

## 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

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

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

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## Overview for Request: cder\_mpl1r\_wp211

**Request ID:** cder\_mpl1r\_wp211

**Request Description:** This request evaluated the uptake and length of follow-up time of New Molecular Entities (NMEs) approved in 2019 in the Sentinel Distributed Database (SDD).

**Sentinel Routine Querying Module:** Cohort Identification and Descriptive Analysis (CIDA) module, version 10.4.0

**Data Source:** We distributed this query to 6 Sentinel Data Partners on October 7, 2021. The study period included data from January 1, 2019 through March 31, 2021. Please see Appendix A for a list of dates of available data for each Data Partner.

**Study Design:** We conducted a descriptive cohort study to calculate the duration of follow-up time available for new users of NMEs approved in 2019. We described demographic and clinical characteristics of new users of each NME based on history recorded in the year prior to initiation of treatment with NME. This was a Type 1 analysis in the Query Request Package (QRP) documentation.

**Exposures of Interest:** The exposures of interest were all NMEs approved in 2019; this report contains data on 24 of the 48 NMEs approved in that year. A second report contains data on the remaining NMEs. We defined the exposures of interest using dispensing and procedure data with National Drug Codes (NDCs) and Healthcare Common Procedure Coding System (HCPCS) procedure codes. The first qualifying dispensing or procedure was identified for all eligible patients; cohort re-entry was not allowed. Please see Appendix B for a list of generic and brand names of medical products.

**Cohort Eligibility Criteria:** We required members to be enrolled in health plans with medical and drug coverages in the 365 days prior to their index date in order to be included in the cohort; gaps in coverage of up to 45 days were allowed and treated as continuous enrollment. New use of each NME was defined by the absence of any days supplied of that NME in the 183 days prior to the index date. We defined the following age groups: 0-18, 19-64, and 65+ years.

**Baseline Characteristics:** We assessed the following characteristics on the index date of NME dispensing: age, year, sex. We also assessed the following characteristics in the 365 days prior to the index NME dispensing: acute myocardial infarction, Alzheimer's disease and related conditions, heart failure, depression, ischemic heart disease, rheumatoid arthritis/osteoarthritis, anemia, glaucoma, atrial fibrillation, diabetes, hyperlipidemia, hypertension, stroke/transient ischemic attack (TIA), breast cancer, colorectal cancer, prostate cancer, lung cancer, endometrial cancer, acquired hypothyroidism, asthma, benign prostatic hyperplasia, chronic kidney disease, chronic obstructive pulmonary disease (COPD) and bronchiectasis, osteoporosis, obesity, overweight, smoking, alcohol abuse or dependence, drug abuse or dependence, history of cardiac arrest, and history of coronary angioplasty or bypass. We identified diabetes, hyperlipidemia, hypertension, stroke/TIA, breast cancer, colorectal cancer, prostate cancer, lung cancer, endometrial cancer, acquired hypothyroidism, asthma, benign prostatic hyperplasia, chronic kidney disease, COPD and bronchiectasis, and osteoporosis by presence of one diagnosis or procedure code in the inpatient or non-acute institutional stay care setting (in any position) or two codes in the ambulatory visit, emergency department encounter, or other ambulatory visit (in any position). We identified atrial fibrillation by presence of one diagnosis or procedure code in the inpatient or non-acute institutional stay care setting (in the principal or secondary position) or two codes in the ambulatory visit, emergency department encounter, or other ambulatory visit (in any position). We identified acute myocardial infarction by presence of one diagnosis or procedure code in the inpatient care setting (in the principal or secondary position). All other conditions were assessed by the presence of one diagnosis, procedure, or dispensing code in any care setting (in any position). We used International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Fourth Edition (CPT-4), Healthcare Common Procedure Coding System, Level II (HCPCS), and NDCs to define these conditions. Please see Appendix D for a list of diagnosis and procedure codes, Appendix E for a list of generic and brand names of medical products.

Please see Appendices F, G, and H for the specifications of parameters used in this request, baseline characteristics used in this request, and a design diagram.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**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



**Table 1a. Aggregated Baseline Table for New Users of Accrufer in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

<b>Characteristic</b>	<b>Number</b>	<b>Percent</b>
Number of episodes	0	
Number of unique patients	0	
<b>Demographics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Mean Age (years)	0	0
<b>Age (years)</b>	<b>Number</b>	<b>Percent</b>
0-18	0	0.0%
19-64	0	0.0%
65+	0	0.0%
<b>Sex</b>		
Female	0	0.0%
Male	0	0.0%
<b>Year</b>		
2019	0	0.0%
2020	0	0.0%
2021	0	0.0%
<b>Recorded History of CCW<sup>1</sup> Conditions in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Acute myocardial infarction	0	0.0%
Alzheimer's disease and related conditions	0	0.0%
Heart failure	0	0.0%
Depression	0	0.0%
Ischemic heart disease	0	0.0%
Rheumatoid arthritis/osteoarthritis	0	0.0%
Anemia	0	0.0%
Glaucoma	0	0.0%
Atrial fibrillation	0	0.0%
Diabetes	0	0.0%
Hyperlipidemia	0	0.0%
Hypertension	0	0.0%
Stroke/TIA	0	0.0%
Breast cancer	0	0.0%
Colorectal cancer	0	0.0%
Prostate cancer	0	0.0%
Lung cancer	0	0.0%
Endometrial cancer	0	0.0%
Acquired hypothyroidism	0	0.0%
Asthma	0	0.0%
Benign prostatic hyperplasia	0	0.0%
Chronic kidney disease	0	0.0%
COPD and bronchiectasis	0	0.0%
Osteoporosis	0	0.0%
<b>Recorded History of Characteristics in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Obesity	0	0.0%
Overweight	0	0.0%
Smoking	0	0.0%
Alcohol Abuse or Dependence	0	0.0%
Drug Abuse or Dependence	0	0.0%
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	0	0.0%

<sup>1</sup>CCW: Chronic Conditions Warehouse

**Table 1b. Aggregated Baseline Table for New Users of Adakveo in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

<b>Characteristic</b>	<b>Number</b>	<b>Percent</b>
Number of episodes	462	
Number of unique patients	462	
<b>Demographics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Mean Age (years)	36.4	10.6
Age (years)	<b>Number</b>	<b>Percent</b>
0-18	*****	*****
19-64	444	96.1%
65+	*****	*****
Sex		
Female	284	61.5%
Male	178	38.5%
Year		
2019	*****	*****
2020	449	97.2%
2021	*****	*****
<b>Recorded History of CCW<sup>1</sup> Conditions in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Acute myocardial infarction	*****	*****
Alzheimer's disease and related conditions	*****	*****
Heart failure	84	18.2%
Depression	206	44.6%
Ischemic heart disease	78	16.9%
Rheumatoid arthritis/osteoarthritis	75	16.2%
Anemia	462	100.0%
Glaucoma	15	3.2%
Atrial fibrillation	13	2.8%
Diabetes	37	8.0%
Hyperlipidemia	34	7.4%
Hypertension	177	38.3%
Stroke/TIA	44	9.5%
Breast cancer	*****	*****
Colorectal cancer	0	0.0%
Prostate cancer	*****	*****
Lung cancer	0	0.0%
Endometrial cancer	0	0.0%
Acquired hypothyroidism	24	5.2%
Asthma	120	26.0%
Benign prostatic hyperplasia	*****	*****
Chronic kidney disease	139	30.1%
COPD and bronchiectasis	52	11.3%
Osteoporosis	12	2.6%
<b>Recorded History of Characteristics in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Obesity	93	20.1%
Overweight	57	12.3%
Smoking	178	38.5%
Alcohol Abuse or Dependence	16	3.5%
Drug Abuse or Dependence	135	29.2%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	12	2.6%

<sup>1</sup>CCW: Chronic Conditions Warehouse

\*\*\*\*\*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 Baseline Table for New Users of Aklief in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

<b>Characteristic</b>	<b>Number</b>	<b>Percent</b>
Number of episodes	5,356	
Number of unique patients	5,356	
<b>Demographics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Mean Age (years)	24.1	11.1
<b>Age (years)</b>	<b>Number</b>	<b>Percent</b>
0-18	2,507	46.8%
19-64	2,822	52.7%
65+	27	0.5%
<b>Sex</b>		
Female	4,068	76.0%
Male	1,288	24.0%
<b>Year</b>		
2019	95	1.8%
2020	4,359	81.4%
2021	902	16.8%
<b>Recorded History of CCW<sup>1</sup> Conditions in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Acute myocardial infarction	*****	*****
Alzheimer's disease and related conditions	*****	*****
Heart failure	*****	*****
Depression	650	12.1%
Ischemic heart disease	26	0.5%
Rheumatoid arthritis/osteoarthritis	96	1.8%
Anemia	207	3.9%
Glaucoma	60	1.1%
Atrial fibrillation	*****	*****
Diabetes	59	1.1%
Hyperlipidemia	161	3.0%
Hypertension	149	2.8%
Stroke/TIA	*****	*****
Breast cancer	13	0.2%
Colorectal cancer	*****	*****
Prostate cancer	*****	*****
Lung cancer	0	0.0%
Endometrial cancer	0	0.0%
Acquired hypothyroidism	134	2.5%
Asthma	171	3.2%
Benign prostatic hyperplasia	*****	*****
Chronic kidney disease	52	1.0%
COPD and bronchiectasis	13	0.2%
Osteoporosis	*****	*****
<b>Recorded History of Characteristics in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Obesity	275	5.1%
Overweight	180	3.4%
Smoking	94	1.8%
Alcohol Abuse or Dependence	36	0.7%
Drug Abuse or Dependence	30	0.6%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	*****	*****

<sup>1</sup>CCW: Chronic Conditions Warehouse

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

**Table 1d. Aggregated Baseline Table for New Users of Balversa in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

<b>Characteristic</b>	<b>Number</b>	<b>Percent</b>
Number of episodes	258	
Number of unique patients	258	
<b>Demographics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Mean Age (years)	71.9	9.9
<b>Age (years)</b>	<b>Number</b>	<b>Percent</b>
0-18	0	0.0%
19-64	52	20.2%
65+	206	79.8%
<b>Sex</b>		
Female	93	36.0%
Male	165	64.0%
<b>Year</b>		
2019	*****	*****
2020	143	55.4%
2021	*****	*****
<b>Recorded History of CCW<sup>1</sup> Conditions in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Acute myocardial infarction	*****	*****
Alzheimer's disease and related conditions	11	4.3%
Heart failure	31	12.0%
Depression	58	22.5%
Ischemic heart disease	100	38.8%
Rheumatoid arthritis/osteoarthritis	62	24.0%
Anemia	203	78.7%
Glaucoma	35	13.6%
Atrial fibrillation	33	12.8%
Diabetes	59	22.9%
Hyperlipidemia	155	60.1%
Hypertension	187	72.5%
Stroke/TIA	11	4.3%
Breast cancer	*****	*****
Colorectal cancer	12	4.7%
Prostate cancer	40	15.5%
Lung cancer	39	15.1%
Endometrial cancer	*****	*****
Acquired hypothyroidism	57	22.1%
Asthma	19	7.4%
Benign prostatic hyperplasia	52	20.2%
Chronic kidney disease	201	77.9%
COPD and bronchiectasis	50	19.4%
Osteoporosis	*****	*****
<b>Recorded History of Characteristics in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Obesity	58	22.5%
Overweight	55	21.3%
Smoking	151	58.5%
Alcohol Abuse or Dependence	*****	*****
Drug Abuse or Dependence	12	4.7%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	26	10.1%

<sup>1</sup>CCW: Chronic Conditions Warehouse

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**Table 1e. Aggregated Baseline Table for New Users of Beovu in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

<b>Characteristic</b>	<b>Number</b>	<b>Percent</b>
Number of episodes	14,280	
Number of unique patients	14,280	
<b>Demographics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Mean Age (years)	81.1	7.7
<b>Age (years)</b>	<b>Number</b>	<b>Percent</b>
0-18	0	0.0%
19-64	165	1.2%
65+	14,115	98.8%
<b>Sex</b>		
Female	8,467	59.3%
Male	5,813	40.7%
<b>Year</b>		
2019	192	1.3%
2020	14,049	98.4%
2021	39	0.3%
<b>Recorded History of CCW<sup>1</sup> Conditions in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Acute myocardial infarction	139	1.0%
Alzheimer's disease and related conditions	897	6.3%
Heart failure	1,868	13.1%
Depression	2,312	16.2%
Ischemic heart disease	4,208	29.5%
Rheumatoid arthritis/osteoarthritis	4,144	29.0%
Anemia	3,284	23.0%
Glaucoma	3,207	22.5%
Atrial fibrillation	2,469	17.3%
Diabetes	3,234	22.6%
Hyperlipidemia	8,828	61.8%
Hypertension	10,251	71.8%
Stroke/TIA	615	4.3%
Breast cancer	727	5.1%
Colorectal cancer	207	1.4%
Prostate cancer	722	5.1%
Lung cancer	172	1.2%
Endometrial cancer	62	0.4%
Acquired hypothyroidism	3,127	21.9%
Asthma	802	5.6%
Benign prostatic hyperplasia	1,572	11.0%
Chronic kidney disease	3,150	22.1%
COPD and bronchiectasis	2,040	14.3%
Osteoporosis	1,546	10.8%
<b>Recorded History of Characteristics in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Obesity	2,788	19.5%
Overweight	2,038	14.3%
Smoking	3,800	26.6%
Alcohol Abuse or Dependence	180	1.3%
Drug Abuse or Dependence	123	0.9%
History of Cardiac Arrest	16	0.1%
History of Coronary Angioplasty or Bypass	1,347	9.4%

<sup>1</sup>CCW: Chronic Conditions Warehouse

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**Table 1f. Aggregated Baseline Table for New Users of Brukinsa in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

<b>Characteristic</b>	<b>Number</b>	<b>Percent</b>
Number of episodes	188	
Number of unique patients	188	
<b>Demographics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Mean Age (years)	76.3	8.4
<b>Age (years)</b>	<b>Number</b>	<b>Percent</b>
0-18	0	0.0%
19-64	18	9.6%
65+	170	90.4%
<b>Sex</b>		
Female	61	32.4%
Male	127	67.6%
<b>Year</b>		
2019	0	0.0%
2020	*****	*****
2021	*****	*****
<b>Recorded History of CCW<sup>1</sup> Conditions in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Acute myocardial infarction	*****	*****
Alzheimer's disease and related conditions	15	8.0%
Heart failure	44	23.4%
Depression	45	23.9%
Ischemic heart disease	76	40.4%
Rheumatoid arthritis/osteoarthritis	47	25.0%
Anemia	117	62.2%
Glaucoma	27	14.4%
Atrial fibrillation	59	31.4%
Diabetes	42	22.3%
Hyperlipidemia	104	55.3%
Hypertension	128	68.1%
Stroke/TIA	12	6.4%
Breast cancer	*****	*****
Colorectal cancer	*****	*****
Prostate cancer	14	7.4%
Lung cancer	*****	*****
Endometrial cancer	0	0.0%
Acquired hypothyroidism	49	26.1%
Asthma	*****	*****
Benign prostatic hyperplasia	40	21.3%
Chronic kidney disease	71	37.8%
COPD and bronchiectasis	29	15.4%
Osteoporosis	11	5.9%
<b>Recorded History of Characteristics in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Obesity	37	19.7%
Overweight	32	17.0%
Smoking	73	38.8%
Alcohol Abuse or Dependence	*****	*****
Drug Abuse or Dependence	*****	*****
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	26	13.8%

<sup>1</sup>CCW: Chronic Conditions Warehouse

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**Table 1g. Aggregated Baseline Table for New Users of Cablivi in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

Characteristic	Number	Percent
Number of episodes	40	
Number of unique patients	40	
Demographics	Mean	Standard Deviation
Mean Age (years)	52	15.3
Age (years)	Number	Percent
0-18	*****	*****
19-64	*****	*****
65+	*****	*****
Sex		
Female	27	67.5%
Male	13	32.5%
Year		
2019	19	47.5%
2020	*****	*****
2021	*****	*****
Recorded History of CCW <sup>1</sup> Conditions in the 365 Days prior to Index	Number	Percent
Acute myocardial infarction	*****	*****
Alzheimer's disease and related conditions	*****	*****
Heart failure	11	27.5%
Depression	*****	*****
Ischemic heart disease	21	52.5%
Rheumatoid arthritis/osteoarthritis	*****	*****
Anemia	38	95.0%
Glaucoma	*****	*****
Atrial fibrillation	*****	*****
Diabetes	15	37.5%
Hyperlipidemia	25	62.5%
Hypertension	30	75.0%
Stroke/TIA	15	37.5%
Breast cancer	0	0.0%
Colorectal cancer	*****	*****
Prostate cancer	0	0.0%
Lung cancer	*****	*****
Endometrial cancer	0	0.0%
Acquired hypothyroidism	*****	*****
Asthma	*****	*****
Benign prostatic hyperplasia	*****	*****
Chronic kidney disease	25	62.5%
COPD and bronchiectasis	*****	*****
Osteoporosis	0	0.0%
Recorded History of Characteristics in the 365 Days prior to Index	Number	Percent
Obesity	19	47.5%
Overweight	*****	*****
Smoking	18	45.0%
Alcohol Abuse or Dependence	*****	*****
Drug Abuse or Dependence	*****	*****
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	*****	*****

<sup>1</sup>CCW: Chronic Conditions Warehouse

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**Table 1h. Aggregated Baseline Table for New Users of Caplyta in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

<b>Characteristic</b>	<b>Number</b>	<b>Percent</b>
Number of episodes	2,200	
Number of unique patients	2,200	
<b>Demographics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Mean Age (years)	47.1	13.1
<b>Age (years)</b>	<b>Number</b>	<b>Percent</b>
0-18	*****	*****
19-64	1,980	90.0%
65+	*****	*****
<b>Sex</b>		
Female	1,057	48.0%
Male	1,143	52.0%
<b>Year</b>		
2019	0	0.0%
2020	2,142	97.4%
2021	58	2.6%
<b>Recorded History of CCW<sup>1</sup> Conditions in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Acute myocardial infarction	*****	*****
Alzheimer's disease and related conditions	149	6.8%
Heart failure	94	4.3%
Depression	1,192	54.2%
Ischemic heart disease	175	8.0%
Rheumatoid arthritis/osteoarthritis	313	14.2%
Anemia	466	21.2%
Glaucoma	99	4.5%
Atrial fibrillation	39	1.8%
Diabetes	578	26.3%
Hyperlipidemia	836	38.0%
Hypertension	929	42.2%
Stroke/TIA	45	2.0%
Breast cancer	22	1.0%
Colorectal cancer	*****	*****
Prostate cancer	*****	*****
Lung cancer	*****	*****
Endometrial cancer	*****	*****
Acquired hypothyroidism	410	18.6%
Asthma	252	11.5%
Benign prostatic hyperplasia	80	3.6%
Chronic kidney disease	363	16.5%
COPD and bronchiectasis	280	12.7%
Osteoporosis	46	2.1%
<b>Recorded History of Characteristics in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Obesity	894	40.6%
Overweight	238	10.8%
Smoking	988	44.9%
Alcohol Abuse or Dependence	229	10.4%
Drug Abuse or Dependence	338	15.4%
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	32	1.5%

<sup>1</sup>CCW: Chronic Conditions Warehouse

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**Table 1i. Aggregated Baseline Table for New Users of Dayvigo in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

<b>Characteristic</b>	<b>Number</b>	<b>Percent</b>
Number of episodes	2,266	
Number of unique patients	2,266	
<b>Demographics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Mean Age (years)	58.2	13.7
<b>Age (years)</b>	<b>Number</b>	<b>Percent</b>
0-18	*****	*****
19-64	1,438	63.5%
65+	*****	*****
<b>Sex</b>		
Female	1,418	62.6%
Male	848	37.4%
<b>Year</b>		
2019	0	0.0%
2020	1,862	82.2%
2021	404	17.8%
<b>Recorded History of CCW<sup>1</sup> Conditions in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Acute myocardial infarction	12	0.5%
Alzheimer's disease and related conditions	119	5.3%
Heart failure	175	7.7%
Depression	1,213	53.5%
Ischemic heart disease	425	18.8%
Rheumatoid arthritis/osteoarthritis	758	33.5%
Anemia	603	26.6%
Glaucoma	192	8.5%
Atrial fibrillation	155	6.8%
Diabetes	508	22.4%
Hyperlipidemia	1,000	44.1%
Hypertension	1,129	49.8%
Stroke/TIA	64	2.8%
Breast cancer	55	2.4%
Colorectal cancer	14	0.6%
Prostate cancer	44	1.9%
Lung cancer	11	0.5%
Endometrial cancer	*****	*****
Acquired hypothyroidism	478	21.1%
Asthma	213	9.4%
Benign prostatic hyperplasia	152	6.7%
Chronic kidney disease	408	18.0%
COPD and bronchiectasis	258	11.4%
Osteoporosis	141	6.2%
<b>Recorded History of Characteristics in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Obesity	730	32.2%
Overweight	333	14.7%
Smoking	581	25.6%
Alcohol Abuse or Dependence	147	6.5%
Drug Abuse or Dependence	174	7.7%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	111	4.9%

<sup>1</sup>CCW: Chronic Conditions Warehouse

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**Table 1j. Aggregated Baseline Table for New Users of Egaten in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

Characteristic	Number	Percent
Number of episodes	0	
Number of unique patients	0	
Demographics	Mean	Standard Deviation
Mean Age (years)	0	0
Age (years)	Number	Percent
0-18	0	0.0%
19-64	0	0.0%
65+	0	0.0%
Sex		
Female	0	0.0%
Male	0	0.0%
Year		
2019	0	0.0%
2020	0	0.0%
2021	0	0.0%
Recorded History of CCW <sup>1</sup> Conditions in the 365 Days prior to Index	Number	Percent
Acute myocardial infarction	0	0.0%
Alzheimer's disease and related conditions	0	0.0%
Heart failure	0	0.0%
Depression	0	0.0%
Ischemic heart disease	0	0.0%
Rheumatoid arthritis/osteoarthritis	0	0.0%
Anemia	0	0.0%
Glaucoma	0	0.0%
Atrial fibrillation	0	0.0%
Diabetes	0	0.0%
Hyperlipidemia	0	0.0%
Hypertension	0	0.0%
Stroke/TIA	0	0.0%
Breast cancer	0	0.0%
Colorectal cancer	0	0.0%
Prostate cancer	0	0.0%
Lung cancer	0	0.0%
Endometrial cancer	0	0.0%
Acquired hypothyroidism	0	0.0%
Asthma	0	0.0%
Benign prostatic hyperplasia	0	0.0%
Chronic kidney disease	0	0.0%
COPD and bronchiectasis	0	0.0%
Osteoporosis	0	0.0%
Recorded History of Characteristics in the 365 Days prior to Index	Number	Percent
Obesity	0	0.0%
Overweight	0	0.0%
Smoking	0	0.0%
Alcohol Abuse or Dependence	0	0.0%
Drug Abuse or Dependence	0	0.0%
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	0	0.0%

<sup>1</sup>CCW: Chronic Conditions Warehouse

**Table 1k. Aggregated Baseline Table for New Users of Enhertu in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

Characteristic	Number	Percent
Number of episodes	901	
Number of unique patients	901	
Demographics	Mean	Standard Deviation
Mean Age (years)	65	11.1
Age (years)	Number	Percent
0-18	0	0.0%
19-64	378	42.0%
65+	523	58.0%
Sex		
Female	834	92.6%
Male	67	7.4%
Year		
2019	0	0.0%
2020	855	94.9%
2021	46	5.1%
Recorded History of CCW <sup>1</sup> Conditions in the 365 Days prior to Index	Number	Percent
Acute myocardial infarction	*****	*****
Alzheimer's disease and related conditions	30	3.3%
Heart failure	136	15.1%
Depression	236	26.2%
Ischemic heart disease	131	14.5%
Rheumatoid arthritis/osteoarthritis	150	16.6%
Anemia	501	55.6%
Glaucoma	71	7.9%
Atrial fibrillation	44	4.9%
Diabetes	155	17.2%
Hyperlipidemia	278	30.9%
Hypertension	453	50.3%
Stroke/TIA	42	4.7%
Breast cancer	813	90.2%
Colorectal cancer	20	2.2%
Prostate cancer	*****	*****
Lung cancer	91	10.1%
Endometrial cancer	*****	*****
Acquired hypothyroidism	164	18.2%
Asthma	56	6.2%
Benign prostatic hyperplasia	15	1.7%
Chronic kidney disease	189	21.0%
COPD and bronchiectasis	62	6.9%
Osteoporosis	58	6.4%
Recorded History of Characteristics in the 365 Days prior to Index	Number	Percent
Obesity	148	16.4%
Overweight	105	11.7%
Smoking	290	32.2%
Alcohol Abuse or Dependence	*****	*****
Drug Abuse or Dependence	21	2.3%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	23	2.6%

