorder	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
29	Depression, Bipolar, or Other Mood Disorders	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
30	Diabetes	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
31	Glaucoma	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
32	Heart Failure and Non-Ischemic Heart Disease	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1

Appendix J. Specifications Defining Covariate Parameters Used in this Request

Note: All covariates used in this request are the same as in request id: cder_sir_wp008_nsdp_v01

Baseline Characteristics												
Covariate Number	Covariate	Include in Baseline Table?	Include in Propensity Score?	Include in High-Dimensional Propensity Score?	Care setting	Principal diagnosis position	Code definition	Code Category	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensings	Number of instances the covariate should be found in evaluation period
33	Hip/Pelvic Fracture	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
34	Hyperlipidemia	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
35	Hypertension	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
36	Hypothyroidism	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
37	Ischemic Heart Disease	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
38	Non-Alzheimer's Dementia	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
39	Osteoporosis	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
40	Parkinson's Disease and Secondary Parkinsonism	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
41	Rheumatoid Arthritis/Osteoarthritis	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
42	Stroke/Transient Ischemic Attack	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
43	Hepatic Disorders	Y	Y	Y	*Any care setting	N/A	As per CCW	Diagnosis	-400	-1	N/A	1
Health Service Utilization Intensity Metrics												

Appendix J. Specifications Defining Covariate Parameters Used in this Request

Note: All covariates used in this request are the same as in request id: cder_sir_wp008_nsdp_v01

Baseline Characteristics												
Covariate Number	Covariate	Include in Baseline Table?	Include in Propensity Score?	Include in High-Dimensional Propensity Score?	Care setting	Principal diagnosis position	Code definition	Code Category	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensings	Number of instances the covariate should be found in evaluation period
N/A	Mean Number Of Filled Prescriptions	Y	Y	Y	*Any care setting	N/A	As per Sentinel standard	N/A	-400	-1	N/A	1
N/A	Mean Number Of Ambulatory Encounters	Y	Y	Y	*Any care setting	N/A	As per Sentinel standard	N/A	-400	-1	N/A	1
N/A	Mean Number Of Generics Dispensed	Y	N	N	*Any care setting	N/A	As per Sentinel standard	N/A	-400	-1	N/A	1
N/A	Mean Number Of Other Ambulatory Encounters	Y	Y	Y	*Any care setting	N/A	As per Sentinel standard	N/A	-400	-1	N/A	1
N/A	Mean Number Of Emergency Room Encounters	Y	Y	Y	*Any care setting	N/A	As per Sentinel standard	N/A	-400	-1	N/A	1
N/A	Mean Number Of Inpatient Hospital Encounters	Y	Y	Y	*Any care setting	N/A	As per Sentinel standard	N/A	-400	-1	N/A	1
N/A	Mean Number Of Non-Acute Institutional Encounters	Y	N	N	*Any care setting	N/A	As per Sentinel standard	N/A	-400	-1	N/A	1

N/A: Not applicable

Appendix K. Design Diagram of Cohort Entry Requirements

Note: The design diagram for this request is the same as request id: cder_sir_wp008_nsdv_v01