<sup>1</sup>CCW: Chronic Conditions Warehouse

\*\*\*\*\*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 1I. Aggregated Baseline Table for New Users of Evenity in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

<b>Characteristic</b>	<b>Number</b>	<b>Percent</b>
Number of episodes	10,820	
Number of unique patients	10,820	
<b>Demographics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Mean Age (years)	74.7	8.2
Age (years)	<b>Number</b>	<b>Percent</b>
0-18	0	0.0%
19-64	920	8.5%
65+	9,900	91.5%
Sex		
Female	10,599	98.0%
Male	221	2.0%
Year		
2019	3,062	28.3%
2020	7,553	69.8%
2021	205	1.9%
<b>Recorded History of CCW<sup>1</sup> Conditions in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Acute myocardial infarction	56	0.5%
Alzheimer's disease and related conditions	717	6.6%
Heart failure	1,040	9.6%
Depression	3,313	30.6%
Ischemic heart disease	2,048	18.9%
Rheumatoid arthritis/osteoarthritis	6,289	58.1%
Anemia	4,055	37.5%
Glaucoma	1,774	16.4%
Atrial fibrillation	1,130	10.4%
Diabetes	1,566	14.5%
Hyperlipidemia	5,966	55.1%
Hypertension	6,455	59.7%
Stroke/TIA	364	3.4%
Breast cancer	900	8.3%
Colorectal cancer	154	1.4%
Prostate cancer	25	0.2%
Lung cancer	155	1.4%
Endometrial cancer	96	0.9%
Acquired hypothyroidism	3,214	29.7%
Asthma	1,117	10.3%
Benign prostatic hyperplasia	76	0.7%
Chronic kidney disease	2,108	19.5%
COPD and bronchiectasis	1,836	17.0%
Osteoporosis	9,468	87.5%
<b>Recorded History of Characteristics in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Obesity	1,588	14.7%
Overweight	1,385	12.8%
Smoking	2,911	26.9%
Alcohol Abuse or Dependence	205	1.9%
Drug Abuse or Dependence	266	2.5%
History of Cardiac Arrest	15	0.1%
History of Coronary Angioplasty or Bypass	397	3.7%

<sup>1</sup>CCW: Chronic Conditions Warehouse

\*\*\*\*\*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 1m. Aggregated Baseline Table for New Users of Exem Foam in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

Characteristic	Number	Percent
Number of episodes	0	
Number of unique patients	0	
Demographics	Mean	Standard Deviation
Mean Age (years)	0	0
Age (years)	Number	Percent
0-18	0	0.0%
19-64	0	0.0%
65+	0	0.0%
Sex		
Female	0	0.0%
Male	0	0.0%
Year		
2019	0	0.0%
2020	0	0.0%
2021	0	0.0%
Recorded History of CCW <sup>1</sup> Conditions in the 365 Days prior to Index	Number	Percent
Acute myocardial infarction	0	0.0%
Alzheimer's disease and related conditions	0	0.0%
Heart failure	0	0.0%
Depression	0	0.0%
Ischemic heart disease	0	0.0%
Rheumatoid arthritis/osteoarthritis	0	0.0%
Anemia	0	0.0%
Glaucoma	0	0.0%
Atrial fibrillation	0	0.0%
Diabetes	0	0.0%
Hyperlipidemia	0	0.0%
Hypertension	0	0.0%
Stroke/TIA	0	0.0%
Breast cancer	0	0.0%
Colorectal cancer	0	0.0%
Prostate cancer	0	0.0%
Lung cancer	0	0.0%
Endometrial cancer	0	0.0%
Acquired hypothyroidism	0	0.0%
Asthma	0	0.0%
Benign prostatic hyperplasia	0	0.0%
Chronic kidney disease	0	0.0%
COPD and bronchiectasis	0	0.0%
Osteoporosis	0	0.0%
Recorded History of Characteristics in the 365 Days prior to Index	Number	Percent
Obesity	0	0.0%
Overweight	0	0.0%
Smoking	0	0.0%
Alcohol Abuse or Dependence	0	0.0%
Drug Abuse or Dependence	0	0.0%
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	0	0.0%

<sup>1</sup>CCW: Chronic Conditions Warehouse

**Table 1n. Aggregated Baseline Table for New Users of Fetroja in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

Characteristic	Number	Percent
Number of episodes	*****	*****
Number of unique patients	*****	*****
Demographics	Mean	Standard Deviation
Mean Age (years)	53.4	10.2
Age (years)	Number	Percent
0-18	*****	*****
19-64	*****	*****
65+	*****	*****
Sex		
Female	*****	*****
Male	*****	*****
Year		
2019	*****	*****
2020	*****	*****
2021	*****	*****
Recorded History of CCW <sup>1</sup> Conditions in the 365 Days prior to Index	Number	Percent
Acute myocardial infarction	0	0.0%
Alzheimer's disease and related conditions	0	0.0%
Heart failure	0	0.0%
Depression	*****	*****
Ischemic heart disease	*****	*****
Rheumatoid arthritis/osteoarthritis	*****	*****
Anemia	*****	*****
Glaucoma	0	0.0%
Atrial fibrillation	*****	*****
Diabetes	*****	*****
Hyperlipidemia	*****	*****
Hypertension	*****	*****
Stroke/TIA	0	0.0%
Breast cancer	0	0.0%
Colorectal cancer	0	0.0%
Prostate cancer	0	0.0%
Lung cancer	0	0.0%
Endometrial cancer	0	0.0%
Acquired hypothyroidism	0	0.0%
Asthma	0	0.0%
Benign prostatic hyperplasia	0	0.0%
Chronic kidney disease	*****	*****
COPD and bronchiectasis	*****	*****
Osteoporosis	0	0.0%
Recorded History of Characteristics in the 365 Days prior to Index	Number	Percent
Obesity	*****	*****
Overweight	0	0.0%
Smoking	0	0.0%
Alcohol Abuse or Dependence	0	0.0%
Drug Abuse or Dependence	0	0.0%
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	0	0.0%

<sup>1</sup>CCW: Chronic Conditions Warehouse

\*\*\*\*\*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 1o. Aggregated Baseline Table for New Users of Fluorodopa F18 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

<b>Characteristic</b>	<b>Number</b>	<b>Percent</b>
Number of episodes	0	
Number of unique patients	0	
<b>Demographics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Mean Age (years)	0	0
<b>Age (years)</b>	<b>Number</b>	<b>Percent</b>
0-18	0	0.0%
19-64	0	0.0%
65+	0	0.0%
<b>Sex</b>		
Female	0	0.0%
Male	0	0.0%
<b>Year</b>		
2019	0	0.0%
2020	0	0.0%
2021	0	0.0%
<b>Recorded History of CCW<sup>1</sup> Conditions in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Acute myocardial infarction	0	0.0%
Alzheimer's disease and related conditions	0	0.0%
Heart failure	0	0.0%
Depression	0	0.0%
Ischemic heart disease	0	0.0%
Rheumatoid arthritis/osteoarthritis	0	0.0%
Anemia	0	0.0%
Glaucoma	0	0.0%
Atrial fibrillation	0	0.0%
Diabetes	0	0.0%
Hyperlipidemia	0	0.0%
Hypertension	0	0.0%
Stroke/TIA	0	0.0%
Breast cancer	0	0.0%
Colorectal cancer	0	0.0%
Prostate cancer	0	0.0%
Lung cancer	0	0.0%
Endometrial cancer	0	0.0%
Acquired hypothyroidism	0	0.0%
Asthma	0	0.0%
Benign prostatic hyperplasia	0	0.0%
Chronic kidney disease	0	0.0%
COPD and bronchiectasis	0	0.0%
Osteoporosis	0	0.0%
<b>Recorded History of Characteristics in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Obesity	0	0.0%
Overweight	0	0.0%
Smoking	0	0.0%
Alcohol Abuse or Dependence	0	0.0%
Drug Abuse or Dependence	0	0.0%
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	0	0.0%

<sup>1</sup>CCW: Chronic Conditions Warehouse

**Table 1p. Aggregated Baseline Table for New Users of Ga68 Dotatoc in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

Characteristic	Number	Percent
Number of episodes	14	
Number of unique patients	14	
Demographics	Mean	Standard Deviation
Mean Age (years)	68.9	10.7
Age (years)	Number	Percent
0-18	0	0.0%
19-64	*****	*****
65+	*****	*****
Sex		
Female	*****	*****
Male	*****	*****
Year		
2019	0	0.0%
2020	*****	*****
2021	*****	*****
Recorded History of CCW <sup>1</sup> Conditions in the 365 Days prior to Index	Number	Percent
Acute myocardial infarction	0	0.0%
Alzheimer's disease and related conditions	*****	*****
Heart failure	*****	*****
Depression	*****	*****
Ischemic heart disease	*****	*****
Rheumatoid arthritis/osteoarthritis	*****	*****
Anemia	*****	*****
Glaucoma	*****	*****
Atrial fibrillation	*****	*****
Diabetes	*****	*****
Hyperlipidemia	*****	*****
Hypertension	11	78.6%
Stroke/TIA	0	0.0%
Breast cancer	*****	*****
Colorectal cancer	0	0.0%
Prostate cancer	*****	*****
Lung cancer	*****	*****
Endometrial cancer	0	0.0%
Acquired hypothyroidism	*****	*****
Asthma	*****	*****
Benign prostatic hyperplasia	*****	*****
Chronic kidney disease	*****	*****
COPD and bronchiectasis	*****	*****
Osteoporosis	*****	*****
Recorded History of Characteristics in the 365 Days prior to Index	Number	Percent
Obesity	*****	*****
Overweight	0	0.0%
Smoking	*****	*****
Alcohol Abuse or Dependence	*****	*****
Drug Abuse or Dependence	0	0.0%
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	*****	*****

<sup>1</sup>CCW: Chronic Conditions Warehouse

\*\*\*\*\*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 1q. Aggregated Baseline Table for New Users of Givlaari in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

<b>Characteristic</b>	<b>Number</b>	<b>Percent</b>
Number of episodes	36	
Number of unique patients	36	
<b>Demographics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Mean Age (years)	46.9	12.3
<b>Age (years)</b>	<b>Number</b>	<b>Percent</b>
0-18	0	0.0%
19-64	*****	*****
65+	*****	*****
<b>Sex</b>		
Female	*****	*****
Male	*****	*****
<b>Year</b>		
2019	0	0.0%
2020	*****	*****
2021	*****	*****
<b>Recorded History of CCW<sup>1</sup> Conditions in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Acute myocardial infarction	0	0.0%
Alzheimer's disease and related conditions	*****	*****
Heart failure	*****	*****
Depression	16	44.4%
Ischemic heart disease	*****	*****
Rheumatoid arthritis/osteoarthritis	*****	*****
Anemia	16	44.4%
Glaucoma	*****	*****
Atrial fibrillation	0	0.0%
Diabetes	*****	*****
Hyperlipidemia	*****	*****
Hypertension	19	52.8%
Stroke/TIA	0	0.0%
Breast cancer	0	0.0%
Colorectal cancer	0	0.0%
Prostate cancer	0	0.0%
Lung cancer	0	0.0%
Endometrial cancer	0	0.0%
Acquired hypothyroidism	*****	*****
Asthma	*****	*****
Benign prostatic hyperplasia	*****	*****
Chronic kidney disease	11	30.6%
COPD and bronchiectasis	0	0.0%
Osteoporosis	*****	*****
<b>Recorded History of Characteristics in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Obesity	*****	*****
Overweight	*****	*****
Smoking	14	38.9%
Alcohol Abuse or Dependence	*****	*****
Drug Abuse or Dependence	*****	*****
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	0	0.0%

<sup>1</sup>CCW: Chronic Conditions Warehouse

\*\*\*\*\*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 1r. Aggregated Baseline Table for New Users of Ibsrela in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

Characteristic	Number	Percent
Number of episodes	0	
Number of unique patients	0	
Demographics	Mean	Standard Deviation
Mean Age (years)	0	0
Age (years)	Number	Percent
0-18	0	0.0%
19-64	0	0.0%
65+	0	0.0%
Sex		
Female	0	0.0%
Male	0	0.0%
Year		
2019	0	0.0%
2020	0	0.0%
2021	0	0.0%
Recorded History of CCW <sup>1</sup> Conditions in the 365 Days prior to Index	Number	Percent
Acute myocardial infarction	0	0.0%
Alzheimer's disease and related conditions	0	0.0%
Heart failure	0	0.0%
Depression	0	0.0%
Ischemic heart disease	0	0.0%
Rheumatoid arthritis/osteoarthritis	0	0.0%
Anemia	0	0.0%
Glaucoma	0	0.0%
Atrial fibrillation	0	0.0%
Diabetes	0	0.0%
Hyperlipidemia	0	0.0%
Hypertension	0	0.0%
Stroke/TIA	0	0.0%
Breast cancer	0	0.0%
Colorectal cancer	0	0.0%
Prostate cancer	0	0.0%
Lung cancer	0	0.0%
Endometrial cancer	0	0.0%
Acquired hypothyroidism	0	0.0%
Asthma	0	0.0%
Benign prostatic hyperplasia	0	0.0%
Chronic kidney disease	0	0.0%
COPD and bronchiectasis	0	0.0%
Osteoporosis	0	0.0%
Recorded History of Characteristics in the 365 Days prior to Index	Number	Percent
Obesity	0	0.0%
Overweight	0	0.0%
Smoking	0	0.0%
Alcohol Abuse or Dependence	0	0.0%
Drug Abuse or Dependence	0	0.0%
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	0	0.0%

<sup>1</sup>CCW: Chronic Conditions Warehouse

**Table 1s. Aggregated Baseline Table for New Users of Inrebic in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

<b>Characteristic</b>	<b>Number</b>	<b>Percent</b>
Number of episodes	390	
Number of unique patients	390	
<b>Demographics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Mean Age (years)	74	8.1
Age (years)	<b>Number</b>	<b>Percent</b>
0-18	0	0.0%
19-64	47	12.1%
65+	343	87.9%
Sex		
Female	179	45.9%
Male	211	54.1%
Year		
2019	*****	*****
2020	229	58.7%
2021	*****	*****
<b>Recorded History of CCW<sup>1</sup> Conditions in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Acute myocardial infarction	*****	*****
Alzheimer's disease and related conditions	26	6.7%
Heart failure	117	30.0%
Depression	101	25.9%
Ischemic heart disease	131	33.6%
Rheumatoid arthritis/osteoarthritis	96	24.6%
Anemia	332	85.1%
Glaucoma	44	11.3%
Atrial fibrillation	59	15.1%
Diabetes	82	21.0%
Hyperlipidemia	199	51.0%
Hypertension	275	70.5%
Stroke/TIA	18	4.6%
Breast cancer	19	4.9%
Colorectal cancer	*****	*****
Prostate cancer	29	7.4%
Lung cancer	*****	*****
Endometrial cancer	*****	*****
Acquired hypothyroidism	99	25.4%
Asthma	20	5.1%
Benign prostatic hyperplasia	63	16.2%
Chronic kidney disease	189	48.5%
COPD and bronchiectasis	61	15.6%
Osteoporosis	23	5.9%
<b>Recorded History of Characteristics in the 365 Days prior to Index</b>	<b>Number</b>	<b>Percent</b>
Obesity	75	19.2%
Overweight	65	16.7%
Smoking	156	40.0%
Alcohol Abuse or Dependence	12	3.1%
Drug Abuse or Dependence	*****	*****
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	48	12.3%

<sup>1</sup>CCW: Chronic Conditions Warehouse

\*\*\*\*\*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 1t. Aggregated Baseline Table for New Users of Jeuveau in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

Characteristic	Number	Percent
Number of episodes	0	
Number of unique patients	0	
Demographics	Mean	Standard Deviation
Mean Age (years)	0	0
Age (years)	Number	Percent
0-18	0	0.0%
19-64	0	0.0%
65+	0	0.0%
Sex		
Female	0	0.0%
Male	0	0.0%
Year		
2019	0	0.0%
2020	0	0.0%
2021	0	0.0%
Recorded History of CCW <sup>1</sup> Conditions in the 365 Days prior to Index	Number	Percent
Acute myocardial infarction	0	0.0%
Alzheimer's disease and related conditions	0	0.0%
Heart failure	0	0.0%
Depression	0	0.0%
Ischemic heart disease	0	0.0%
Rheumatoid arthritis/osteoarthritis	0	0.0%
Anemia	0	0.0%
Glaucoma	0	0.0%
Atrial fibrillation	0	0.0%
Diabetes	0	0.0%
Hyperlipidemia	0	0.0%
Hypertension	0	0.0%
Stroke/TIA	0	0.0%
Breast cancer	0	0.0%
Colorectal cancer	0	0.0%
Prostate cancer	0	0.0%
Lung cancer	0	0.0%
Endometrial cancer	0	0.0%
Acquired hypothyroidism	0	0.0%
Asthma	0	0.0%
Benign prostatic hyperplasia	0	0.0%
Chronic kidney disease	0	0.0%
COPD and bronchiectasis	0	0.0%
Osteoporosis	0	0.0%
Recorded History of Characteristics in the 365 Days prior to Index	Number	Percent
Obesity	0	0.0%
Overweight	0	0.0%
Smoking	0	0.0%
Alcohol Abuse or Dependence	0	0.0%
Drug Abuse or Dependence	0	0.0%
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	0	0.0%

<sup>1</sup>CCW: Chronic Conditions Warehouse

**Table 1u. Aggregated Baseline Table for New Users of Mayzent in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

Characteristic	Number	Percent
Number of episodes	776	
Number of unique patients	776	
Demographics	Mean	Standard Deviation
Mean Age (years)	53.5	10.8
Age (years)	Number	Percent
0-18	0	0.0%
19-64	651	83.9%
65+	125	16.1%
Sex		
Female	584	75.3%
Male	192	24.7%
Year		
2019	265	34.1%
2020	484	62.4%
2021	27	3.5%
Recorded History of CCW <sup>1</sup> Conditions in the 365 Days prior to Index	Number	Percent
Acute myocardial infarction	0	0.0%
Alzheimer's disease and related conditions	35	4.5%
Heart failure	18	2.3%
Depression	306	39.4%
Ischemic heart disease	49	6.3%
Rheumatoid arthritis/osteoarthritis	139	17.9%
Anemia	150	19.3%
Glaucoma	89	11.5%
Atrial fibrillation	*****	*****
Diabetes	79	10.2%
Hyperlipidemia	218	28.1%
Hypertension	247	31.8%
Stroke/TIA	21	2.7%
Breast cancer	*****	*****
Colorectal cancer	*****	*****
Prostate cancer	*****	*****
Lung cancer	0	0.0%
Endometrial cancer	*****	*****
Acquired hypothyroidism	99	12.8%
Asthma	39	5.0%
Benign prostatic hyperplasia	28	3.6%
Chronic kidney disease	69	8.9%
COPD and bronchiectasis	37	4.8%
Osteoporosis	59	7.6%
Recorded History of Characteristics in the 365 Days prior to Index	Number	Percent
Obesity	158	20.4%
Overweight	73	9.4%
Smoking	209	26.9%
Alcohol Abuse or Dependence	20	2.6%
Drug Abuse or Dependence	25	3.2%
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	*****	*****

<sup>1</sup>CCW: Chronic Conditions Warehouse

\*\*\*\*\*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 1v. Aggregated Baseline Table for New Users of Nouriaz in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

Characteristic	Number	Percent
Number of episodes	1,890	
Number of unique patients	1,890	
Demographics	Mean	Standard Deviation
Mean Age (years)	73.5	8.2
Age (years)	Number	Percent
0-18	0	0.0%
19-64	248	13.1%
65+	1,642	86.9%
Sex		
Female	793	42.0%
Male	1,097	58.0%
Year		
2019	95	5.0%
2020	1,757	93.0%
2021	38	2.0%
Recorded History of CCW <sup>1</sup> Conditions in the 365 Days prior to Index	Number	Percent
Acute myocardial infarction	11	0.6%
Alzheimer's disease and related conditions	381	20.2%
Heart failure	187	9.9%
Depression	698	36.9%
Ischemic heart disease	478	25.3%
Rheumatoid arthritis/osteoarthritis	593	31.4%
Anemia	512	27.1%
Glaucoma	305	16.1%
Atrial fibrillation	196	10.4%
Diabetes	362	19.2%
Hyperlipidemia	938	49.6%
Hypertension	1,052	55.7%
Stroke/TIA	108	5.7%
Breast cancer	52	2.8%
Colorectal cancer	22	1.2%
Prostate cancer	92	4.9%
Lung cancer	*****	*****
Endometrial cancer	*****	*****
Acquired hypothyroidism	355	18.8%
Asthma	81	4.3%
Benign prostatic hyperplasia	320	16.9%
Chronic kidney disease	311	16.5%
COPD and bronchiectasis	139	7.4%
Osteoporosis	189	10.0%
Recorded History of Characteristics in the 365 Days prior to Index	Number	Percent
Obesity	259	13.7%
Overweight	238	12.6%
Smoking	348	18.4%
Alcohol Abuse or Dependence	25	1.3%
Drug Abuse or Dependence	32	1.7%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	143	7.6%

<sup>1</sup>CCW: Chronic Conditions Warehouse

\*\*\*\*\*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 1w. Aggregated Baseline Table for New Users of Nubeqa in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

Characteristic	Number	Percent
Number of episodes	1,178	
Number of unique patients	1,178	
Demographics	Mean	Standard Deviation
Mean Age (years)	78	8.1
Age (years)	Number	Percent
0-18	0	0.0%
19-64	52	4.4%
65+	1,126	95.6%
Sex		
Female	*****	*****
Male	*****	*****
Year		
2019	217	18.4%
2020	930	78.9%
2021	31	2.6%
Recorded History of CCW <sup>1</sup> Conditions in the 365 Days prior to Index	Number	Percent
Acute myocardial infarction	15	1.3%
Alzheimer's disease and related conditions	99	8.4%
Heart failure	167	14.2%
Depression	206	17.5%
Ischemic heart disease	442	37.5%
Rheumatoid arthritis/osteoarthritis	315	26.7%
Anemia	486	41.3%
Glaucoma	209	17.7%
Atrial fibrillation	230	19.5%
Diabetes	352	29.9%
Hyperlipidemia	710	60.3%
Hypertension	877	74.4%
Stroke/TIA	80	6.8%
Breast cancer	*****	*****
Colorectal cancer	40	3.4%
Prostate cancer	1,175	99.7%
Lung cancer	16	1.4%
Endometrial cancer	0	0.0%
Acquired hypothyroidism	126	10.7%
Asthma	49	4.2%
Benign prostatic hyperplasia	203	17.2%
Chronic kidney disease	356	30.2%
COPD and bronchiectasis	134	11.4%
Osteoporosis	113	9.6%
Recorded History of Characteristics in the 365 Days prior to Index	Number	Percent
Obesity	258	21.9%
Overweight	185	15.7%
Smoking	388	32.9%
Alcohol Abuse or Dependence	24	2.0%
Drug Abuse or Dependence	22	1.9%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	139	11.8%

<sup>1</sup>CCW: Chronic Conditions Warehouse

\*\*\*\*\*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 1x. Aggregated Baseline Table for New Users of Oxbryta in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

Characteristic	Number	Percent
Number of episodes	720	
Number of unique patients	720	
Demographics	Mean	Standard Deviation
Mean Age (years)	40.1	12.3
Age (years)	Number	Percent
0-18	20	2.8%
19-64	669	92.9%
65+	31	4.3%
Sex		
Female	448	62.2%
Male	272	37.8%
Year		
2019	13	1.8%
2020	691	96.0%
2021	16	2.2%
Recorded History of CCW <sup>1</sup> Conditions in the 365 Days prior to Index	Number	Percent
Acute myocardial infarction	11	1.5%
Alzheimer's disease and related conditions	14	1.9%
Heart failure	158	21.9%
Depression	237	32.9%
Ischemic heart disease	120	16.7%
Rheumatoid arthritis/osteoarthritis	100	13.9%
Anemia	718	99.7%
Glaucoma	40	5.6%
Atrial fibrillation	40	5.6%
Diabetes	47	6.5%
Hyperlipidemia	73	10.1%
Hypertension	307	42.6%
Stroke/TIA	49	6.8%
Breast cancer	*****	*****
Colorectal cancer	0	0.0%
Prostate cancer	*****	*****
Lung cancer	*****	*****
Endometrial cancer	0	0.0%
Acquired hypothyroidism	49	6.8%
Asthma	140	19.4%
Benign prostatic hyperplasia	17	2.4%
Chronic kidney disease	282	39.2%
COPD and bronchiectasis	84	11.7%
Osteoporosis	27	3.8%
Recorded History of Characteristics in the 365 Days prior to Index	Number	Percent
Obesity	109	15.1%
Overweight	99	13.8%
Smoking	206	28.6%
Alcohol Abuse or Dependence	11	1.5%
Drug Abuse or Dependence	170	23.6%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	21	2.9%

<sup>1</sup>CCW: Chronic Conditions Warehouse

\*\*\*\*\*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 2a. Summary of Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

<b>Drug</b>	<b>Number of New Users</b>	<b>Number of Episodes</b>	<b>Eligible Members<sup>1</sup></b>	<b>Eligible Member Years<sup>1</sup></b>	<b>New Users / 100,000 Eligible Members</b>
Accrufer	0	0	70,410,915	99,809,153.0	0.00
Adakveo	462	462	70,410,861	99,808,930.4	0.66
Aklief	5,356	5,356	70,410,404	99,806,685.8	7.61
Balversa	258	258	70,410,899	99,809,013.4	0.37
Beovu	14,280	14,280	70,410,598	99,797,061.2	20.28
Brukinsa	188	188	70,410,907	99,809,087.6	0.27
Cablivi	40	40	70,410,913	99,809,118.9	0.06
Caplyta	2,200	2,200	70,410,772	99,808,448.3	3.12
Dayvigo	2,266	2,266	70,410,721	99,808,588.2	3.22
Egaten	0	0	70,410,915	99,809,153.0	0.00
Enhertu	901	901	70,410,828	99,808,786.2	1.28
Evenity	10,820	10,820	70,410,144	99,801,563.4	15.37
Exem Foam	0	0	70,410,915	99,809,153.0	0.00
Fetroja	*****	*****	*****	99,809,152.6	0.00
Fluorodopa F 18	0	0	70,410,915	99,809,153.0	0.00
Ga 68 Dotatoc	14	14	70,410,913	99,809,149.9	0.02
Givlaari	36	36	70,410,909	99,809,135.5	0.05
Ibsrela	0	0	70,410,915	99,809,153.0	0.00
Inrebic	390	390	70,410,886	99,808,884.8	0.55
Jeuveau	0	0	70,410,915	99,809,153.0	0.00
Mayzent	776	776	70,410,801	99,808,500.4	1.10
Nourianz	1,890	1,890	70,410,798	99,808,161.3	2.68
Nubeqa	1,178	1,178	70,410,845	99,808,425.7	1.67
Oxbryta	720	720	70,410,850	99,808,748.7	1.02

<sup>1</sup>Eligible Members and Member-years are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.

\*\*\*\*\*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 2b. Summary of Follow-Up Time for Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021**

Drug	Number of New Users	Counts of New Users by Length of Follow-Up Time in Years <sup>1</sup>			Summary Statistics for Length of Follow-Up Time in Days						
		< 1	1-2	3+	Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Accrufer	0	0	0	0							
Adakveo	462	*****	*****	0	1	97	168	239	385	166	87
Aklief	5,356	4,977	379	0	1	66	136	239	493	160	114
Balversa	258	226	32	0	2	67	153	262	572	185	142
Beovu	14,280	13,091	1,189	0	1	301	332	352	661	307	84
Brukinsa	188	188	0	0	1	46	113	181	354	125	94
Cablivi	40	26	14	0	8	143	314	431	664	298	180
Caplyta	2,200	2,200	0	0	1	57	106	164	364	114	71
Dayvigo	2,266	2,266	0	0	1	35	77	129	300	88	64
Egaten	0	0	0	0							
Enhertu	901	879	22	0	1	80	157	178	448	144	84
Evenity	10,820	7,795	3,025	0	1	108	242	386	692	246	151
Exem Foam	0	0	0	0							
Fetroja	*****	*****	0	0	24	24	56	75	75	52	26
Fluorodopa F 18	0	0	0	0							
Ga 68 Dotatoc	14	14	0	0	1	26	71	147	175	80	66
Givlaari	36	36	0	0	3	95	181	265	332	176	100
Ibsrela	0	0	0	0							
Inrebic	390	290	100	0	2	100	226	368	588	238	151
Jeuveau	0	0	0	0							
Mayzent	776	508	268	0	1	153	292	413	645	284	157
Nourianz	1,890	1,770	120	0	2	92	178	282	498	188	112
Nubeqa	1,178	969	209	0	2	102	203	333	583	219	136
Oxbryta	720	688	32	0	1	101	201	291	458	196	110

<sup>1</sup>Time to censor is for characterization purposes only. It does not represent at risk time and does not take into account episode end date, outcome occurrence, or blackout period when calculating time to censor.

\*\*\*\*\*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 3a. Summary of Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021, by Sex**

Sex	New Users	New Episodes	Eligible Members <sup>1</sup>	Eligible Member-Years <sup>1</sup>	New Users /100,000 Eligible Members
Accrufer					
Female	0	0	37,310,611	53,498,914.9	0.00
Male	0	0	33,100,304	46,310,238.1	0.00
Adakveo					
Female	284	284	37,310,579	53,498,774.8	0.76
Male	178	178	33,100,282	46,310,155.6	0.54
Aklief					
Female	4,068	4,068	37,310,230	53,497,051.5	10.90
Male	1,288	1,288	33,100,174	46,309,634.3	3.89
Balversa					
Female	93	93	37,310,606	53,498,862.4	0.25
Male	165	165	33,100,293	46,310,151.1	0.50
Beovu					
Female	8,467	8,467	37,310,443	53,491,715.1	22.69
Male	5,813	5,813	33,100,155	46,305,346.1	17.56
Brukinsa					
Female	61	61	37,310,609	53,498,894.6	0.16
Male	127	127	33,100,298	46,310,193.0	0.38
Cablivi					
Female	27	27	37,310,610	53,498,891.3	0.07
Male	13	13	33,100,303	46,310,227.6	0.04
Caplyta					
Female	1,057	1,057	37,310,545	53,498,572.9	2.83
Male	1,143	1,143	33,100,227	46,309,875.3	3.45
Dayvigo					
Female	1,418	1,418	37,310,484	53,498,560.5	3.80
Male	848	848	33,100,237	46,310,027.7	2.56
Egaten					
Female	0	0	37,310,611	53,498,914.9	0.00
Male	0	0	33,100,304	46,310,238.1	0.00
Enhertu					
Female	834	834	37,310,528	53,498,565.6	2.24
Male	67	67	33,100,300	46,310,220.6	0.20
Evenity					
Female	10,599	10,599	37,309,856	53,491,464.2	28.41
Male	221	221	33,100,288	46,310,099.3	0.67
Exem Foam					
Female	0	0	37,310,611	53,498,914.9	0.00
Male	0	0	33,100,304	46,310,238.1	0.00
Fetroja					
Female	*****	*****	*****	53,498,914.6	0.01
Male	*****	*****	*****	46,310,238.0	0.00
Fluorodopa F 18					
Female	0	0	37,310,611	53,498,914.9	0.00
Male	0	0	33,100,304	46,310,238.1	0.00
Ga 68 Dotatoc					
Female	*****	*****	*****	53,498,913.7	0.02
Male	*****	*****	*****	46,310,236.2	0.02
Givlaari					
Female	*****	*****	*****	53,498,901.0	0.08
Male	*****	*****	*****	46,310,234.5	0.02

**Table 3a. Summary of Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021, by Sex**

Sex	New Users	New Episodes	Eligible Members <sup>1</sup>	Eligible Member-Years <sup>1</sup>	New Users /100,000 Eligible Members
Ibsrela					
Female	0	0	37,310,611	53,498,914.9	0.00
Male	0	0	33,100,304	46,310,238.1	0.00
Inrebic					
Female	179	179	37,310,597	53,498,787.6	0.48
Male	211	211	33,100,289	46,310,097.2	0.64
Jeuveau					
Female	0	0	37,310,611	53,498,914.9	0.00
Male	0	0	33,100,304	46,310,238.1	0.00
Mayzent					
Female	584	584	37,310,522	53,498,416.1	1.57
Male	192	192	33,100,279	46,310,084.3	0.58
Nourianz					
Female	793	793	37,310,585	53,498,500.3	2.13
Male	1,097	1,097	33,100,213	46,309,661.0	3.31
Nubeqa					
Female	*****	*****	*****	53,498,914.1	0.00
Male	*****	*****	*****	46,309,511.6	3.56
Oxbryta					
Female	448	448	37,310,568	53,498,667.3	1.20
Male	272	272	33,100,282	46,310,081.5	0.82

<sup>1</sup>Eligible Members and Member Years are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.

\*\*\*\*\*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 3b. Summary of Follow-Up Time for Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021, by Sex**

Sex	Number of New Users	Counts of New Users by Length of Follow-Up Time in Years <sup>1</sup>		
		< 1	1-2	3+
Accrufer				
Female	0	0	0	0
Male	0	0	0	0
Adakveo				
Female	284	*****	*****	0
Male	178	*****	*****	0
Aklief				
Female	4,068	3,794	274	0
Male	1,288	1,183	105	0
Balversa				
Female	93	82	11	0
Male	165	144	21	0
Beovu				
Female	8,467	7,782	685	0
Male	5,813	5,309	504	0
Brukinsa				
Female	61	61	0	0
Male	127	127	0	0
Cablivi				
Female	27	*****	*****	0
Male	13	*****	*****	0
Caplyta				
Female	1,057	1,057	0	0
Male	1,143	1,143	0	0
Dayvigo				
Female	1,418	1,418	0	0
Male	848	848	0	0
Egaten				
Female	0	0	0	0
Male	0	0	0	0
Enhertu				
Female	834	812	22	0
Male	67	67	0	0
Evenity				
Female	10,599	7,616	2,983	0
Male	221	179	42	0
Exem Foam				
Female	0	0	0	0
Male	0	0	0	0
Fetroja				
Female	*****	*****	0	0
Male	*****	*****	0	0
Fluorodopa F 18				
Female	0	0	0	0
Male	0	0	0	0
Ga 68 Dotatoc				
Female	*****	*****	0	0
Male	*****	*****	0	0

**Table 3b. Summary of Follow-Up Time for Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021, by Sex**

Sex	Number of New Users	Counts of New Users by Length of Follow-Up Time in Years <sup>1</sup>		
		< 1	1-2	3+
Givlaari				
Female	*****	*****	0	0
Male	*****	*****	0	0
Ibsrela				
Female	0	0	0	0
Male	0	0	0	0
Inrebic				
Female	179	136	43	0
Male	211	154	57	0
Jeuveau				
Female	0	0	0	0
Male	0	0	0	0
Mayzent				
Female	584	379	205	0
Male	192	129	63	0
Nourianz				
Female	793	748	45	0
Male	1,097	1,022	75	0
Nubeqa				
Female	*****	*****	0	0
Male	*****	*****	209	0
Oxbryta				
Female	448	432	16	0
Male	272	256	16	0

<sup>1</sup>Time to censor is for characterization purposes only. It does not represent at-risk time and does not take into account episode end date, outcome occurrence or blackout period when calculating time to censor.

\*\*\*\*\*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 4a. Summary of Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021, by Age Group**

Age Group (Years)	Number of New Users	Number of Episodes	Eligible Members <sup>1</sup>	Eligible Member Years <sup>1</sup>	New Users /100,000 Eligible Members
<b>Accrufer</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	0	0	33,887,627	43371756.6	0.00
65+ Years	0	0	28,800,508	45070839.0	0.00
<b>Adakveo</b>					
0-18 Years	*****	*****	*****	11366554.3	0.10
19-64 Years	444	444	33,887,575	43371542.0	1.31
65+ Years	*****	*****	*****	45070834.2	0.03
<b>Aklief</b>					
0-18 Years	2,507	2,507	9,317,627	11365466.5	26.91
19-64 Years	2,822	2,822	33,887,168	43370389.4	8.33
65+ Years	27	27	28,800,507	45070829.9	0.09
<b>Balversa</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	52	52	33,887,623	43371729.1	0.15
65+ Years	206	206	28,800,494	45070726.8	0.72
<b>Beovu</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	165	165	33,887,613	43371635.1	0.49
65+ Years	14,115	14,115	28,800,190	45058868.7	49.01
<b>Brukinsa</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	18	18	33,887,627	43371748.8	0.05
65+ Years	170	170	28,800,500	45070781.3	0.59
<b>Cablivi</b>					
0-18 Years	*****	*****	*****	11366556.1	0.01
19-64 Years	*****	*****	*****	43371729.3	0.09
65+ Years	*****	*****	*****	45070833.4	0.03
<b>Caplyta</b>					
0-18 Years	*****	*****	*****	11366553.2	0.10
19-64 Years	1,980	1,980	33,887,498	43371127.6	5.84
65+ Years	*****	*****	*****	45070767.5	0.73
<b>Dayvigo</b>					
0-18 Years	*****	*****	*****	11366556.7	0.04
19-64 Years	1,438	1,438	33,887,479	43371384.1	4.24
65+ Years	*****	*****	*****	45070647.4	2.86
<b>Egaten</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	0	0	33,887,627	43371756.6	0.00
65+ Years	0	0	28,800,508	45070839.0	0.00
<b>Enhertu</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	378	378	33,887,583	43371590.7	1.12
65+ Years	523	523	28,800,459	45070638.1	1.82
<b>Evenity</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	920	920	33,887,511	43371139.4	2.71
65+ Years	9,900	9,900	28,799,803	45063866.6	34.38
<b>Exem Foam</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	0	0	33,887,627	43371756.6	0.00
65+ Years	0	0	28,800,508	45070839.0	0.00



**Table 4a. Summary of Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021, by Age Group**

Age Group (Years)	Number of New Users	Number of Episodes	Eligible Members <sup>1</sup>	Eligible Member Years <sup>1</sup>	New Users /100,000 Eligible Members
<b>Fetroja</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	*****	*****	*****	43371756.2	0.01
65+ Years	*****	*****	*****	45070839.0	0.00
<b>Fluorodopa F 18</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	0	0	33,887,627	43371756.6	0.00
65+ Years	0	0	28,800,508	45070839.0	0.00
<b>Ga 68 Dotatoc</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	*****	*****	*****	43371755.1	0.02
65+ Years	*****	*****	*****	45070837.3	0.03
<b>Givlaari</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	*****	*****	*****	43371741.7	0.09
65+ Years	*****	*****	*****	45070836.3	0.01
<b>lbsrela</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	0	0	33,887,627	43371756.6	0.00
65+ Years	0	0	28,800,508	45070839.0	0.00
<b>Inrebic</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	47	47	33,887,620	43371724.4	0.14
65+ Years	343	343	28,800,484	45070602.9	1.19
<b>Jeuveau</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	0	0	33,887,627	43371756.6	0.00
65+ Years	0	0	28,800,508	45070839.0	0.00
<b>Mayzent</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	651	651	33,887,527	43371233.8	1.92
65+ Years	125	125	28,800,477	45070709.1	0.43
<b>Nouriaz</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	248	248	33,887,594	43371620.1	0.73
65+ Years	1,642	1,642	28,800,403	45069983.7	5.70
<b>Nubeqa</b>					
0-18 Years	0	0	9,317,821	11366557.5	0.00
19-64 Years	52	52	33,887,621	43371729.5	0.15
65+ Years	1,126	1,126	28,800,442	45070138.7	3.91
<b>Oxbryta</b>					
0-18 Years	20	20	9,317,817	11366546.6	0.21
19-64 Years	669	669	33,887,568	43371381.9	1.97
65+ Years	31	31	28,800,503	45070820.2	0.11

<sup>1</sup>Eligible Members and Member-Years are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.

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

**Table 4b. Summary of Follow-Up Time for Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021, by Age Group**

Age Group (Years)	Number of New Users	Counts of New Users by Length of Follow-Up Time in Years <sup>1</sup>		
		< 1	1-2	3+
<b>Accrufer</b>				
0-18 Years	0	0	0	0
19-64 Years	0	0	0	0
65+ Years	0	0	0	0
<b>Adakveo</b>				
0-18 Years	*****	*****	*****	0
19-64 Years	444	*****	*****	0
65+ Years	*****	*****	*****	0
<b>Aklief</b>				
0-18 Years	2,507	*****	*****	0
19-64 Years	2,822	2,629	193	0
65+ Years	27	*****	*****	0
<b>Balversa</b>				
0-18 Years	0	0	0	0
19-64 Years	52	*****	*****	0
65+ Years	206	*****	*****	0
<b>Beovu</b>				
0-18 Years	0	0	0	0
19-64 Years	165	128	37	0
65+ Years	14,115	12,963	1,152	0
<b>Brukina</b>				
0-18 Years	0	0	0	0
19-64 Years	18	18	0	0
65+ Years	170	170	0	0
<b>Cablivi</b>				
0-18 Years	*****	*****	*****	0
19-64 Years	*****	*****	*****	0
65+ Years	*****	*****	*****	0
<b>Caplyta</b>				
0-18 Years	*****	*****	0	0
19-64 Years	1,980	1,980	0	0
65+ Years	*****	*****	0	0
<b>Dayvigo</b>				
0-18 Years	*****	*****	0	0
19-64 Years	1,438	1,438	0	0
65+ Years	*****	*****	0	0
<b>Egaten</b>				
0-18 Years	0	0	0	0
19-64 Years	0	0	0	0
65+ Years	0	0	0	0
<b>Enhertu</b>				
0-18 Years	0	0	0	0
19-64 Years	378	*****	*****	0
65+ Years	523	*****	*****	0
<b>Evenity</b>				
0-18 Years	0	0	0	0
19-64 Years	920	674	246	0
65+ Years	9,900	7,121	2,779	0

**Table 4b. Summary of Follow-Up Time for Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021, by Age Group**

Age Group (Years)	Number of New Users	Counts of New Users by Length of Follow-Up Time in Years <sup>1</sup>		
		< 1	1-2	3+
<b>Exem Foam</b>				
0-18 Years	0	0	0	0
19-64 Years	0	0	0	0
65+ Years	0	0	0	0
<b>Fetroja</b>				
0-18 Years	0	0	0	0
19-64 Years	*****	*****	0	0
65+ Years	*****	*****	0	0
<b>Fluorodopa F 18</b>				
0-18 Years	0	0	0	0
19-64 Years	0	0	0	0
65+ Years	0	0	0	0
<b>Ga 68 Dotatoc</b>				
0-18 Years	0	0	0	0
19-64 Years	*****	*****	0	0
65+ Years	*****	*****	0	0
<b>Givlaari</b>				
0-18 Years	0	0	0	0
19-64 Years	*****	*****	0	0
65+ Years	*****	*****	0	0
<b>lbsrela</b>				
0-18 Years	0	0	0	0
19-64 Years	0	0	0	0
65+ Years	0	0	0	0
<b>Inrebic</b>				
0-18 Years	0	0	0	0
19-64 Years	47	33	14	0
65+ Years	343	257	86	0
<b>Jeuveau</b>				
0-18 Years	0	0	0	0
19-64 Years	0	0	0	0
65+ Years	0	0	0	0
<b>Mayzent</b>				
0-18 Years	0	0	0	0
19-64 Years	651	440	211	0
65+ Years	125	68	57	0
<b>Nourianz</b>				
0-18 Years	0	0	0	0
19-64 Years	248	222	26	0
65+ Years	1,642	1,548	94	0
<b>Nubeqa</b>				
0-18 Years	0	0	0	0
19-64 Years	52	*****	*****	0
65+ Years	1,126	*****	*****	0
<b>Oxbryta</b>				
0-18 Years	20	20	0	0
19-64 Years	669	*****	*****	0
65+ Years	31	*****	*****	0

<sup>1</sup>Time to censor is for characterization purposes only. It does not represent at-risk time and does not take into account episode end date, outcome occurrence, or blackout period when calculating time to censor.

\*\*\*\*\*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 5a. Summary of Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021, by Year**

Drug	New Users	New Episodes	Eligible Members <sup>1</sup>	Eligible Member-Years <sup>1</sup>	New Users /100,000 Eligible Members
Accrufer					
2019	0	0	55,407,042	48,668,768.1	0.00
2020	0	0	58,973,543	47,734,395.4	0.00
2021	0	0	15,462,831	3,405,989.5	0.00
Adakveo					
2019	****	****	****	48,668,768.0	0.00
2020	449	449	58,973,488	47,734,187.4	0.76
2021	****	****	****	3,405,975.0	0.07
Aklief					
2019	95	95	55,407,042	48,668,763.2	0.17
2020	4,359	4,359	58,972,922	47,732,691.6	7.39
2021	902	902	15,460,130	3,405,231.0	5.83
Balversa					
2019	****	****	****	48,668,739.3	0.20
2020	143	143	58,973,457	47,734,288.5	0.24
2021	****	****	****	3,405,985.6	0.02
Beovu					
2019	192	192	55,407,042	48,668,752.8	0.35
2020	14,049	14,049	58,973,025	47,722,622.4	23.82
2021	39	39	15,461,381	3,405,686.0	0.25
Brukinsa					
2019	0	0	55,407,042	48,668,768.1	0.00
2020	****	****	****	47,734,334.0	0.30
2021	****	****	****	3,405,985.5	0.06
Cablivi					
2019	19	19	55,407,041	48,668,761.8	0.03
2020	****	****	****	47,734,370.2	0.03
2021	****	****	****	3,405,986.9	0.01
Caplyta					
2019	0	0	55,407,042	48,668,768.1	0.00
2020	2,142	2,142	58,973,390	47,733,743.8	3.63
2021	58	58	15,462,594	3,405,936.4	0.38
Dayvigo					
2019	0	0	55,407,042	48,668,768.1	0.00
2020	1,862	1,862	58,973,366	47,734,017.4	3.16
2021	404	404	15,462,191	3,405,802.7	2.61
Egaten					
2019	0	0	55,407,042	48,668,768.1	0.00
2020	0	0	58,973,543	47,734,395.4	0.00
2021	0	0	15,462,831	3,405,989.5	0.00
Enhertu					
2019	0	0	55,407,042	48,668,768.1	0.00
2020	855	855	58,973,457	47,734,068.1	1.45
2021	46	46	15,462,668	3,405,950.0	0.30
Evenity					
2019	3,062	3,062	55,407,015	48,668,232.1	5.53
2020	7,553	7,553	58,969,786	47,727,584.9	12.81
2021	205	205	15,461,778	3,405,746.4	1.33
Exem Foam					
2019	0	0	55,407,042	48,668,768.1	0.00
2020	0	0	58,973,543	47,734,395.4	0.00
2021	0	0	15,462,831	3,405,989.5	0.00

**Table 5a. Summary of Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021, by Year**

Drug	New Users	New Episodes	Eligible Members <sup>1</sup>	Eligible Member-Years <sup>1</sup>	New Users /100,000 Eligible Members
Fetroja					
2019	0	0	55,407,042	48,668,768.1	0.00
2020	****	****	****	47,734,395.1	0.00
2021	****	****	****	3,405,989.4	0.01
Fluorodopa F 18					
2019	0	0	55,407,042	48,668,768.1	0.00
2020	0	0	58,973,543	47,734,395.4	0.00
2021	0	0	15,462,831	3,405,989.5	0.00
Ga 68 Dotatoc					
2019	0	0	55,407,042	48,668,768.1	0.00
2020	****	****	****	47,734,394.0	0.02
2021	****	****	****	3,405,987.8	0.02
Givlaari					
2019	0	0	55,407,042	48,668,768.1	0.00
2020	****	****	****	47,734,378.8	0.06
2021	****	****	****	3,405,988.6	0.02
lbsrela					
2019	0	0	55,407,042	48,668,768.1	0.00
2020	0	0	58,973,543	47,734,395.4	0.00
2021	0	0	15,462,831	3,405,989.5	0.00
Inrebic					
2019	****	****	****	48,668,741.9	0.28
2020	229	229	58,973,374	47,734,162.3	0.39
2021	****	****	****	3,405,980.7	0.04
Jeuveau					
2019	0	0	55,407,042	48,668,768.1	0.00
2020	0	0	58,973,543	47,734,395.4	0.00
2021	0	0	15,462,831	3,405,989.5	0.00
Mayzent					
2019	265	265	55,407,039	48,668,708.3	0.48
2020	484	484	58,973,176	47,733,850.8	0.82
2021	27	27	15,462,626	3,405,941.3	0.17
Nourianz					
2019	95	95	55,407,041	48,668,761.9	0.17
2020	1,757	1,757	58,973,334	47,733,457.7	2.98
2021	38	38	15,462,616	3,405,941.7	0.25
Nubeqa					
2019	217	217	55,407,041	48,668,730.8	0.39
2020	930	930	58,973,264	47,733,737.6	1.58
2021	31	31	15,462,684	3,405,957.3	0.20
Oxbryta					
2019	13	13	55,407,042	48,668,767.8	0.02
2020	691	691	58,973,455	47,734,015.9	0.45
2021	16	16	15,462,719	3,405,965.0	0.10

<sup>1</sup>Eligible Members and Member-Years are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.

\*\*\*\*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 5b. Summary of Follow-Up Time for Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021, by Year**

Year	Number of New Users	Counts of New Users by Length of Follow-Up Time in Years <sup>1</sup>		
		< 1	1-2	3+
Accrufer				
2019	0	0	0	0
2020	0	0	0	0
2021	0	0	0	0
Adakveo				
2019	*****	*****	*****	0
2020	449	*****	*****	0
2021	*****	*****	*****	0
Aklief				
2019	95	29	66	0
2020	4,359	4,046	313	0
2021	902	902	0	0
Balversa				
2019	*****	*****	*****	0
2020	143	*****	*****	0
2021	*****	*****	*****	0
Beovu				
2019	192	24	168	0
2020	14,049	13,028	1,021	0
2021	39	39	0	0
Brukinsa				
2019	0	0	0	0
2020	*****	*****	*****	0
2021	*****	*****	*****	0
Cablivi				
2019	*****	*****	*****	0
2020	*****	*****	*****	0
2021	*****	*****	*****	0
Caplyta				
2019	0	0	0	0
2020	2,142	2,142	0	0
2021	58	58	0	0
Dayvigo				
2019	0	0	0	0
2020	1,862	1,862	0	0
2021	404	404	0	0
Egaten				
2019	0	0	0	0
2020	0	0	0	0
2021	0	0	0	0
Enhertu				
2019	0	0	0	0
2020	855	833	22	0
2021	46	46	0	0
Evenity				
2019	3,062	199	2,863	0
2020	7,553	7,391	162	0
2021	205	205	0	0

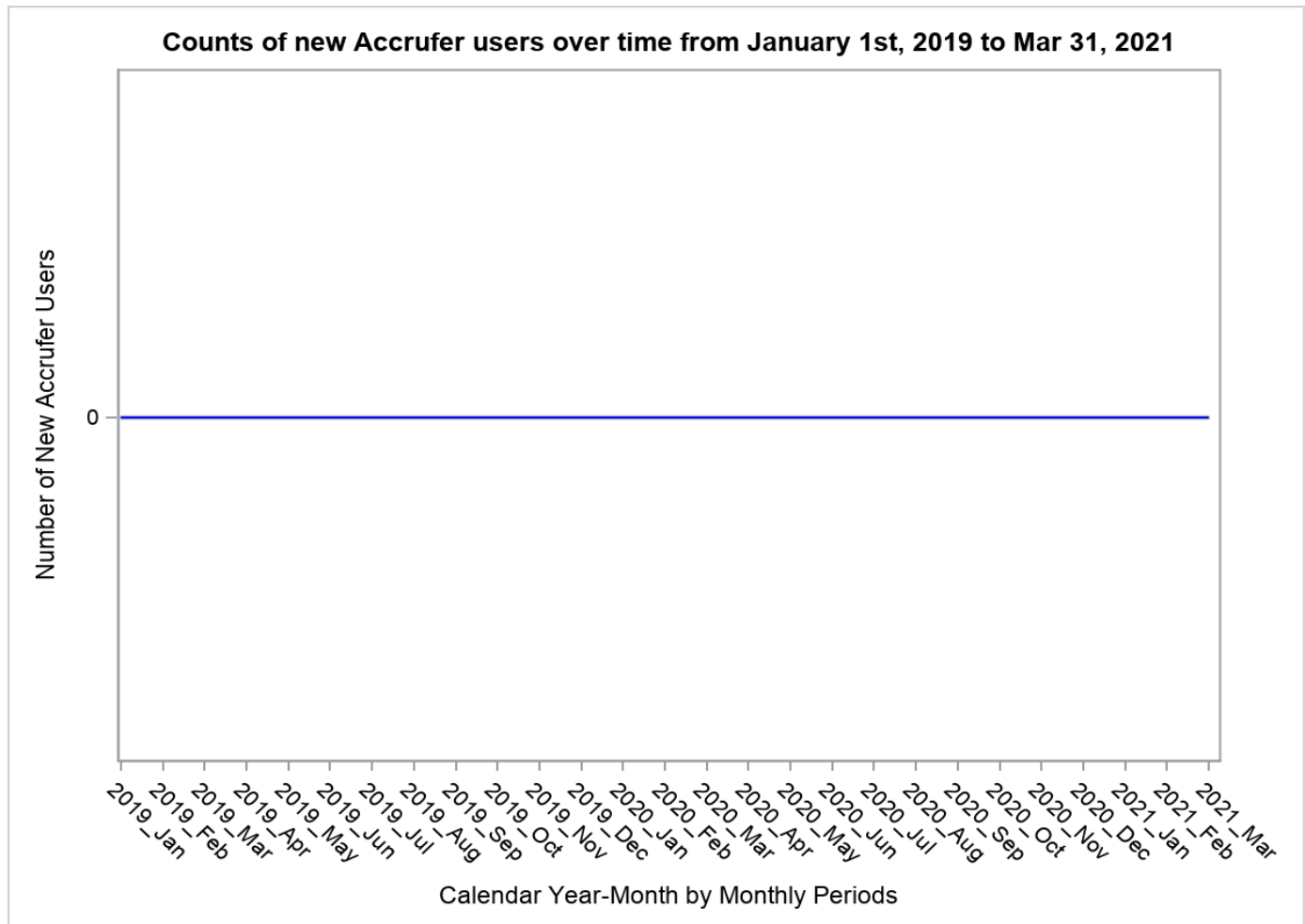
**Table 5b. Summary of Follow-Up Time for Patients Treated with a New Molecular Entities Approved in 2019 in the Sentinel Distributed Database (SDD) between January 1, 2019 and March 31, 2021, by Year**

Year	Number of New Users	Counts of New Users by Length of Follow-Up Time in Years <sup>1</sup>		
		< 1	1-2	3+
<b>Exem Foam</b>				
2019	0	0	0	0
2020	0	0	0	0
2021	0	0	0	0
<b>Fetroja</b>				
2019	*****	*****	*****	0
2020	*****	*****	*****	0
2021	*****	*****	*****	0
<b>Fluorodopa F 18</b>				
2019	0	0	0	0
2020	0	0	0	0
2021	0	0	0	0
<b>Ga 68 Dotatoc</b>				
2019	0	0	0	0
2020	*****	*****	*****	0
2021	*****	*****	*****	0
<b>Givlaari</b>				
2019	0	0	0	0
2020	*****	*****	*****	0
2021	*****	*****	*****	0
<b>lbsrela</b>				
2019	0	0	0	0
2020	0	0	0	0
2021	0	0	0	0
<b>Inrebic</b>				
2019	155	*****	*****	0
2020	*****	*****	*****	0
2021	*****	*****	*****	0
<b>Jeuveau</b>				
2019	0	0	0	0
2020	0	0	0	0
2021	0	0	0	0
<b>Mayzent</b>				
2019	265	34	231	0
2020	484	447	37	0
2021	27	27	0	0
<b>Nourianz</b>				
2019	*****	*****	*****	0
2020	1,757	1,722	35	0
2021	*****	*****	*****	0
<b>Nubeqa</b>				
2019	217	38	179	0
2020	930	900	30	0
2021	31	31	0	0
<b>Oxbryta</b>				
2019	13	0	13	0
2020	691	672	19	0
2021	16	16	0	0

<sup>1</sup>Time to censor is for characterization purposes only. It does not represent at-risk time and does not take into account episode end date, outcome occurrence, or blackout period when calculating time to censor.

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

Figure 1. Counts of New Users of Accrufer in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021



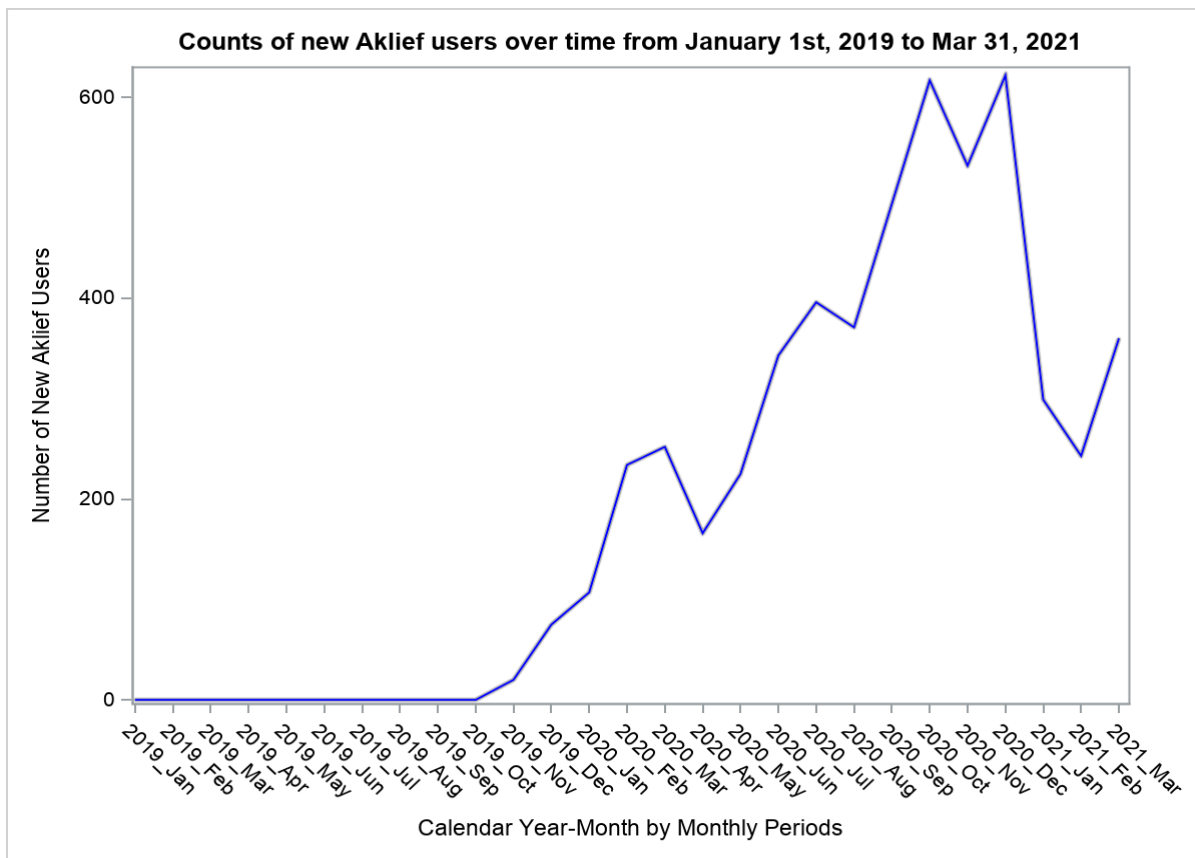


**Figure 2. Counts of New Users of Adakveo in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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

**Figure 3. Counts of New Users of Akliet in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**



**Figure 4. Counts of New Users of Balversa in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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

**Figure 5. Counts of New Users of Beovu in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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

**Figure 6. Counts of New Users of Brukinsa in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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

**Figure 7. Counts of New Users of Cablivi in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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

**Figure 8. Counts of New Users of Caplyta in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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

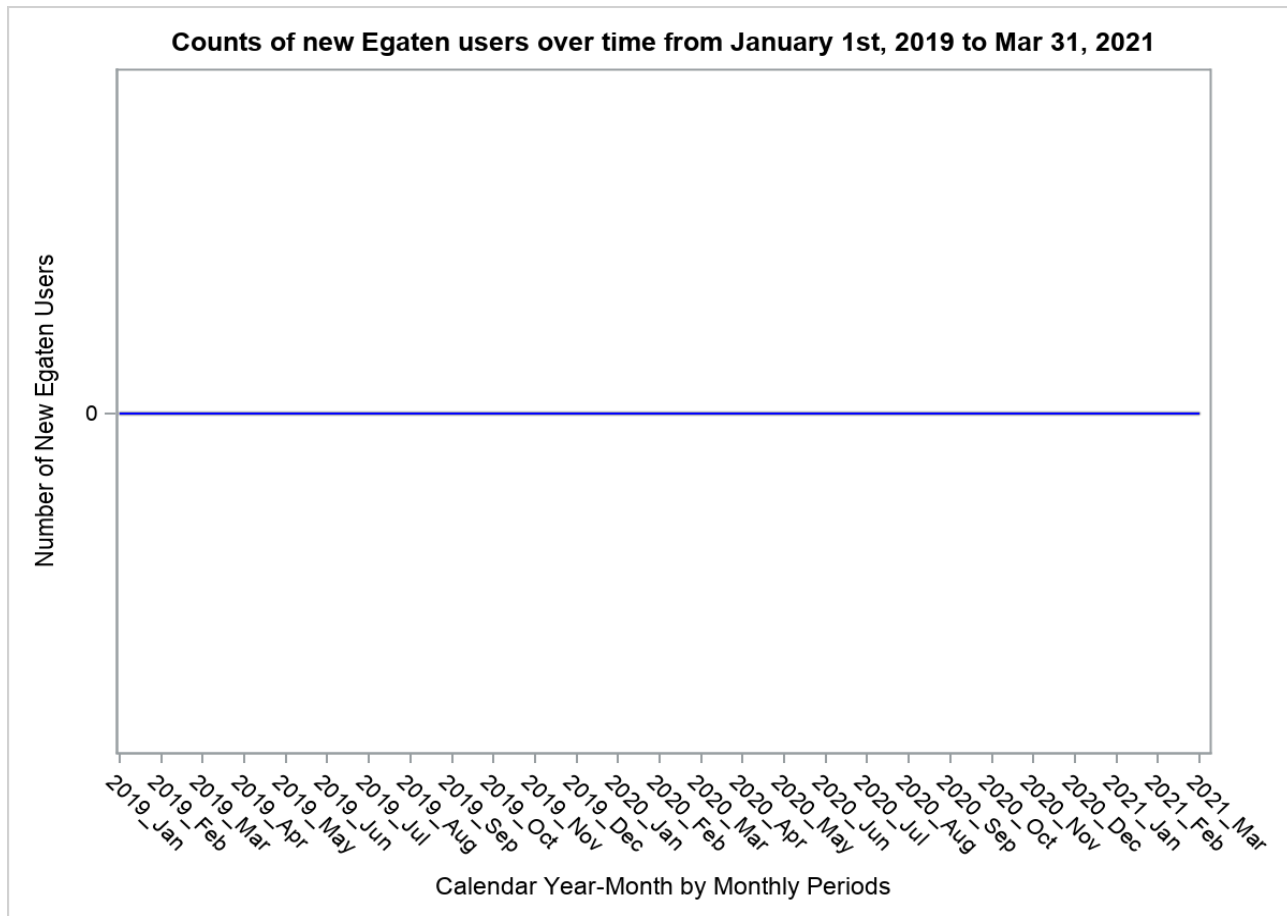
**Figure 9. Counts of New Users of Dayvigo in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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



Figure 10. Counts of New Users of Egaten in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021



**Figure 11. Counts of New Users of Enhertu in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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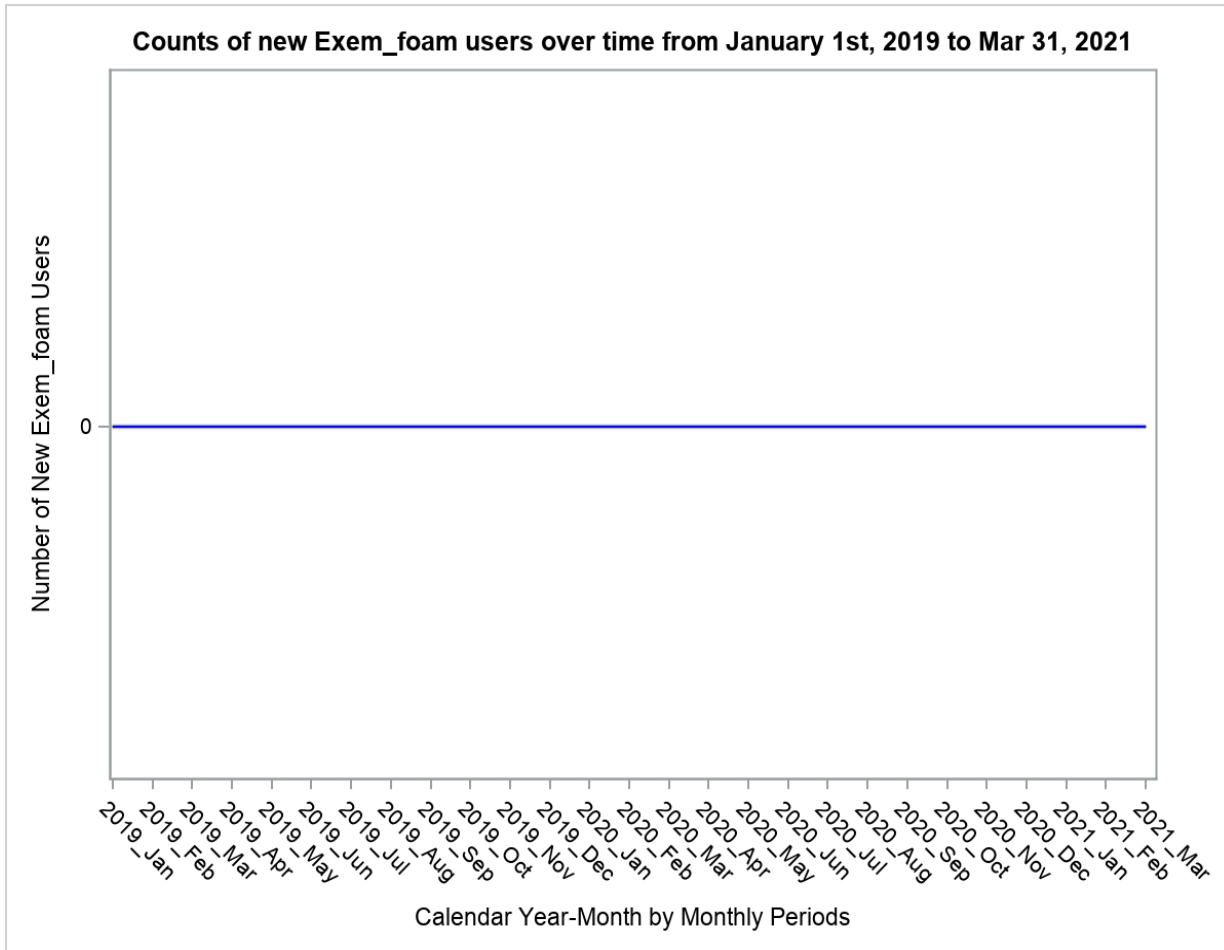
\*\*\*\*\*Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

**Figure 12. Counts of New Users of Evenity in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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

Figure 13. Counts of New Users of Exem Foam in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021

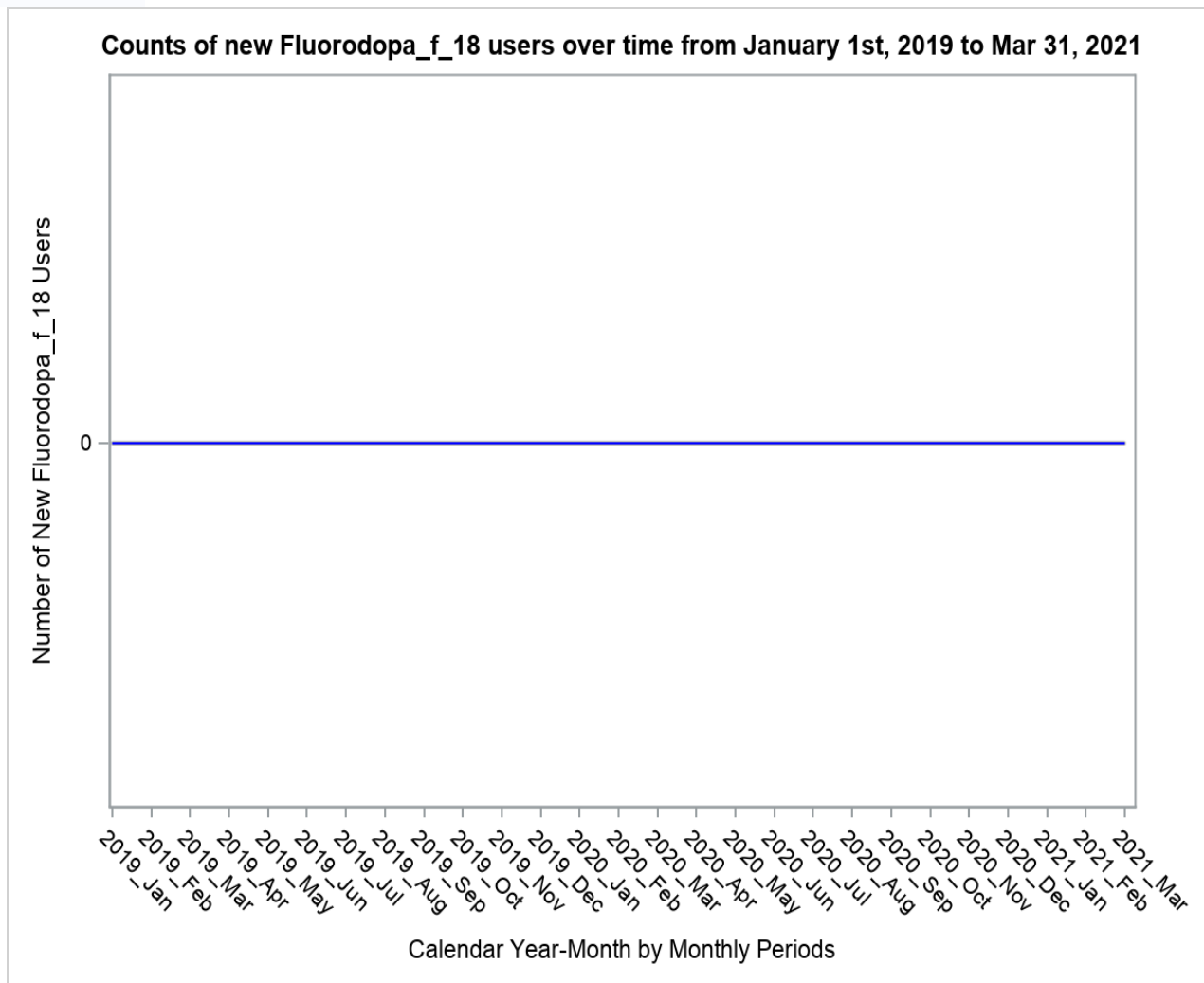


**Figure 14. Counts of New Users of Fetroja in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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

Figure 15. Counts of New Users of Fluorodopa F18 in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021



**Figure 16. Counts of New Users of Ga68 Dotatoc in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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

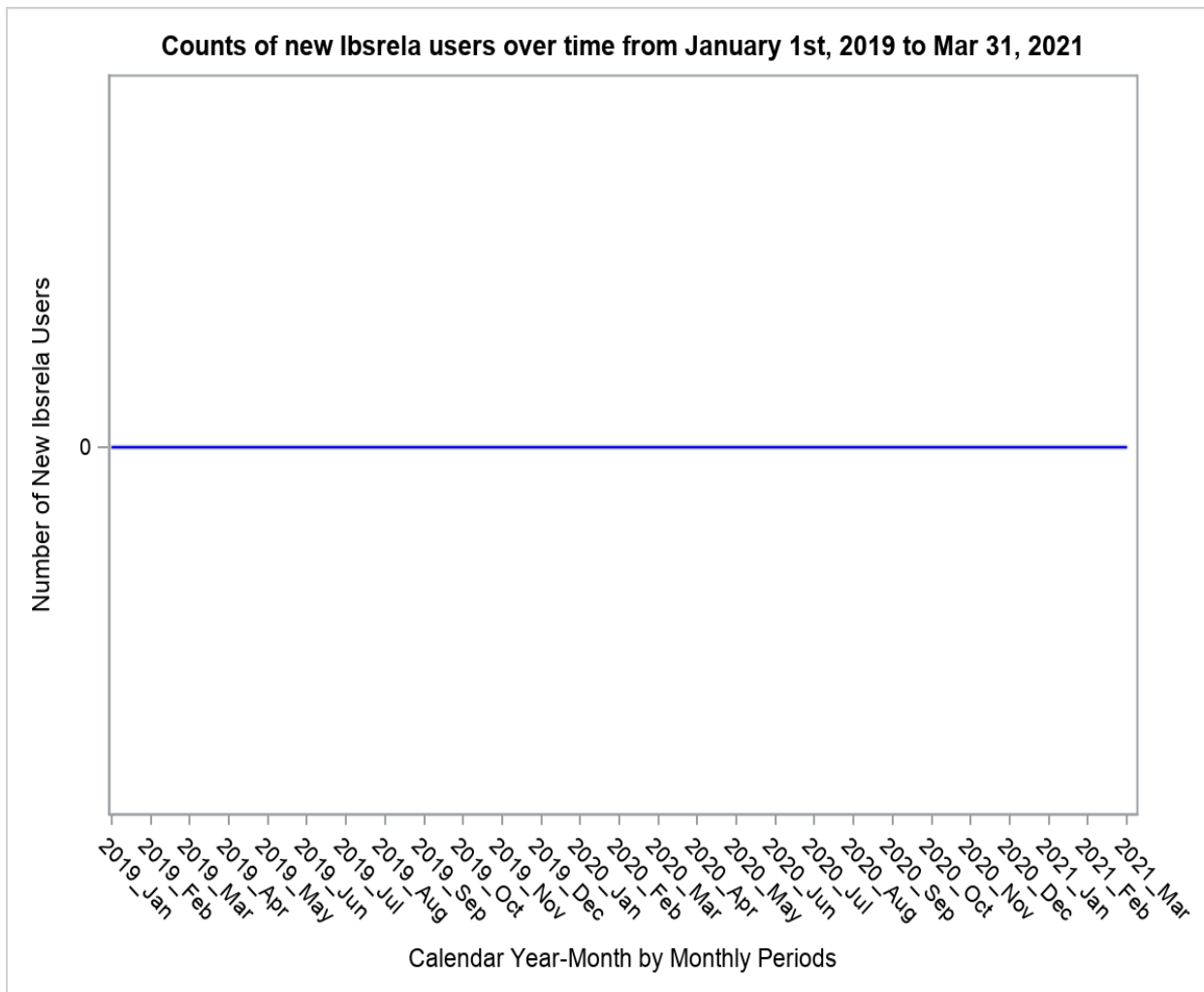
**Figure 17. Counts of New Users of Givlaari in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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



Figure 18. Counts of New Users of Ibsrela in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021

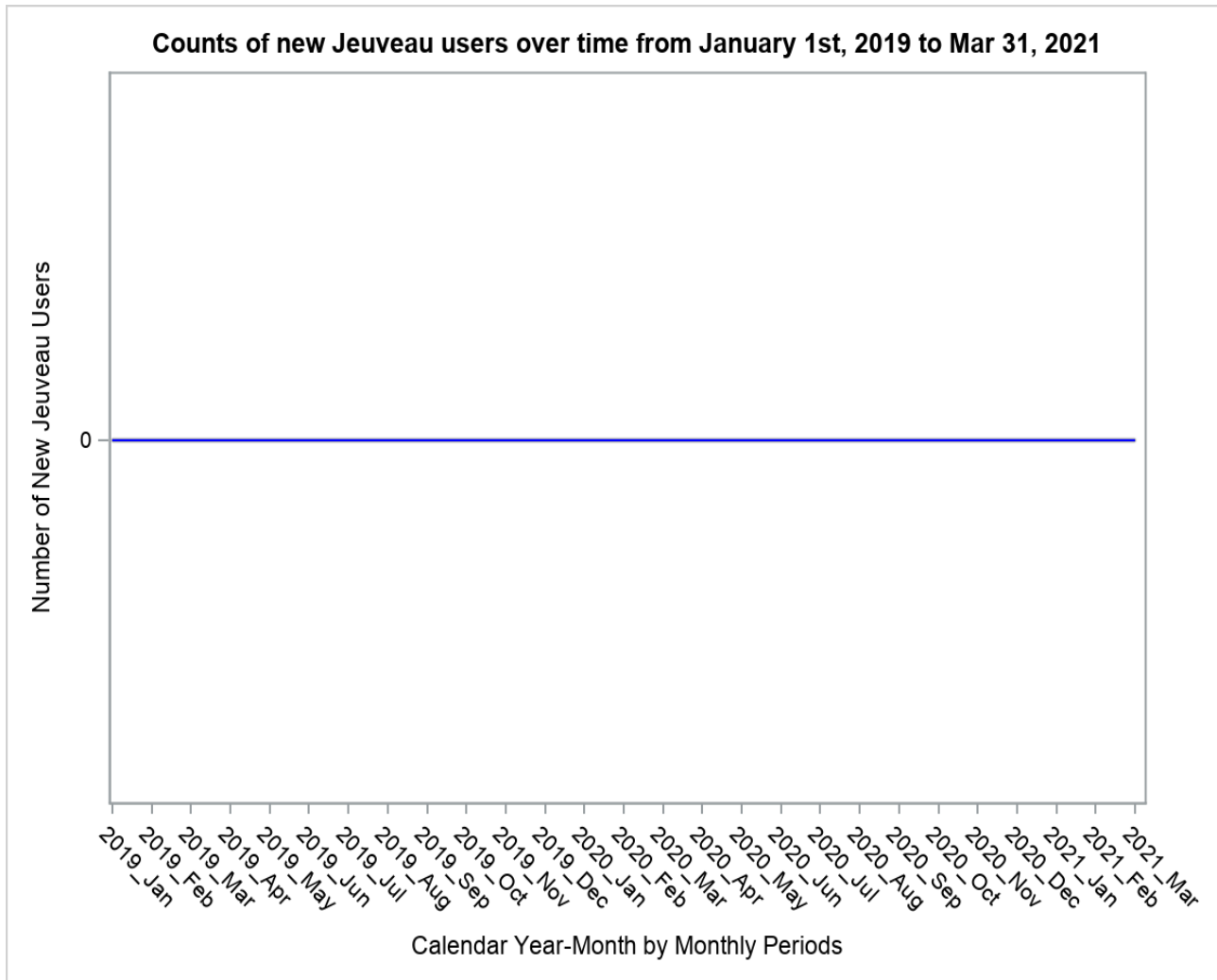


**Figure 19. Counts of New Users of Inrebic in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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

Figure 20. Counts of New Users of Jueveau in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021



**Figure 21. Counts of New Users of Mayzent in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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

**Figure 22. Counts of New Users of Nouriaz in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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

**Figure 23. Counts of New Users of Nubeqa in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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

**Figure 24. Counts of New Users of Oxbryta in the Sentinel Distributed Database (SDD) Over Time From January 1, 2019 to March 31, 2021**

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\*\*\*\*\*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.

**Appendix A. Start and End Dates for Each Data Partner up to Request End Date (09/30/2021)**

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<b>Masked ID</b>	<b>DP Start Date*</b>	<b>DP End Date*</b>
DP01	01/01/2008	12/31/2020
DP02	01/01/2007	02/28/2021
DP03	01/01/2006	03/31/2021
DP04	01/01/2008	12/31/2020
DP05	01/01/2000	12/31/2019
DP06	01/01/2010	12/31/2020

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



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

Generic Name		Brand Name
	<b>Accrufer</b>	
ferric maltol		Ferric Maltol
	<b>Fluorodopa F18</b>	
Fluorodopa F 18		Fluorodopa F 18
	<b>Ibsrela</b>	
Tenapor		Ibsrela
	<b>Exem Foam</b>	
air polymer-type A		Exem Foam
	<b>Beovu</b>	
brolocizumab-dbll		Beovu
	<b>Cablivi</b>	
caplacizumab-yhdp		Cablivi
	<b>Fetroja</b>	
cefiderocol sulfate tosylate		Fetroja
	<b>Adakveo</b>	
crizanlizumab-tmca		Adakveo
	<b>Nubeqa</b>	
darolutamide		Nubeqa
	<b>Balversa</b>	
erdafitinib		Balversa
	<b>Enhertu</b>	
fam-trastuzumab deruxtecan-nxki		Enhertu
	<b>Inrebic</b>	
fedratinib dihydrochloride		Inrebic
	<b>Gallium Ga-68 Dotatoc</b>	
gallium Ga-68 dotatoc		Gallium Ga-68 Dotatoc
	<b>Givlaari</b>	
givosiran sodium		Givlaari
	<b>Nourianz</b>	
istradefylline		Nourianz
	<b>Dayvigo</b>	
lemborexant		Dayvigo
	<b>Caplyta</b>	
lumateperone tosylate		Caplyta
	<b>Jeuveau</b>	
prabotulinumtoxinA-xvfs		Jeuveau
	<b>Evenity</b>	
romosozumab-aqqg		Evenity
	<b>Mayzent</b>	
siponimod		Mayzent
	<b>Egaten</b>	
triclabendazole		Egaten
	<b>Aklief</b>	
trifarotene		Aklief
	<b>Oxbryta</b>	
voxelotor		Oxbryta
	<b>Brukinsa</b>	
zanubrutinib		Brukinsa

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

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
<b>Adakveo</b>			
C9053	INJECTION CRIZANLIZUMAB-TMCA 1 MG	Procedure	HCPCS
J0791	INJECTION CRIZANLIZUMAB-TMCA 5 MG	Procedure	HCPCS
<b>Beovu</b>			
J0179	INJECTION BROLUCIZUMAB-DBLL 1 MG	Procedure	HCPCS
<b>Cablivi</b>			
C9047	INJECTION CAPLACIZUMAB-YHDP 1 MG	Procedure	HCPCS
<b>Enhertu</b>			
J9358	INJ FAM-TRSTUZUMB DRUXTCN-NXKI 1 MG	Procedure	HCPCS
<b>Evenity</b>			
J3111	INJECTION ROMOSUZUMAB-AQQG 1 MG	Procedure	HCPCS
<b>Fetroja</b>			
J0693	INJECTION CEFIDEROCOL 5 MG	Procedure	HCPCS
<b>Fluorodopa f18</b>			
C1775	RADOPHRM DX FLUORODEOXYGLU F18-DOSE	Procedure	HCPCS
<b>Gallium Ga-68 dotatoc</b>			
C9067	GALLIUM GA-68 DOTATOC DIAG 0.01 MCI	Procedure	HCPCS
<b>Givlaari</b>			
C9056	INJECTION GIVOSIRAN 0.5 MG	Procedure	HCPCS
J0223	INJECTION GIVOSIRAN 0.5 MG	Procedure	HCPCS

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

<b>Code</b>		<b>Code Category</b>	<b>Code Type</b>
<b>Hyperlipidemia</b>			
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
<b>Depression</b>			
F31.30	Bipolar disorder, current episode depressed, mild or moderate severity, unspecified	Diagnosis	ICD-10-CM
F31.31	Bipolar disorder, current episode depressed, mild	Diagnosis	ICD-10-CM
F31.32	Bipolar disorder, current episode depressed, moderate	Diagnosis	ICD-10-CM
F31.4	Bipolar disorder, current episode depressed, severe, without psychotic features	Diagnosis	ICD-10-CM
F31.5	Bipolar disorder, current episode depressed, severe, with psychotic features	Diagnosis	ICD-10-CM
F31.60	Bipolar disorder, current episode mixed, unspecified	Diagnosis	ICD-10-CM
F31.61	Bipolar disorder, current episode mixed, mild	Diagnosis	ICD-10-CM
F31.62	Bipolar disorder, current episode mixed, moderate	Diagnosis	ICD-10-CM
F31.63	Bipolar disorder, current episode mixed, severe, without psychotic features	Diagnosis	ICD-10-CM
F31.64	Bipolar disorder, current episode mixed, severe, with psychotic features	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
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
F32.9	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-10-CM
F33.0	Major depressive disorder, recurrent, mild	Diagnosis	ICD-10-CM
F33.1	Major depressive disorder, recurrent, moderate	Diagnosis	ICD-10-CM
F33.2	Major depressive disorder, recurrent severe without psychotic features	Diagnosis	ICD-10-CM
F33.3	Major depressive disorder, recurrent, severe with psychotic symptoms	Diagnosis	ICD-10-CM
F33.40	Major depressive disorder, recurrent, in remission, unspecified	Diagnosis	ICD-10-CM
F33.41	Major depressive disorder, recurrent, in partial remission	Diagnosis	ICD-10-CM
F33.42	Major depressive disorder, recurrent, in full remission	Diagnosis	ICD-10-CM
F33.8	Other recurrent depressive disorders	Diagnosis	ICD-10-CM
F33.9	Major depressive disorder, recurrent, unspecified	Diagnosis	ICD-10-CM
F34.1	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
<b>Endometrial Cancer</b>			
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

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

		<b>Code</b>	
<b>Code</b>		<b>Category</b>	<b>Code Type</b>
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
<b>Acquired Hypothyroidism</b>			
E01.8	Other iodine-deficiency related thyroid disorders and allied conditions	Diagnosis	ICD-10-CM
E02	Subclinical iodine-deficiency hypothyroidism	Diagnosis	ICD-10-CM
E03.2	Hypothyroidism due to medicaments and other exogenous substances	Diagnosis	ICD-10-CM
E03.3	Postinfectious hypothyroidism	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
<b>Asthma</b>			
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
J82.83	Eosinophilic asthma	Diagnosis	ICD-10-CM
<b>Chronic Obstructive Pulmonary Disorder</b>			
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
J43.8	Other emphysema	Diagnosis	ICD-10-CM
J43.9	Emphysema, unspecified	Diagnosis	ICD-10-CM
J44.0	Chronic obstructive pulmonary disease with (acute) lower respiratory infection	Diagnosis	ICD-10-CM
J44.1	Chronic obstructive pulmonary disease with (acute) exacerbation	Diagnosis	ICD-10-CM
J44.9	Chronic obstructive pulmonary disease, unspecified	Diagnosis	ICD-10-CM
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

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

Code		Code Category	Code Type
<b>Obesity</b>			
0D16079	Bypass Stomach to Duodenum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1607A	Bypass Stomach to Jejunum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1607B	Bypass Stomach to Ileum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1607L	Bypass Stomach to Transverse Colon with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D160J9	Bypass Stomach to Duodenum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D160JA	Bypass Stomach to Jejunum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D160JB	Bypass Stomach to Ileum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D160JL	Bypass Stomach to Transverse Colon with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D160K9	Bypass Stomach to Duodenum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D160KA	Bypass Stomach to Jejunum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D160KB	Bypass Stomach to Ileum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D160KL	Bypass Stomach to Transverse Colon with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D160Z9	Bypass Stomach to Duodenum, Open Approach	Procedure	ICD-10-PCS
0D160ZA	Bypass Stomach to Jejunum, Open Approach	Procedure	ICD-10-PCS
0D160ZB	Bypass Stomach to Ileum, Open Approach	Procedure	ICD-10-PCS
0D160ZL	Bypass Stomach to Transverse Colon, Open Approach	Procedure	ICD-10-PCS
0D16479	Bypass Stomach to Duodenum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1647A	Bypass Stomach to Jejunum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1647B	Bypass Stomach to Ileum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1647L	Bypass Stomach to Transverse Colon with Autologous Tissue Substitute, Percutaneous Endoscopic App	Procedure	ICD-10-PCS
0D164J9	Bypass Stomach to Duodenum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164JA	Bypass Stomach to Jejunum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164JB	Bypass Stomach to Ileum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164JL	Bypass Stomach to Transverse Colon with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164K9	Bypass Stomach to Duodenum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Appro	Procedure	ICD-10-PCS
0D164KA	Bypass Stomach to Jejunum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approac	Procedure	ICD-10-PCS
0D164KB	Bypass Stomach to Ileum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164KL	Bypass Stomach to Transverse Colon with Nonautologous Tissue Substitute, Percutaneous Endoscopic	Procedure	ICD-10-PCS
0D164Z9	Bypass Stomach to Duodenum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164ZA	Bypass Stomach to Jejunum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164ZB	Bypass Stomach to Ileum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164ZL	Bypass Stomach to Transverse Colon, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D16879	Bypass Stomach to Duodenum with Autologous Tissue Substitute, Via Natural or Artificial Opening End	Procedure	ICD-10-PCS
0D1687A	Bypass Stomach to Jejunum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endosc	Procedure	ICD-10-PCS
0D1687B	Bypass Stomach to Ileum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endosco	Procedure	ICD-10-PCS
0D1687L	Bypass Stomach to Transverse Colon with Autologous Tissue Substitute, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0D168J9	Bypass Stomach to Duodenum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168JA	Bypass Stomach to Jejunum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168JB	Bypass Stomach to Ileum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168JL	Bypass Stomach to Transverse Colon with Synthetic Substitute, Via Natural or Artificial Opening Endosc	Procedure	ICD-10-PCS
0D168K9	Bypass Stomach to Duodenum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0D168KA	Bypass Stomach to Jejunum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening En	Procedure	ICD-10-PCS
0D168KB	Bypass Stomach to Ileum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endo	Procedure	ICD-10-PCS
0D168KL	Bypass Stomach to Transverse Colon with Nonautologous Tissue Substitute, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0D168Z9	Bypass Stomach to Duodenum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168ZA	Bypass Stomach to Jejunum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
0D168ZB	Bypass Stomach to Ileum, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D168ZL	Bypass Stomach to Transverse Colon, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D19079	Bypass Duodenum to Duodenum with Autologous Tissue Substitute, Open Approach	Procedure ICD-10-PCS
0D1907A	Bypass Duodenum to Jejunum with Autologous Tissue Substitute, Open Approach	Procedure ICD-10-PCS
0D1907B	Bypass Duodenum to Ileum with Autologous Tissue Substitute, Open Approach	Procedure ICD-10-PCS
0D190J9	Bypass Duodenum to Duodenum with Synthetic Substitute, Open Approach	Procedure ICD-10-PCS
0D190JA	Bypass Duodenum to Jejunum with Synthetic Substitute, Open Approach	Procedure ICD-10-PCS
0D190JB	Bypass Duodenum to Ileum with Synthetic Substitute, Open Approach	Procedure ICD-10-PCS
0D190K9	Bypass Duodenum to Duodenum with Nonautologous Tissue Substitute, Open Approach	Procedure ICD-10-PCS
0D190KA	Bypass Duodenum to Jejunum with Nonautologous Tissue Substitute, Open Approach	Procedure ICD-10-PCS
0D190KB	Bypass Duodenum to Ileum with Nonautologous Tissue Substitute, Open Approach	Procedure ICD-10-PCS
0D190Z9	Bypass Duodenum to Duodenum, Open Approach	Procedure ICD-10-PCS
0D190ZA	Bypass Duodenum to Jejunum, Open Approach	Procedure ICD-10-PCS
0D190ZB	Bypass Duodenum to Ileum, Open Approach	Procedure ICD-10-PCS
0D19479	Bypass Duodenum to Duodenum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D1947A	Bypass Duodenum to Jejunum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D1947B	Bypass Duodenum to Ileum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D194J9	Bypass Duodenum to Duodenum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D194JA	Bypass Duodenum to Jejunum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D194JB	Bypass Duodenum to Ileum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D194K9	Bypass Duodenum to Duodenum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D194KA	Bypass Duodenum to Jejunum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D194KB	Bypass Duodenum to Ileum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D194Z9	Bypass Duodenum to Duodenum, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D194ZA	Bypass Duodenum to Jejunum, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D194ZB	Bypass Duodenum to Ileum, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D19879	Bypass Duodenum to Duodenum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D1987A	Bypass Duodenum to Jejunum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D1987B	Bypass Duodenum to Ileum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D198J9	Bypass Duodenum to Duodenum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D198JA	Bypass Duodenum to Jejunum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D198JB	Bypass Duodenum to Ileum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D198K9	Bypass Duodenum to Duodenum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D198KA	Bypass Duodenum to Jejunum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D198KB	Bypass Duodenum to Ileum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D198Z9	Bypass Duodenum to Duodenum, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D198ZA	Bypass Duodenum to Jejunum, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D198ZB	Bypass Duodenum to Ileum, Via Natural or Artificial Opening Endoscopic	Procedure ICD-10-PCS
0D1A07A	Bypass Jejunum to Jejunum with Autologous Tissue Substitute, Open Approach	Procedure ICD-10-PCS
0D1A07B	Bypass Jejunum to Ileum with Autologous Tissue Substitute, Open Approach	Procedure ICD-10-PCS
0D1A0JA	Bypass Jejunum to Jejunum with Synthetic Substitute, Open Approach	Procedure ICD-10-PCS
0D1A0JB	Bypass Jejunum to Ileum with Synthetic Substitute, Open Approach	Procedure ICD-10-PCS
0D1A0KA	Bypass Jejunum to Jejunum with Nonautologous Tissue Substitute, Open Approach	Procedure ICD-10-PCS
0D1A0KB	Bypass Jejunum to Ileum with Nonautologous Tissue Substitute, Open Approach	Procedure ICD-10-PCS
0D1A0ZA	Bypass Jejunum to Jejunum, Open Approach	Procedure ICD-10-PCS
0D1A0ZB	Bypass Jejunum to Ileum, Open Approach	Procedure ICD-10-PCS
0D1A47A	Bypass Jejunum to Jejunum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D1A47B	Bypass Jejunum to Ileum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS
0D1A4JA	Bypass Jejunum to Jejunum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure ICD-10-PCS



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

<b>Code</b>	<b>Code</b>	<b>Category</b>	<b>Code Type</b>
0D1A4JB	Bypass Jejunum to Ileum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1A4KA	Bypass Jejunum to Jejunum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1A4KB	Bypass Jejunum to Ileum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1A4ZA	Bypass Jejunum to Jejunum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1A4ZB	Bypass Jejunum to Ileum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1A87A	Bypass Jejunum to Jejunum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endosc	Procedure	ICD-10-PCS
0D1A87B	Bypass Jejunum to Ileum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscop	Procedure	ICD-10-PCS
0D1A8JA	Bypass Jejunum to Jejunum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1A8JB	Bypass Jejunum to Ileum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1A8KA	Bypass Jejunum to Jejunum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening En	Procedure	ICD-10-PCS
0D1A8KB	Bypass Jejunum to Ileum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endo:	Procedure	ICD-10-PCS
0D1A8ZA	Bypass Jejunum to Jejunum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1A8ZB	Bypass Jejunum to Ileum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1A8ZH	Bypass Jejunum to Cecum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1B07B	Bypass Ileum to Ileum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1B0JB	Bypass Ileum to Ileum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D1B0KB	Bypass Ileum to Ileum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1B0ZB	Bypass Ileum to Ileum, Open Approach	Procedure	ICD-10-PCS
0D1B47B	Bypass Ileum to Ileum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1B4JB	Bypass Ileum to Ileum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1B4KB	Bypass Ileum to Ileum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1B4ZB	Bypass Ileum to Ileum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1B87B	Bypass Ileum to Ileum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1B8JB	Bypass Ileum to Ileum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1B8KB	Bypass Ileum to Ileum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endosco	Procedure	ICD-10-PCS
0D1B8ZB	Bypass Ileum to Ileum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1B8ZH	Bypass Ileum to Cecum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0DB60Z3	Excision of Stomach, Open Approach, Vertical	Procedure	ICD-10-PCS
0DB60ZZ	Excision of Stomach, Open Approach	Procedure	ICD-10-PCS
0DB63Z3	Excision of Stomach, Percutaneous Approach, Vertical	Procedure	ICD-10-PCS
0DB63ZZ	Excision of Stomach, Percutaneous Approach	Procedure	ICD-10-PCS
0DB67Z3	Excision of Stomach, Via Natural or Artificial Opening, Vertical	Procedure	ICD-10-PCS
0DB67ZZ	Excision of Stomach, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0DB68Z3	Excision of Stomach, Via Natural or Artificial Opening Endoscopic, Vertical	Procedure	ICD-10-PCS
0DB80ZZ	Excision of Small Intestine, Open Approach	Procedure	ICD-10-PCS
0DB90ZZ	Excision of Duodenum, Open Approach	Procedure	ICD-10-PCS
0DBB0ZZ	Excision of Ileum, Open Approach	Procedure	ICD-10-PCS
0DQ64ZZ	Repair Stomach, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0DV64CZ	Restriction of Stomach with Extraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0F190Z3	Bypass Common Bile Duct to Duodenum, Open Approach	Procedure	ICD-10-PCS
0TRB07Z	Replacement of Bladder with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
43644	Laparoscopy, surgical, gastric restrictive procedure; with gastric bypass and Roux-en-Y gastroenterostomy (roux limb)	Procedure	CPT-4
43645	Laparoscopy, surgical, gastric restrictive procedure; with gastric bypass and small intestine reconstruction to limit	Procedure	CPT-4
43770	Laparoscopy, surgical, gastric restrictive procedure; placement of adjustable gastric restrictive device (eg, gastric	Procedure	CPT-4
43842	Gastric restrictive procedure, without gastric bypass, for morbid obesity; vertical-banded gastroplasty	Procedure	CPT-4
43843	Gastric restrictive procedure, without gastric bypass, for morbid obesity; other than vertical-banded ga	Procedure	CPT-4

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
<b>Code</b>	<b>Category</b>	<b>Code Type</b>
43845	Gastric restrictive procedure with partial gastrectomy, pylorus-preserving duodenoileostomy and ileoileostomy (50 to	Procedure CPT-4
43846	Gastric restrictive procedure, with gastric bypass for morbid obesity; with short limb (150 cm or less) Roux-en-Y	Procedure CPT-4
43847	Gastric restrictive procedure, with gastric bypass for morbid obesity; with small intestine reconstruction to limit	Procedure CPT-4
E66.01	Morbid (severe) obesity due to excess calories	Diagnosis ICD-10-CM
E66.09	Other obesity due to excess calories	Diagnosis ICD-10-CM
E66.1	Drug-induced obesity	Diagnosis ICD-10-CM
E66.2	Morbid (severe) obesity with alveolar hypoventilation	Diagnosis ICD-10-CM
E66.8	Other obesity	Diagnosis ICD-10-CM
E66.9	Obesity, unspecified	Diagnosis ICD-10-CM
K95.01	Infection due to gastric band procedure	Diagnosis ICD-10-CM
K95.09	Other complications of gastric band procedure	Diagnosis ICD-10-CM
K95.81	Infection due to other bariatric procedure	Diagnosis ICD-10-CM
K95.89	Other complications of other bariatric procedure	Diagnosis ICD-10-CM
O99.210	Obesity complicating pregnancy, unspecified trimester	Diagnosis ICD-10-CM
O99.211	Obesity complicating pregnancy, first trimester	Diagnosis ICD-10-CM
O99.212	Obesity complicating pregnancy, second trimester	Diagnosis ICD-10-CM
O99.213	Obesity complicating pregnancy, third trimester	Diagnosis ICD-10-CM
O99.214	Obesity complicating childbirth	Diagnosis ICD-10-CM
O99.215	Obesity complicating the puerperium	Diagnosis ICD-10-CM
O99.840	Bariatric surgery status complicating pregnancy, unspecified trimester	Diagnosis ICD-10-CM
O99.841	Bariatric surgery status complicating pregnancy, first trimester	Diagnosis ICD-10-CM
O99.842	Bariatric surgery status complicating pregnancy, second trimester	Diagnosis ICD-10-CM
O99.843	Bariatric surgery status complicating pregnancy, third trimester	Diagnosis ICD-10-CM
O99.844	Bariatric surgery status complicating childbirth	Diagnosis ICD-10-CM
O99.845	Bariatric surgery status complicating the puerperium	Diagnosis ICD-10-CM
Z68.30	Body mass index (BMI) 30.0-30.9, adult	Diagnosis ICD-10-CM
Z68.31	Body mass index (BMI) 31.0-31.9, adult	Diagnosis ICD-10-CM
Z68.32	Body mass index (BMI) 32.0-32.9, adult	Diagnosis ICD-10-CM
Z68.33	Body mass index (BMI) 33.0-33.9, adult	Diagnosis ICD-10-CM
Z68.34	Body mass index (BMI) 34.0-34.9, adult	Diagnosis ICD-10-CM
Z68.35	Body mass index (BMI) 35.0-35.9, adult	Diagnosis ICD-10-CM
Z68.36	Body mass index (BMI) 36.0-36.9, adult	Diagnosis ICD-10-CM
Z68.37	Body mass index (BMI) 37.0-37.9, adult	Diagnosis ICD-10-CM
Z68.38	Body mass index (BMI) 38.0-38.9, adult	Diagnosis ICD-10-CM
Z68.39	Body mass index (BMI) 39.0-39.9, adult	Diagnosis ICD-10-CM
Z68.41	Body mass index (BMI) 40.0-44.9, adult	Diagnosis ICD-10-CM
Z68.42	Body mass index (BMI) 45.0-49.9, adult	Diagnosis ICD-10-CM
Z68.43	Body mass index (BMI) 50-59.9, adult	Diagnosis ICD-10-CM
Z68.44	Body mass index (BMI) 60.0-69.9, adult	Diagnosis ICD-10-CM
Z68.45	Body mass index (BMI) 70 or greater, adult	Diagnosis ICD-10-CM
<b>Smoking</b>		
1034F	Current tobacco smoker (CAD, CAP, COPD, PV) (DM)	Procedure CPT-2
4001F	Tobacco use cessation intervention, pharmacologic therapy (COPD, CAD, CAP, PV, Asthma) (DM) (PV)	Procedure CPT-2
4004F	Patient screened for tobacco use and received tobacco cessation intervention (counseling, pharmacotherapy, or	Procedure CPT-2
99406	Smoking and tobacco use cessation counseling visit; intermediate, greater than 3 minutes up to 10 min	Procedure CPT-4



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

		Code	
Code		Category	Code Type
99407	Smoking and tobacco use cessation counseling visit; intensive, greater than 10 minutes	Procedure	CPT-4
F17.200	Nicotine dependence, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F17.201	Nicotine dependence, unspecified, in remission	Diagnosis	ICD-10-CM
F17.210	Nicotine dependence, cigarettes, uncomplicated	Diagnosis	ICD-10-CM
F17.211	Nicotine dependence, cigarettes, in remission	Diagnosis	ICD-10-CM
F17.290	Nicotine dependence, other tobacco product, uncomplicated	Diagnosis	ICD-10-CM
F17.291	Nicotine dependence, other tobacco product, in remission	Diagnosis	ICD-10-CM
G0436	Smoking and tobacco cessation counseling visit for the asymptomatic patient; intermediate, greater than 3 minutes,	Procedure	HCPCS
G0437	Smoking and tobacco cessation counseling visit for the asymptomatic patient; intensive, greater than 1	Procedure	HCPCS
G9016	Smoking cessation counseling, individual, in the absence of or in addition to any other evaluation and management	Procedure	HCPCS
G9276	Documentation that patient is a current tobacco user	Procedure	HCPCS
G9458	Patient documented as tobacco user and received tobacco cessation intervention (must include at least one of the following: advice given to quit smoking or tobacco use, counseling on the benefits of quitting smoking	Procedure	HCPCS
O99.330	Smoking (tobacco) complicating pregnancy, unspecified trimester	Diagnosis	ICD-10-CM
O99.331	Smoking (tobacco) complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O99.332	Smoking (tobacco) complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O99.333	Smoking (tobacco) complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O99.334	Smoking (tobacco) complicating childbirth	Diagnosis	ICD-10-CM
O99.335	Smoking (tobacco) complicating the puerperium	Diagnosis	ICD-10-CM
S4995	Smoking cessation gum	Procedure	HCPCS
S9075	Smoking cessation treatment	Procedure	HCPCS
S9453	Smoking cessation classes, non-physician provider, per session	Procedure	HCPCS
T65.221A	Toxic effect of tobacco cigarettes, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T65.222A	Toxic effect of tobacco cigarettes, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T65.223A	Toxic effect of tobacco cigarettes, assault, initial encounter	Diagnosis	ICD-10-CM
T65.224A	Toxic effect of tobacco cigarettes, undetermined, initial encounter	Diagnosis	ICD-10-CM
Z87.891	Personal history of nicotine dependence	Diagnosis	ICD-10-CM
<b>Chronic Kidney Disorder</b>			
A18.11	Tuberculosis of kidney and ureter	Diagnosis	ICD-10-CM
A52.75	Syphilis of kidney and ureter	Diagnosis	ICD-10-CM
B52.0	Plasmodium malariae malaria with nephropathy	Diagnosis	ICD-10-CM
C64.1	Malignant neoplasm of right kidney, except renal pelvis	Diagnosis	ICD-10-CM
C64.2	Malignant neoplasm of left kidney, except renal pelvis	Diagnosis	ICD-10-CM
C64.9	Malignant neoplasm of unspecified kidney, except renal pelvis	Diagnosis	ICD-10-CM
C68.9	Malignant neoplasm of urinary organ, unspecified	Diagnosis	ICD-10-CM
D30.00	Benign neoplasm of unspecified kidney	Diagnosis	ICD-10-CM
D30.01	Benign neoplasm of right kidney	Diagnosis	ICD-10-CM
D30.02	Benign neoplasm of left kidney	Diagnosis	ICD-10-CM
D41.00	Neoplasm of uncertain behavior of unspecified kidney	Diagnosis	ICD-10-CM
D41.01	Neoplasm of uncertain behavior of right kidney	Diagnosis	ICD-10-CM
D41.02	Neoplasm of uncertain behavior of left kidney	Diagnosis	ICD-10-CM
D41.10	Neoplasm of uncertain behavior of unspecified renal pelvis	Diagnosis	ICD-10-CM
D41.11	Neoplasm of uncertain behavior of right renal pelvis	Diagnosis	ICD-10-CM
D41.12	Neoplasm of uncertain behavior of left renal pelvis	Diagnosis	ICD-10-CM
D41.20	Neoplasm of uncertain behavior of unspecified ureter	Diagnosis	ICD-10-CM
D41.21	Neoplasm of uncertain behavior of right ureter	Diagnosis	ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
<b>Code</b>	<b>Category</b>	<b>Code Type</b>
D41.22	Neoplasm of uncertain behavior of left ureter	Diagnosis ICD-10-CM
D59.3	Hemolytic-uremic syndrome	Diagnosis ICD-10-CM
E08.21	Diabetes mellitus due to underlying condition with diabetic nephropathy	Diagnosis ICD-10-CM
E08.22	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease	Diagnosis ICD-10-CM
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication	Diagnosis ICD-10-CM
E08.65	Diabetes mellitus due to underlying condition with hyperglycemia	Diagnosis ICD-10-CM
E09.21	Drug or chemical induced diabetes mellitus with diabetic nephropathy	Diagnosis ICD-10-CM
E09.22	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease	Diagnosis ICD-10-CM
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication	Diagnosis ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	Diagnosis ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis ICD-10-CM
E10.65	Type 1 diabetes mellitus with hyperglycemia	Diagnosis ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis ICD-10-CM
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis ICD-10-CM
E13.21	Other specified diabetes mellitus with diabetic nephropathy	Diagnosis ICD-10-CM
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease	Diagnosis ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	Diagnosis ICD-10-CM
E74.8	Other specified disorders of carbohydrate metabolism	Diagnosis ICD-10-CM
I12.0	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	Diagnosis ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 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	Diagnosis ICD-10-CM
I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end	Diagnosis ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end	Diagnosis ICD-10-CM
I70.1	Atherosclerosis of renal artery	Diagnosis ICD-10-CM
I72.2	Aneurysm of renal artery	Diagnosis ICD-10-CM
K76.7	Hepatorenal syndrome	Diagnosis ICD-10-CM
M10.30	Gout due to renal impairment, unspecified site	Diagnosis ICD-10-CM
M10.311	Gout due to renal impairment, right shoulder	Diagnosis ICD-10-CM
M10.312	Gout due to renal impairment, left shoulder	Diagnosis ICD-10-CM
M10.319	Gout due to renal impairment, unspecified shoulder	Diagnosis ICD-10-CM
M10.321	Gout due to renal impairment, right elbow	Diagnosis ICD-10-CM
M10.322	Gout due to renal impairment, left elbow	Diagnosis ICD-10-CM
M10.329	Gout due to renal impairment, unspecified elbow	Diagnosis ICD-10-CM
M10.331	Gout due to renal impairment, right wrist	Diagnosis ICD-10-CM
M10.332	Gout due to renal impairment, left wrist	Diagnosis ICD-10-CM
M10.339	Gout due to renal impairment, unspecified wrist	Diagnosis ICD-10-CM
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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
M10.352	Gout due to renal impairment, left hip	Diagnosis ICD-10-CM
M10.359	Gout due to renal impairment, unspecified hip	Diagnosis ICD-10-CM
M10.361	Gout due to renal impairment, right knee	Diagnosis ICD-10-CM
M10.362	Gout due to renal impairment, left knee	Diagnosis ICD-10-CM
M10.369	Gout due to renal impairment, unspecified knee	Diagnosis ICD-10-CM
M10.371	Gout due to renal impairment, right ankle and foot	Diagnosis ICD-10-CM
M10.372	Gout due to renal impairment, left ankle and foot	Diagnosis ICD-10-CM
M10.379	Gout due to renal impairment, unspecified ankle and foot	Diagnosis ICD-10-CM
M10.38	Gout due to renal impairment, vertebrae	Diagnosis ICD-10-CM
M10.39	Gout due to renal impairment, multiple sites	Diagnosis ICD-10-CM
M32.14	Glomerular disease in systemic lupus erythematosus	Diagnosis ICD-10-CM
M32.15	Tubulo-interstitial nephropathy in systemic lupus erythematosus	Diagnosis ICD-10-CM
M35.04	Sicca syndrome with tubulo-interstitial nephropathy	Diagnosis ICD-10-CM
N00.0	Acute nephritic syndrome with minor glomerular abnormality	Diagnosis ICD-10-CM
N00.1	Acute nephritic syndrome with focal and segmental glomerular lesions	Diagnosis ICD-10-CM
N00.2	Acute nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis ICD-10-CM
N00.3	Acute nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis ICD-10-CM
N00.4	Acute nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis ICD-10-CM
N00.5	Acute nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis ICD-10-CM
N00.6	Acute nephritic syndrome with dense deposit disease	Diagnosis ICD-10-CM
N00.7	Acute nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis ICD-10-CM
N00.8	Acute nephritic syndrome with other morphologic changes	Diagnosis ICD-10-CM
N00.9	Acute nephritic syndrome with unspecified morphologic changes	Diagnosis ICD-10-CM
N00.A	Acute nephritic syndrome with C3 glomerulonephritis	Diagnosis ICD-10-CM
N01.0	Rapidly progressive nephritic syndrome with minor glomerular abnormality	Diagnosis ICD-10-CM
N01.1	Rapidly progressive nephritic syndrome with focal and segmental glomerular lesions	Diagnosis ICD-10-CM
N01.2	Rapidly progressive nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis ICD-10-CM
N01.3	Rapidly progressive nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis ICD-10-CM
N01.4	Rapidly progressive nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis ICD-10-CM
N01.5	Rapidly progressive nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis ICD-10-CM
N01.6	Rapidly progressive nephritic syndrome with dense deposit disease	Diagnosis ICD-10-CM
N01.7	Rapidly progressive nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis ICD-10-CM
N01.8	Rapidly progressive nephritic syndrome with other morphologic changes	Diagnosis ICD-10-CM
N01.9	Rapidly progressive nephritic syndrome with unspecified morphologic changes	Diagnosis ICD-10-CM
N01.A	Rapidly progressive nephritic syndrome with C3 glomerulonephritis	Diagnosis ICD-10-CM
N02.0	Recurrent and persistent hematuria with minor glomerular abnormality	Diagnosis ICD-10-CM
N02.1	Recurrent and persistent hematuria with focal and segmental glomerular lesions	Diagnosis ICD-10-CM
N02.2	Recurrent and persistent hematuria with diffuse membranous glomerulonephritis	Diagnosis ICD-10-CM
N02.3	Recurrent and persistent hematuria with diffuse mesangial proliferative glomerulonephritis	Diagnosis ICD-10-CM
N02.4	Recurrent and persistent hematuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis ICD-10-CM
N02.5	Recurrent and persistent hematuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis ICD-10-CM
N02.6	Recurrent and persistent hematuria with dense deposit disease	Diagnosis ICD-10-CM
N02.7	Recurrent and persistent hematuria with diffuse crescentic glomerulonephritis	Diagnosis ICD-10-CM
N02.8	Recurrent and persistent hematuria with other morphologic changes	Diagnosis ICD-10-CM
N02.9	Recurrent and persistent hematuria with unspecified morphologic changes	Diagnosis ICD-10-CM
N02.A	Recurrent and persistent hematuria with C3 glomerulonephritis	Diagnosis ICD-10-CM
N03.0	Chronic nephritic syndrome with minor glomerular abnormality	Diagnosis ICD-10-CM
N03.1	Chronic nephritic syndrome with focal and segmental glomerular lesions	Diagnosis ICD-10-CM
N03.2	Chronic nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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 glomerulonephri	Diagnosis ICD-10-CM
N07.4	Hereditary nephropathy, not elsewhere classified with diffuse endocapillary proliferative glomerulone	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

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

<b>Code</b>		<b>Code Category</b>	<b>Code Type</b>
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
N13.1	Hydronephrosis with ureteral stricture, not elsewhere classified	Diagnosis	ICD-10-CM
N13.2	Hydronephrosis with renal and ureteral calculous obstruction	Diagnosis	ICD-10-CM
N13.30	Unspecified hydronephrosis	Diagnosis	ICD-10-CM
N13.39	Other hydronephrosis	Diagnosis	ICD-10-CM
N14.0	Analgesic nephropathy	Diagnosis	ICD-10-CM
N14.1	Nephropathy induced by other drugs, medicaments and biological substances	Diagnosis	ICD-10-CM
N14.2	Nephropathy induced by unspecified drug, medicament or biological substance	Diagnosis	ICD-10-CM
N14.3	Nephropathy induced by heavy metals	Diagnosis	ICD-10-CM
N14.4	Toxic nephropathy, not elsewhere classified	Diagnosis	ICD-10-CM
N15.0	Balkan nephropathy	Diagnosis	ICD-10-CM
N15.8	Other specified renal tubulo-interstitial diseases	Diagnosis	ICD-10-CM
N15.9	Renal tubulo-interstitial disease, unspecified	Diagnosis	ICD-10-CM
N16	Renal tubulo-interstitial disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N17.0	Acute kidney failure with tubular necrosis	Diagnosis	ICD-10-CM
N17.1	Acute kidney failure with acute cortical necrosis	Diagnosis	ICD-10-CM
N17.2	Acute kidney failure with medullary necrosis	Diagnosis	ICD-10-CM
N17.8	Other acute kidney failure	Diagnosis	ICD-10-CM
N17.9	Acute kidney failure, unspecified	Diagnosis	ICD-10-CM
N18.1	Chronic kidney disease, stage 1	Diagnosis	ICD-10-CM
N18.2	Chronic kidney disease, stage 2 (mild)	Diagnosis	ICD-10-CM
N18.3	Chronic kidney disease, stage 3 (moderate)	Diagnosis	ICD-10-CM
N18.30	Chronic kidney disease, stage 3 unspecified	Diagnosis	ICD-10-CM
N18.31	Chronic kidney disease, stage 3a	Diagnosis	ICD-10-CM
N18.32	Chronic kidney disease, stage 3b	Diagnosis	ICD-10-CM
N18.4	Chronic kidney disease, stage 4 (severe)	Diagnosis	ICD-10-CM
N18.5	Chronic kidney disease, stage 5	Diagnosis	ICD-10-CM
N18.6	End stage renal disease	Diagnosis	ICD-10-CM
N18.9	Chronic kidney disease, unspecified	Diagnosis	ICD-10-CM
N19	Unspecified kidney failure	Diagnosis	ICD-10-CM
N25.0	Renal osteodystrophy	Diagnosis	ICD-10-CM
N25.1	Nephrogenic diabetes insipidus	Diagnosis	ICD-10-CM
N25.81	Secondary hyperparathyroidism of renal origin	Diagnosis	ICD-10-CM
N25.89	Other disorders resulting from impaired renal tubular function	Diagnosis	ICD-10-CM
N25.9	Disorder resulting from impaired renal tubular function, unspecified	Diagnosis	ICD-10-CM
N26.1	Atrophy of kidney (terminal)	Diagnosis	ICD-10-CM
N26.9	Renal sclerosis, unspecified	Diagnosis	ICD-10-CM
Q61.02	Congenital multiple renal cysts	Diagnosis	ICD-10-CM
Q61.11	Cystic dilatation of collecting ducts	Diagnosis	ICD-10-CM
Q61.19	Other polycystic kidney, infantile type	Diagnosis	ICD-10-CM
Q61.2	Polycystic kidney, adult type	Diagnosis	ICD-10-CM
Q61.3	Polycystic kidney, unspecified	Diagnosis	ICD-10-CM
Q61.4	Renal dysplasia	Diagnosis	ICD-10-CM
Q61.5	Medullary cystic kidney	Diagnosis	ICD-10-CM
Q61.8	Other cystic kidney diseases	Diagnosis	ICD-10-CM
Q62.0	Congenital hydronephrosis	Diagnosis	ICD-10-CM



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		Code	
Code		Category	Code Type
Q62.10	Congenital occlusion of ureter, unspecified	Diagnosis	ICD-10-CM
Q62.11	Congenital occlusion of ureteropelvic junction	Diagnosis	ICD-10-CM
Q62.12	Congenital occlusion of ureterovesical orifice	Diagnosis	ICD-10-CM
Q62.2	Congenital megaureter	Diagnosis	ICD-10-CM
Q62.31	Congenital ureterocele, orthotopic	Diagnosis	ICD-10-CM
Q62.32	Cecoureterocele	Diagnosis	ICD-10-CM
Q62.39	Other obstructive defects of renal pelvis and ureter	Diagnosis	ICD-10-CM
R94.4	Abnormal results of kidney function studies	Diagnosis	ICD-10-CM
<b>Colorectal Cancer</b>			
C18.0	Malignant neoplasm of cecum	Diagnosis	ICD-10-CM
C18.1	Malignant neoplasm of appendix	Diagnosis	ICD-10-CM
C18.2	Malignant neoplasm of ascending colon	Diagnosis	ICD-10-CM
C18.3	Malignant neoplasm of hepatic flexure	Diagnosis	ICD-10-CM
C18.4	Malignant neoplasm of transverse colon	Diagnosis	ICD-10-CM
C18.5	Malignant neoplasm of splenic flexure	Diagnosis	ICD-10-CM
C18.6	Malignant neoplasm of descending colon	Diagnosis	ICD-10-CM
C18.7	Malignant neoplasm of sigmoid colon	Diagnosis	ICD-10-CM
C18.8	Malignant neoplasm of overlapping sites of colon	Diagnosis	ICD-10-CM
C18.9	Malignant neoplasm of colon, unspecified	Diagnosis	ICD-10-CM
C19	Malignant neoplasm of rectosigmoid junction	Diagnosis	ICD-10-CM
C20	Malignant neoplasm of rectum	Diagnosis	ICD-10-CM
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
Z85.038	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
<b>Lung Cancer</b>			
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

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<b>Code</b>		<b>Code Category</b>	<b>Code Type</b>
<b>Breast Cancer</b>			
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
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

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

<b>Code</b>	<b>Code</b>	<b>Category</b>	<b>Code Type</b>
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
Z85.3	Personal history of malignant neoplasm of breast	Diagnosis	ICD-10-CM
<b>Prostate Cancer</b>			
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
<b>Anemia</b>			
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
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
D55.3	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



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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
<b>Code</b>	<b>Category</b>	<b>Code Type</b>
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
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
D62	Acute posthemorrhagic anemia	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
<b>Diabetes</b>		
E08.00	Diabetes mellitus due to underlying condition with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar	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
E08.21	Diabetes mellitus due to underlying condition with diabetic nephropathy	Diagnosis ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
E08.22	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease	Diagnosis ICD-10-CM
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication	Diagnosis ICD-10-CM
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	Diagnosis ICD-10-CM
E08.3212	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, left	Diagnosis ICD-10-CM
E08.3213	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema,	Diagnosis ICD-10-CM
E08.3219	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema,	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,	Diagnosis ICD-10-CM
E08.3292	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema,	Diagnosis ICD-10-CM
E08.3293	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema,	Diagnosis ICD-10-CM
E08.3299	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema,	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,	Diagnosis ICD-10-CM
E08.3312	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema,	Diagnosis ICD-10-CM
E08.3313	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema,	Diagnosis ICD-10-CM
E08.3319	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema,	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,	Diagnosis ICD-10-CM
E08.3392	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema,	Diagnosis ICD-10-CM
E08.3393	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema,	Diagnosis ICD-10-CM
E08.3399	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema,	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,	Diagnosis ICD-10-CM
E08.3412	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema,	Diagnosis ICD-10-CM
E08.3413	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema,	Diagnosis ICD-10-CM

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

<b>Code</b>	<b>Code Category</b>	<b>Code Type</b>
E08.3419 Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema,	Diagnosis	ICD-10-CM
E08.349 Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular	Diagnosis	ICD-10-CM
E08.3491 Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular	Diagnosis	ICD-10-CM
E08.3492 Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular	Diagnosis	ICD-10-CM
E08.3493 Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular	Diagnosis	ICD-10-CM
E08.3499 Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular	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,	Diagnosis	ICD-10-CM
E08.3512 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema,	Diagnosis	ICD-10-CM
E08.3513 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema,	Diagnosis	ICD-10-CM
E08.3519 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, unspecified	Diagnosis	ICD-10-CM
E08.3521 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment	Diagnosis	ICD-10-CM
E08.3522 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment	Diagnosis	ICD-10-CM
E08.3523 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment	Diagnosis	ICD-10-CM
E08.3529 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment	Diagnosis	ICD-10-CM
E08.3531 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment	Diagnosis	ICD-10-CM
E08.3532 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment	Diagnosis	ICD-10-CM
E08.3533 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment	Diagnosis	ICD-10-CM
E08.3539 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment	Diagnosis	ICD-10-CM
E08.3541 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal	Diagnosis	ICD-10-CM
E08.3542 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal	Diagnosis	ICD-10-CM
E08.3543 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal	Diagnosis	ICD-10-CM
E08.3549 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal	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	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,	Diagnosis	ICD-10-CM
E08.3592 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema,	Diagnosis	ICD-10-CM
E08.3593 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema,	Diagnosis	ICD-10-CM

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

<b>Code</b>	<b>Code Category</b>	<b>Code Type</b>
E08.3599 Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema,	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 treatm	Diagnosis	ICD-10-CM
E08.37X2 Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatm	Diagnosis	ICD-10-CM
E08.37X3 Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatm	Diagnosis	ICD-10-CM
E08.37X9 Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, unspecified	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	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
E09.319 Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy without macular ede	Diagnosis	ICD-10-CM
E09.321 Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macul	Diagnosis	ICD-10-CM
E09.3211 Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right	Diagnosis	ICD-10-CM
E09.3212 Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left	Diagnosis	ICD-10-CM
E09.3213 Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema,	Diagnosis	ICD-10-CM



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

<b>Code</b>	<b>Code Category</b>	<b>Code Type</b>
E09.3219 Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema,	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,	Diagnosis	ICD-10-CM
E09.3292 Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left	Diagnosis	ICD-10-CM
E09.3293 Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema,	Diagnosis	ICD-10-CM
E09.3299 Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema,	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,	Diagnosis	ICD-10-CM
E09.3312 Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema,	Diagnosis	ICD-10-CM
E09.3313 Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema,	Diagnosis	ICD-10-CM
E09.3319 Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema,	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,	Diagnosis	ICD-10-CM
E09.3392 Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema,	Diagnosis	ICD-10-CM
E09.3393 Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema,	Diagnosis	ICD-10-CM
E09.3399 Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema,	Diagnosis	ICD-10-CM
E09.341 Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema,	Diagnosis	ICD-10-CM
E09.3411 Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema,	Diagnosis	ICD-10-CM
E09.3412 Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left	Diagnosis	ICD-10-CM
E09.3413 Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema,	Diagnosis	ICD-10-CM
E09.3419 Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema,	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,	Diagnosis	ICD-10-CM
E09.3492 Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema,	Diagnosis	ICD-10-CM
E09.3493 Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema,	Diagnosis	ICD-10-CM
E09.3499 Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema,	Diagnosis	ICD-10-CM
E09.351 Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema,	Diagnosis	ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
E09.3511	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis ICD-10-CM
E09.3512	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis ICD-10-CM
E09.3513	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis ICD-10-CM
E09.3519	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified	Diagnosis ICD-10-CM
E09.3521	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment	Diagnosis ICD-10-CM
E09.3522	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment	Diagnosis ICD-10-CM
E09.3523	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment	Diagnosis ICD-10-CM
E09.3529	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment	Diagnosis ICD-10-CM
E09.3531	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not	Diagnosis ICD-10-CM
E09.3532	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not	Diagnosis ICD-10-CM
E09.3533	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not	Diagnosis ICD-10-CM
E09.3539	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not	Diagnosis ICD-10-CM
E09.3541	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal	Diagnosis ICD-10-CM
E09.3542	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal	Diagnosis ICD-10-CM
E09.3543	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal	Diagnosis ICD-10-CM
E09.3549	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal	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	Diagnosis ICD-10-CM
E09.3592	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis ICD-10-CM
E09.3593	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis ICD-10-CM
E09.3599	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified	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	Diagnosis ICD-10-CM
E09.37X2	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment	Diagnosis ICD-10-CM
E09.37X3	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment	Diagnosis ICD-10-CM
E09.37X9	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified	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,	Diagnosis ICD-10-CM
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

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

<b>Code</b>	<b>Code</b>	<b>Category</b>	<b>Code Type</b>
E09.43	Drug or chemical induced diabetes mellitus with neurological complications with diabetic autonomic (r	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	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
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, unsp	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	Diagnosis	ICD-10-CM
E10.3292	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left e	Diagnosis	ICD-10-CM
E10.3293	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilat	Diagnosis	ICD-10-CM
E10.3299	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unsp	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, rig	Diagnosis	ICD-10-CM
E10.3312	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, lef	Diagnosis	ICD-10-CM
E10.3313	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bil	Diagnosis	ICD-10-CM
E10.3319	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, un	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,	Diagnosis	ICD-10-CM
E10.3392	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema,	Diagnosis	ICD-10-CM
E10.3393	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema,	Diagnosis	ICD-10-CM
E10.3399	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema,	Diagnosis	ICD-10-CM
E10.341	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM



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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
E10.3411	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis ICD-10-CM
E10.3412	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis ICD-10-CM
E10.3413	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis ICD-10-CM
E10.3419	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis ICD-10-CM
E10.349	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,	Diagnosis ICD-10-CM
E10.3522	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula,	Diagnosis ICD-10-CM
E10.3523	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula,	Diagnosis ICD-10-CM
E10.3529	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula,	Diagnosis ICD-10-CM
E10.3531	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the	Diagnosis ICD-10-CM
E10.3532	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the	Diagnosis ICD-10-CM
E10.3533	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the	Diagnosis ICD-10-CM
E10.3539	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the	Diagnosis ICD-10-CM
E10.3541	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and	Diagnosis ICD-10-CM
E10.3542	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and	Diagnosis ICD-10-CM
E10.3543	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and	Diagnosis ICD-10-CM
E10.3549	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and	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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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	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, unsp	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	Diagnosis ICD-10-CM
E11.3292	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left e	Diagnosis ICD-10-CM
E11.3293	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilat	Diagnosis ICD-10-CM
E11.3299	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unsp	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, rig	Diagnosis ICD-10-CM
E11.3312	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, lef	Diagnosis ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
E11.3313	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bil	Diagnosis ICD-10-CM
E11.3319	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, un	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,	Diagnosis ICD-10-CM
E11.3392	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema,	Diagnosis ICD-10-CM
E11.3393	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema,	Diagnosis ICD-10-CM
E11.3399	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema,	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 e	Diagnosis ICD-10-CM
E11.3412	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left ey	Diagnosis ICD-10-CM
E11.3413	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilate	Diagnosis ICD-10-CM
E11.3419	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspe	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, rig	Diagnosis ICD-10-CM
E11.3492	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, lef	Diagnosis ICD-10-CM
E11.3493	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bil	Diagnosis ICD-10-CM
E11.3499	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, un	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
E11.3521	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula,	Diagnosis ICD-10-CM
E11.3522	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula,	Diagnosis ICD-10-CM
E11.3523	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula,	Diagnosis ICD-10-CM
E11.3529	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula,	Diagnosis ICD-10-CM
E11.3531	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the	Diagnosis ICD-10-CM
E11.3532	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the	Diagnosis ICD-10-CM
E11.3533	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the	Diagnosis ICD-10-CM
E11.3539	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the	Diagnosis ICD-10-CM
E11.3541	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and	Diagnosis ICD-10-CM
E11.3542	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and	Diagnosis ICD-10-CM
E11.3543	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and	Diagnosis ICD-10-CM
E11.3549	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and	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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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	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
E13.3211	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema,	Diagnosis ICD-10-CM
E13.3212	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema,	Diagnosis ICD-10-CM
E13.3213	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema,	Diagnosis ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
E13.3219	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema,	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,	Diagnosis ICD-10-CM
E13.3292	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema,	Diagnosis ICD-10-CM
E13.3293	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema,	Diagnosis ICD-10-CM
E13.3299	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified	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,	Diagnosis ICD-10-CM
E13.3312	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema,	Diagnosis ICD-10-CM
E13.3313	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema,	Diagnosis ICD-10-CM
E13.3319	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified	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	Diagnosis ICD-10-CM
E13.3392	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema,	Diagnosis ICD-10-CM
E13.3393	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema,	Diagnosis ICD-10-CM
E13.3399	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified	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,	Diagnosis ICD-10-CM
E13.3412	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema,	Diagnosis ICD-10-CM
E13.3413	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema,	Diagnosis ICD-10-CM
E13.3419	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified	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,	Diagnosis ICD-10-CM
E13.3492	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema,	Diagnosis ICD-10-CM
E13.3493	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema,	Diagnosis ICD-10-CM
E13.3499	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified	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	Diagnosis ICD-10-CM
E13.3521	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the	Diagnosis ICD-10-CM
E13.3522	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the	Diagnosis ICD-10-CM
E13.3523	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the	Diagnosis ICD-10-CM
E13.3529	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the	Diagnosis ICD-10-CM
E13.3531	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving	Diagnosis ICD-10-CM
E13.3532	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving	Diagnosis ICD-10-CM



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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
E13.3533	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving	Diagnosis ICD-10-CM
E13.3539	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving	Diagnosis ICD-10-CM
E13.3541	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and	Diagnosis ICD-10-CM
E13.3542	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and	Diagnosis ICD-10-CM
E13.3543	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and	Diagnosis ICD-10-CM
E13.3549	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and	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	Diagnosis ICD-10-CM
E13.3592	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, left e	Diagnosis ICD-10-CM
E13.3593	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilate	Diagnosis ICD-10-CM
E13.3599	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, unsp	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
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
<b>Overweight</b>		
E66.3	Overweight	Diagnosis ICD-10-CM
Z68.25	Body mass index (BMI) 25.0-25.9, adult	Diagnosis ICD-10-CM

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

<b>Code</b>		<b>Code Category</b>	<b>Code Type</b>
Z68.26	Body mass index (BMI) 26.0-26.9, adult	Diagnosis	ICD-10-CM
Z68.27	Body mass index (BMI) 27.0-27.9, adult	Diagnosis	ICD-10-CM
Z68.28	Body mass index (BMI) 28.0-28.9, adult	Diagnosis	ICD-10-CM
Z68.29	Body mass index (BMI) 29.0-29.9, adult	Diagnosis	ICD-10-CM
<b>Alzheimer's Disease</b>			
F01.50	Vascular dementia without behavioral disturbance	Diagnosis	ICD-10-CM
F01.51	Vascular dementia with behavioral disturbance	Diagnosis	ICD-10-CM
F02.80	Dementia in other diseases classified elsewhere without behavioral disturbance	Diagnosis	ICD-10-CM
F02.81	Dementia in other diseases classified elsewhere with behavioral disturbance	Diagnosis	ICD-10-CM
F03.90	Unspecified dementia without behavioral disturbance	Diagnosis	ICD-10-CM
F03.91	Unspecified dementia with behavioral disturbance	Diagnosis	ICD-10-CM
F04	Amnesic disorder due to known physiological condition	Diagnosis	ICD-10-CM
F05	Delirium due to known physiological condition	Diagnosis	ICD-10-CM
F06.1	Catatonic disorder due to known physiological condition	Diagnosis	ICD-10-CM
F06.8	Other specified mental disorders 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
G30.0	Alzheimer's disease with early onset	Diagnosis	ICD-10-CM
G30.1	Alzheimer's disease with late onset	Diagnosis	ICD-10-CM
G30.8	Other Alzheimer's disease	Diagnosis	ICD-10-CM
G30.9	Alzheimer's disease, unspecified	Diagnosis	ICD-10-CM
G31.01	Pick's disease	Diagnosis	ICD-10-CM
G31.09	Other frontotemporal dementia	Diagnosis	ICD-10-CM
G31.1	Senile degeneration of brain, not elsewhere classified	Diagnosis	ICD-10-CM
G31.2	Degeneration of nervous system due to alcohol	Diagnosis	ICD-10-CM
G94	Other disorders of brain in diseases classified elsewhere	Diagnosis	ICD-10-CM
R41.81	Age-related cognitive decline	Diagnosis	ICD-10-CM
R54	Age-related physical debility	Diagnosis	ICD-10-CM
<b>Alcohol Abuse</b>			
F10.10	Alcohol abuse, uncomplicated	Diagnosis	ICD-10-CM
F10.11	Alcohol abuse, in remission	Diagnosis	ICD-10-CM
F10.120	Alcohol abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F10.121	Alcohol abuse with intoxication delirium	Diagnosis	ICD-10-CM
F10.129	Alcohol abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F10.14	Alcohol abuse with alcohol-induced mood disorder	Diagnosis	ICD-10-CM
F10.150	Alcohol abuse with alcohol-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F10.151	Alcohol abuse with alcohol-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F10.159	Alcohol abuse with alcohol-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F10.180	Alcohol abuse with alcohol-induced anxiety disorder	Diagnosis	ICD-10-CM
F10.181	Alcohol abuse with alcohol-induced sexual dysfunction	Diagnosis	ICD-10-CM
F10.182	Alcohol abuse with alcohol-induced sleep disorder	Diagnosis	ICD-10-CM
F10.188	Alcohol abuse with other alcohol-induced disorder	Diagnosis	ICD-10-CM
F10.19	Alcohol abuse with unspecified alcohol-induced disorder	Diagnosis	ICD-10-CM
F10.20	Alcohol dependence, uncomplicated	Diagnosis	ICD-10-CM
F10.21	Alcohol dependence, in remission	Diagnosis	ICD-10-CM
F10.220	Alcohol dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F10.221	Alcohol dependence with intoxication delirium	Diagnosis	ICD-10-CM
F10.229	Alcohol dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F10.230	Alcohol dependence with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F10.231	Alcohol dependence with withdrawal delirium	Diagnosis	ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
F10.232	Alcohol dependence with withdrawal with perceptual disturbance	Diagnosis ICD-10-CM
F10.239	Alcohol dependence with withdrawal, unspecified	Diagnosis ICD-10-CM
F10.24	Alcohol dependence with alcohol-induced mood disorder	Diagnosis ICD-10-CM
F10.250	Alcohol dependence with alcohol-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F10.251	Alcohol dependence with alcohol-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F10.259	Alcohol dependence with alcohol-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F10.26	Alcohol dependence with alcohol-induced persisting amnestic disorder	Diagnosis ICD-10-CM
F10.27	Alcohol dependence with alcohol-induced persisting dementia	Diagnosis ICD-10-CM
F10.280	Alcohol dependence with alcohol-induced anxiety disorder	Diagnosis ICD-10-CM
F10.281	Alcohol dependence with alcohol-induced sexual dysfunction	Diagnosis ICD-10-CM
F10.282	Alcohol dependence with alcohol-induced sleep disorder	Diagnosis ICD-10-CM
F10.288	Alcohol dependence with other alcohol-induced disorder	Diagnosis ICD-10-CM
F10.29	Alcohol dependence with unspecified alcohol-induced disorder	Diagnosis ICD-10-CM
F10.920	Alcohol use, unspecified with intoxication, uncomplicated	Diagnosis ICD-10-CM
F10.921	Alcohol use, unspecified with intoxication delirium	Diagnosis ICD-10-CM
F10.929	Alcohol use, unspecified with intoxication, unspecified	Diagnosis ICD-10-CM
F10.94	Alcohol use, unspecified with alcohol-induced mood disorder	Diagnosis ICD-10-CM
F10.950	Alcohol use, unspecified with alcohol-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F10.951	Alcohol use, unspecified with alcohol-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F10.959	Alcohol use, unspecified with alcohol-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F10.96	Alcohol use, unspecified with alcohol-induced persisting amnestic disorder	Diagnosis ICD-10-CM
F10.97	Alcohol use, unspecified with alcohol-induced persisting dementia	Diagnosis ICD-10-CM
F10.980	Alcohol use, unspecified with alcohol-induced anxiety disorder	Diagnosis ICD-10-CM
F10.981	Alcohol use, unspecified with alcohol-induced sexual dysfunction	Diagnosis ICD-10-CM
F10.982	Alcohol use, unspecified with alcohol-induced sleep disorder	Diagnosis ICD-10-CM
F10.988	Alcohol use, unspecified with other alcohol-induced disorder	Diagnosis ICD-10-CM
F10.99	Alcohol use, unspecified with unspecified alcohol-induced disorder	Diagnosis ICD-10-CM
G62.1	Alcoholic polyneuropathy	Diagnosis ICD-10-CM
HZ2ZZZZ	Detoxification Services for Substance Abuse Treatment	Procedure ICD-10-PCS
HZ30ZZZ	Individual Counseling for Substance Abuse Treatment, Cognitive	Procedure ICD-10-PCS
HZ31ZZZ	Individual Counseling for Substance Abuse Treatment, Behavioral	Procedure ICD-10-PCS
HZ32ZZZ	Individual Counseling for Substance Abuse Treatment, Cognitive-Behavioral	Procedure ICD-10-PCS
HZ33ZZZ	Individual Counseling for Substance Abuse Treatment, 12-Step	Procedure ICD-10-PCS
HZ34ZZZ	Individual Counseling for Substance Abuse Treatment, Interpersonal	Procedure ICD-10-PCS
HZ35ZZZ	Individual Counseling for Substance Abuse Treatment, Vocational	Procedure ICD-10-PCS
HZ36ZZZ	Individual Counseling for Substance Abuse Treatment, Psychoeducation	Procedure ICD-10-PCS
HZ37ZZZ	Individual Counseling for Substance Abuse Treatment, Motivational Enhancement	Procedure ICD-10-PCS
HZ38ZZZ	Individual Counseling for Substance Abuse Treatment, Confrontational	Procedure ICD-10-PCS
HZ39ZZZ	Individual Counseling for Substance Abuse Treatment, Continuing Care	Procedure ICD-10-PCS
HZ3BZZZ	Individual Counseling for Substance Abuse Treatment, Spiritual	Procedure ICD-10-PCS
HZ40ZZZ	Group Counseling for Substance Abuse Treatment, Cognitive	Procedure ICD-10-PCS
HZ41ZZZ	Group Counseling for Substance Abuse Treatment, Behavioral	Procedure ICD-10-PCS
HZ42ZZZ	Group Counseling for Substance Abuse Treatment, Cognitive-Behavioral	Procedure ICD-10-PCS
HZ43ZZZ	Group Counseling for Substance Abuse Treatment, 12-Step	Procedure ICD-10-PCS
HZ44ZZZ	Group Counseling for Substance Abuse Treatment, Interpersonal	Procedure ICD-10-PCS
HZ45ZZZ	Group Counseling for Substance Abuse Treatment, Vocational	Procedure ICD-10-PCS
HZ46ZZZ	Group Counseling for Substance Abuse Treatment, Psychoeducation	Procedure ICD-10-PCS
HZ47ZZZ	Group Counseling for Substance Abuse Treatment, Motivational Enhancement	Procedure ICD-10-PCS
HZ48ZZZ	Group Counseling for Substance Abuse Treatment, Confrontational	Procedure ICD-10-PCS



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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
<b>Code</b>	<b>Category</b>	<b>Code Type</b>
HZ49ZZZ	Group Counseling for Substance Abuse Treatment, Continuing Care	Procedure ICD-10-PCS
HZ4BZZZ	Group Counseling for Substance Abuse Treatment, Spiritual	Procedure ICD-10-PCS
HZ50ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Cognitive	Procedure ICD-10-PCS
HZ51ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Behavioral	Procedure ICD-10-PCS
HZ52ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Cognitive-Behavioral	Procedure ICD-10-PCS
HZ53ZZZ	Individual Psychotherapy for Substance Abuse Treatment, 12-Step	Procedure ICD-10-PCS
HZ54ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Interpersonal	Procedure ICD-10-PCS
HZ55ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Interactive	Procedure ICD-10-PCS
HZ56ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Psychoeducation	Procedure ICD-10-PCS
HZ57ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Motivational Enhancement	Procedure ICD-10-PCS
HZ58ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Confrontational	Procedure ICD-10-PCS
HZ59ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Supportive	Procedure ICD-10-PCS
HZ5BZZZ	Individual Psychotherapy for Substance Abuse Treatment, Psychoanalysis	Procedure ICD-10-PCS
HZ5CZZZ	Individual Psychotherapy for Substance Abuse Treatment, Psychodynamic	Procedure ICD-10-PCS
HZ5DZZZ	Individual Psychotherapy for Substance Abuse Treatment, Psychophysiological	Procedure ICD-10-PCS
HZ63ZZZ	Family Counseling for Substance Abuse Treatment	Procedure ICD-10-PCS
HZ83ZZZ	Medication Management for Substance Abuse Treatment, Antabuse	Procedure ICD-10-PCS
HZ86ZZZ	Medication Management for Substance Abuse Treatment, Clonidine	Procedure ICD-10-PCS
HZ88ZZZ	Medication Management for Substance Abuse Treatment, Psychiatric Medication	Procedure ICD-10-PCS
HZ89ZZZ	Medication Management for Substance Abuse Treatment, Other Replacement Medication	Procedure ICD-10-PCS
HZ93ZZZ	Pharmacotherapy for Substance Abuse Treatment, Antabuse	Procedure ICD-10-PCS
HZ96ZZZ	Pharmacotherapy for Substance Abuse Treatment, Clonidine	Procedure ICD-10-PCS
HZ98ZZZ	Pharmacotherapy for Substance Abuse Treatment, Psychiatric Medication	Procedure ICD-10-PCS
HZ99ZZZ	Pharmacotherapy for Substance Abuse Treatment, Other Replacement Medication	Procedure ICD-10-PCS
I42.6	Alcoholic cardiomyopathy	Diagnosis ICD-10-CM
K29.20	Alcoholic gastritis without bleeding	Diagnosis ICD-10-CM
K29.21	Alcoholic gastritis with bleeding	Diagnosis ICD-10-CM
K70.0	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
R78.0	Finding of alcohol in blood	Diagnosis ICD-10-CM
Z65.8	Other specified problems related to psychosocial circumstances	Diagnosis ICD-10-CM
<b>Drug Abuse</b>		
F11.10	Opioid abuse, uncomplicated	Diagnosis ICD-10-CM
F11.11	Opioid abuse, in remission	Diagnosis ICD-10-CM
F11.120	Opioid abuse with intoxication, uncomplicated	Diagnosis ICD-10-CM
F11.121	Opioid abuse with intoxication delirium	Diagnosis ICD-10-CM
F11.122	Opioid abuse with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F11.129	Opioid abuse with intoxication, unspecified	Diagnosis ICD-10-CM
F11.14	Opioid abuse with opioid-induced mood disorder	Diagnosis ICD-10-CM
F11.150	Opioid abuse with opioid-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F11.151	Opioid abuse with opioid-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F11.159	Opioid abuse with opioid-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
F11.181	Opioid abuse with opioid-induced sexual dysfunction	Diagnosis ICD-10-CM
F11.182	Opioid abuse with opioid-induced sleep disorder	Diagnosis ICD-10-CM
F11.188	Opioid abuse with other opioid-induced disorder	Diagnosis ICD-10-CM
F11.19	Opioid abuse with unspecified opioid-induced disorder	Diagnosis ICD-10-CM
F11.220	Opioid dependence with intoxication, uncomplicated	Diagnosis ICD-10-CM
F11.221	Opioid dependence with intoxication delirium	Diagnosis ICD-10-CM
F11.222	Opioid dependence with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F11.229	Opioid dependence with intoxication, unspecified	Diagnosis ICD-10-CM
F11.23	Opioid dependence with withdrawal	Diagnosis ICD-10-CM
F11.24	Opioid dependence with opioid-induced mood disorder	Diagnosis ICD-10-CM
F11.250	Opioid dependence with opioid-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F11.251	Opioid dependence with opioid-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F11.259	Opioid dependence with opioid-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F11.281	Opioid dependence with opioid-induced sexual dysfunction	Diagnosis ICD-10-CM
F11.282	Opioid dependence with opioid-induced sleep disorder	Diagnosis ICD-10-CM
F11.288	Opioid dependence with other opioid-induced disorder	Diagnosis ICD-10-CM
F11.29	Opioid dependence with unspecified opioid-induced disorder	Diagnosis ICD-10-CM
F11.90	Opioid use, unspecified, uncomplicated	Diagnosis ICD-10-CM
F11.920	Opioid use, unspecified with intoxication, uncomplicated	Diagnosis ICD-10-CM
F11.921	Opioid use, unspecified with intoxication delirium	Diagnosis ICD-10-CM
F11.922	Opioid use, unspecified with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F11.929	Opioid use, unspecified with intoxication, unspecified	Diagnosis ICD-10-CM
F11.93	Opioid use, unspecified with withdrawal	Diagnosis ICD-10-CM
F11.94	Opioid use, unspecified with opioid-induced mood disorder	Diagnosis ICD-10-CM
F11.950	Opioid use, unspecified with opioid-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F11.951	Opioid use, unspecified with opioid-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F11.959	Opioid use, unspecified with opioid-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F11.981	Opioid use, unspecified with opioid-induced sexual dysfunction	Diagnosis ICD-10-CM
F11.982	Opioid use, unspecified with opioid-induced sleep disorder	Diagnosis ICD-10-CM
F11.988	Opioid use, unspecified with other opioid-induced disorder	Diagnosis ICD-10-CM
F11.99	Opioid use, unspecified with unspecified opioid-induced disorder	Diagnosis ICD-10-CM
F12.10	Cannabis abuse, uncomplicated	Diagnosis ICD-10-CM
F12.11	Cannabis abuse, in remission	Diagnosis ICD-10-CM
F12.120	Cannabis abuse with intoxication, uncomplicated	Diagnosis ICD-10-CM
F12.121	Cannabis abuse with intoxication delirium	Diagnosis ICD-10-CM
F12.122	Cannabis abuse with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F12.129	Cannabis abuse with intoxication, unspecified	Diagnosis ICD-10-CM
F12.150	Cannabis abuse with psychotic disorder with delusions	Diagnosis ICD-10-CM
F12.151	Cannabis abuse with psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F12.159	Cannabis abuse with psychotic disorder, unspecified	Diagnosis ICD-10-CM
F12.180	Cannabis abuse with cannabis-induced anxiety disorder	Diagnosis ICD-10-CM
F12.188	Cannabis abuse with other cannabis-induced disorder	Diagnosis ICD-10-CM
F12.19	Cannabis abuse with unspecified cannabis-induced disorder	Diagnosis ICD-10-CM
F12.220	Cannabis dependence with intoxication, uncomplicated	Diagnosis ICD-10-CM
F12.221	Cannabis dependence with intoxication delirium	Diagnosis ICD-10-CM
F12.222	Cannabis dependence with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F12.229	Cannabis dependence with intoxication, unspecified	Diagnosis ICD-10-CM
F12.250	Cannabis dependence with psychotic disorder with delusions	Diagnosis ICD-10-CM
F12.251	Cannabis dependence with psychotic disorder with hallucinations	Diagnosis ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
F12.259	Cannabis dependence with psychotic disorder, unspecified	Diagnosis ICD-10-CM
F12.280	Cannabis dependence with cannabis-induced anxiety disorder	Diagnosis ICD-10-CM
F12.288	Cannabis dependence with other cannabis-induced disorder	Diagnosis ICD-10-CM
F12.29	Cannabis dependence with unspecified cannabis-induced disorder	Diagnosis ICD-10-CM
F12.90	Cannabis use, unspecified, uncomplicated	Diagnosis ICD-10-CM
F12.920	Cannabis use, unspecified with intoxication, uncomplicated	Diagnosis ICD-10-CM
F12.921	Cannabis use, unspecified with intoxication delirium	Diagnosis ICD-10-CM
F12.922	Cannabis use, unspecified with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F12.929	Cannabis use, unspecified with intoxication, unspecified	Diagnosis ICD-10-CM
F12.950	Cannabis use, unspecified with psychotic disorder with delusions	Diagnosis ICD-10-CM
F12.951	Cannabis use, unspecified with psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F12.959	Cannabis use, unspecified with psychotic disorder, unspecified	Diagnosis ICD-10-CM
F12.980	Cannabis use, unspecified with anxiety disorder	Diagnosis ICD-10-CM
F12.988	Cannabis use, unspecified with other cannabis-induced disorder	Diagnosis ICD-10-CM
F12.99	Cannabis use, unspecified with unspecified cannabis-induced disorder	Diagnosis ICD-10-CM
F13.10	Sedative, hypnotic or anxiolytic abuse, uncomplicated	Diagnosis ICD-10-CM
F13.11	Sedative, hypnotic or anxiolytic abuse, in remission	Diagnosis ICD-10-CM
F13.120	Sedative, hypnotic or anxiolytic abuse with intoxication, uncomplicated	Diagnosis ICD-10-CM
F13.121	Sedative, hypnotic or anxiolytic abuse with intoxication delirium	Diagnosis ICD-10-CM
F13.129	Sedative, hypnotic or anxiolytic abuse with intoxication, unspecified	Diagnosis ICD-10-CM
F13.14	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced mood disorder	Diagnosis ICD-10-CM
F13.150	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder	Diagnosis ICD-10-CM
F13.151	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder with	Diagnosis ICD-10-CM
F13.159	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder,	Diagnosis ICD-10-CM
F13.180	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced anxiety disorder	Diagnosis ICD-10-CM
F13.181	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced sexual dysfunction	Diagnosis ICD-10-CM
F13.182	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced sleep disorder	Diagnosis ICD-10-CM
F13.188	Sedative, hypnotic or anxiolytic abuse with other sedative, hypnotic or anxiolytic-induced disorder	Diagnosis ICD-10-CM
F13.19	Sedative, hypnotic or anxiolytic abuse with unspecified sedative, hypnotic or anxiolytic-induced disorder	Diagnosis ICD-10-CM
F13.220	Sedative, hypnotic or anxiolytic dependence with intoxication, uncomplicated	Diagnosis ICD-10-CM
F13.221	Sedative, hypnotic or anxiolytic dependence with intoxication delirium	Diagnosis ICD-10-CM
F13.229	Sedative, hypnotic or anxiolytic dependence with intoxication, unspecified	Diagnosis ICD-10-CM
F13.230	Sedative, hypnotic or anxiolytic dependence with withdrawal, uncomplicated	Diagnosis ICD-10-CM
F13.231	Sedative, hypnotic or anxiolytic dependence with withdrawal delirium	Diagnosis ICD-10-CM
F13.232	Sedative, hypnotic or anxiolytic dependence with withdrawal with perceptual disturbance	Diagnosis ICD-10-CM
F13.239	Sedative, hypnotic or anxiolytic dependence with withdrawal, unspecified	Diagnosis ICD-10-CM
F13.24	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced mood disorder	Diagnosis ICD-10-CM
F13.250	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder with	Diagnosis ICD-10-CM
F13.251	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder with	Diagnosis ICD-10-CM
F13.259	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder,	Diagnosis ICD-10-CM
F13.26	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced persisting ar	Diagnosis ICD-10-CM
F13.27	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced persisting de	Diagnosis ICD-10-CM
F13.280	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced anxiety diso	Diagnosis ICD-10-CM
F13.281	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced sexual dysfu	Diagnosis ICD-10-CM
F13.282	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced sleep disord	Diagnosis ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
F13.288	Sedative, hypnotic or anxiolytic dependence with other sedative, hypnotic or anxiolytic-induced disord	Diagnosis ICD-10-CM
F13.29	Sedative, hypnotic or anxiolytic dependence with unspecified sedative, hypnotic or anxiolytic-induced	Diagnosis ICD-10-CM
F13.90	Sedative, hypnotic, or anxiolytic use, unspecified, uncomplicated	Diagnosis ICD-10-CM
F13.920	Sedative, hypnotic or anxiolytic use, unspecified with intoxication, uncomplicated	Diagnosis ICD-10-CM
F13.921	Sedative, hypnotic or anxiolytic use, unspecified with intoxication delirium	Diagnosis ICD-10-CM
F13.929	Sedative, hypnotic or anxiolytic use, unspecified with intoxication, unspecified	Diagnosis ICD-10-CM
F13.930	Sedative, hypnotic or anxiolytic use, unspecified with withdrawal, uncomplicated	Diagnosis ICD-10-CM
F13.931	Sedative, hypnotic or anxiolytic use, unspecified with withdrawal delirium	Diagnosis ICD-10-CM
F13.932	Sedative, hypnotic or anxiolytic use, unspecified with withdrawal with perceptual disturbances	Diagnosis ICD-10-CM
F13.939	Sedative, hypnotic or anxiolytic use, unspecified with withdrawal, unspecified	Diagnosis ICD-10-CM
F13.94	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced mood di	Diagnosis ICD-10-CM
F13.950	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder with	Diagnosis ICD-10-CM
F13.951	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder with	Diagnosis ICD-10-CM
F13.959	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder,	Diagnosis ICD-10-CM
F13.96	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced persisting amnesic	Diagnosis ICD-10-CM
F13.97	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced persistin	Diagnosis ICD-10-CM
F13.980	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced anxiety c	Diagnosis ICD-10-CM
F13.981	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced sexual d	Diagnosis ICD-10-CM
F13.982	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced sleep dis	Diagnosis ICD-10-CM
F13.988	Sedative, hypnotic or anxiolytic use, unspecified with other sedative, hypnotic or anxiolytic-induced dis	Diagnosis ICD-10-CM
F13.99	Sedative, hypnotic or anxiolytic use, unspecified with unspecified sedative, hypnotic or anxiolytic-induc	Diagnosis ICD-10-CM
F14.10	Cocaine abuse, uncomplicated	Diagnosis ICD-10-CM
F14.11	Cocaine abuse, in remission	Diagnosis ICD-10-CM
F14.120	Cocaine abuse with intoxication, uncomplicated	Diagnosis ICD-10-CM
F14.121	Cocaine abuse with intoxication with delirium	Diagnosis ICD-10-CM
F14.122	Cocaine abuse with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F14.129	Cocaine abuse with intoxication, unspecified	Diagnosis ICD-10-CM
F14.14	Cocaine abuse with cocaine-induced mood disorder	Diagnosis ICD-10-CM
F14.150	Cocaine abuse with cocaine-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F14.151	Cocaine abuse with cocaine-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F14.159	Cocaine abuse with cocaine-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F14.180	Cocaine abuse with cocaine-induced anxiety disorder	Diagnosis ICD-10-CM
F14.181	Cocaine abuse with cocaine-induced sexual dysfunction	Diagnosis ICD-10-CM
F14.182	Cocaine abuse with cocaine-induced sleep disorder	Diagnosis ICD-10-CM
F14.188	Cocaine abuse with other cocaine-induced disorder	Diagnosis ICD-10-CM
F14.19	Cocaine abuse with unspecified cocaine-induced disorder	Diagnosis ICD-10-CM
F14.220	Cocaine dependence with intoxication, uncomplicated	Diagnosis ICD-10-CM
F14.221	Cocaine dependence with intoxication delirium	Diagnosis ICD-10-CM
F14.222	Cocaine dependence with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F14.229	Cocaine dependence with intoxication, unspecified	Diagnosis ICD-10-CM
F14.23	Cocaine dependence with withdrawal	Diagnosis ICD-10-CM
F14.24	Cocaine dependence with cocaine-induced mood disorder	Diagnosis ICD-10-CM
F14.250	Cocaine dependence with cocaine-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F14.251	Cocaine dependence with cocaine-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F14.259	Cocaine dependence with cocaine-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
F14.280	Cocaine dependence with cocaine-induced anxiety disorder	Diagnosis ICD-10-CM
F14.281	Cocaine dependence with cocaine-induced sexual dysfunction	Diagnosis ICD-10-CM
F14.282	Cocaine dependence with cocaine-induced sleep disorder	Diagnosis ICD-10-CM
F14.288	Cocaine dependence with other cocaine-induced disorder	Diagnosis ICD-10-CM
F14.29	Cocaine dependence with unspecified cocaine-induced disorder	Diagnosis ICD-10-CM
F14.90	Cocaine use, unspecified, uncomplicated	Diagnosis ICD-10-CM
F14.920	Cocaine use, unspecified with intoxication, uncomplicated	Diagnosis ICD-10-CM
F14.921	Cocaine use, unspecified with intoxication delirium	Diagnosis ICD-10-CM
F14.922	Cocaine use, unspecified with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F14.929	Cocaine use, unspecified with intoxication, unspecified	Diagnosis ICD-10-CM
F14.94	Cocaine use, unspecified with cocaine-induced mood disorder	Diagnosis ICD-10-CM
F14.950	Cocaine use, unspecified with cocaine-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F14.951	Cocaine use, unspecified with cocaine-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F14.959	Cocaine use, unspecified with cocaine-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F14.980	Cocaine use, unspecified with cocaine-induced anxiety disorder	Diagnosis ICD-10-CM
F14.981	Cocaine use, unspecified with cocaine-induced sexual dysfunction	Diagnosis ICD-10-CM
F14.982	Cocaine use, unspecified with cocaine-induced sleep disorder	Diagnosis ICD-10-CM
F14.988	Cocaine use, unspecified with other cocaine-induced disorder	Diagnosis ICD-10-CM
F14.99	Cocaine use, unspecified with unspecified cocaine-induced disorder	Diagnosis ICD-10-CM
F15.10	Other stimulant abuse, uncomplicated	Diagnosis ICD-10-CM
F15.11	Other stimulant abuse, in remission	Diagnosis ICD-10-CM
F15.120	Other stimulant abuse with intoxication, uncomplicated	Diagnosis ICD-10-CM
F15.121	Other stimulant abuse with intoxication delirium	Diagnosis ICD-10-CM
F15.122	Other stimulant abuse with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F15.129	Other stimulant abuse with intoxication, unspecified	Diagnosis ICD-10-CM
F15.14	Other stimulant abuse with stimulant-induced mood disorder	Diagnosis ICD-10-CM
F15.150	Other stimulant abuse with stimulant-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F15.151	Other stimulant abuse with stimulant-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F15.159	Other stimulant abuse with stimulant-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F15.180	Other stimulant abuse with stimulant-induced anxiety disorder	Diagnosis ICD-10-CM
F15.181	Other stimulant abuse with stimulant-induced sexual dysfunction	Diagnosis ICD-10-CM
F15.182	Other stimulant abuse with stimulant-induced sleep disorder	Diagnosis ICD-10-CM
F15.188	Other stimulant abuse with other stimulant-induced disorder	Diagnosis ICD-10-CM
F15.19	Other stimulant abuse with unspecified stimulant-induced disorder	Diagnosis ICD-10-CM
F15.220	Other stimulant dependence with intoxication, uncomplicated	Diagnosis ICD-10-CM
F15.221	Other stimulant dependence with intoxication delirium	Diagnosis ICD-10-CM
F15.222	Other stimulant dependence with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F15.229	Other stimulant dependence with intoxication, unspecified	Diagnosis ICD-10-CM
F15.23	Other stimulant dependence with withdrawal	Diagnosis ICD-10-CM
F15.24	Other stimulant dependence with stimulant-induced mood disorder	Diagnosis ICD-10-CM
F15.250	Other stimulant dependence with stimulant-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F15.251	Other stimulant dependence with stimulant-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F15.259	Other stimulant dependence with stimulant-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F15.280	Other stimulant dependence with stimulant-induced anxiety disorder	Diagnosis ICD-10-CM
F15.281	Other stimulant dependence with stimulant-induced sexual dysfunction	Diagnosis ICD-10-CM
F15.282	Other stimulant dependence with stimulant-induced sleep disorder	Diagnosis ICD-10-CM
F15.288	Other stimulant dependence with other stimulant-induced disorder	Diagnosis ICD-10-CM
F15.29	Other stimulant dependence with unspecified stimulant-induced disorder	Diagnosis ICD-10-CM
F15.90	Other stimulant use, unspecified, uncomplicated	Diagnosis ICD-10-CM



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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
F15.920	Other stimulant use, unspecified with intoxication, uncomplicated	Diagnosis ICD-10-CM
F15.921	Other stimulant use, unspecified with intoxication delirium	Diagnosis ICD-10-CM
F15.922	Other stimulant use, unspecified with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F15.929	Other stimulant use, unspecified with intoxication, unspecified	Diagnosis ICD-10-CM
F15.93	Other stimulant use, unspecified with withdrawal	Diagnosis ICD-10-CM
F15.94	Other stimulant use, unspecified with stimulant-induced mood disorder	Diagnosis ICD-10-CM
F15.950	Other stimulant use, unspecified with stimulant-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F15.951	Other stimulant use, unspecified with stimulant-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F15.959	Other stimulant use, unspecified with stimulant-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F15.980	Other stimulant use, unspecified with stimulant-induced anxiety disorder	Diagnosis ICD-10-CM
F15.981	Other stimulant use, unspecified with stimulant-induced sexual dysfunction	Diagnosis ICD-10-CM
F15.982	Other stimulant use, unspecified with stimulant-induced sleep disorder	Diagnosis ICD-10-CM
F15.988	Other stimulant use, unspecified with other stimulant-induced disorder	Diagnosis ICD-10-CM
F15.99	Other stimulant use, unspecified with unspecified stimulant-induced disorder	Diagnosis ICD-10-CM
F16.10	Hallucinogen abuse, uncomplicated	Diagnosis ICD-10-CM
F16.11	Hallucinogen abuse, in remission	Diagnosis ICD-10-CM
F16.120	Hallucinogen abuse with intoxication, uncomplicated	Diagnosis ICD-10-CM
F16.121	Hallucinogen abuse with intoxication with delirium	Diagnosis ICD-10-CM
F16.122	Hallucinogen abuse with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F16.129	Hallucinogen abuse with intoxication, unspecified	Diagnosis ICD-10-CM
F16.14	Hallucinogen abuse with hallucinogen-induced mood disorder	Diagnosis ICD-10-CM
F16.150	Hallucinogen abuse with hallucinogen-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F16.151	Hallucinogen abuse with hallucinogen-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F16.159	Hallucinogen abuse with hallucinogen-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F16.180	Hallucinogen abuse with hallucinogen-induced anxiety disorder	Diagnosis ICD-10-CM
F16.183	Hallucinogen abuse with hallucinogen persisting perception disorder (flashbacks)	Diagnosis ICD-10-CM
F16.188	Hallucinogen abuse with other hallucinogen-induced disorder	Diagnosis ICD-10-CM
F16.19	Hallucinogen abuse with unspecified hallucinogen-induced disorder	Diagnosis ICD-10-CM
F16.220	Hallucinogen dependence with intoxication, uncomplicated	Diagnosis ICD-10-CM
F16.221	Hallucinogen dependence with intoxication with delirium	Diagnosis ICD-10-CM
F16.229	Hallucinogen dependence with intoxication, unspecified	Diagnosis ICD-10-CM
F16.24	Hallucinogen dependence with hallucinogen-induced mood disorder	Diagnosis ICD-10-CM
F16.250	Hallucinogen dependence with hallucinogen-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F16.251	Hallucinogen dependence with hallucinogen-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F16.259	Hallucinogen dependence with hallucinogen-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F16.280	Hallucinogen dependence with hallucinogen-induced anxiety disorder	Diagnosis ICD-10-CM
F16.283	Hallucinogen dependence with hallucinogen persisting perception disorder (flashbacks)	Diagnosis ICD-10-CM
F16.288	Hallucinogen dependence with other hallucinogen-induced disorder	Diagnosis ICD-10-CM
F16.29	Hallucinogen dependence with unspecified hallucinogen-induced disorder	Diagnosis ICD-10-CM
F16.90	Hallucinogen use, unspecified, uncomplicated	Diagnosis ICD-10-CM
F16.920	Hallucinogen use, unspecified with intoxication, uncomplicated	Diagnosis ICD-10-CM
F16.921	Hallucinogen use, unspecified with intoxication with delirium	Diagnosis ICD-10-CM
F16.929	Hallucinogen use, unspecified with intoxication, unspecified	Diagnosis ICD-10-CM
F16.94	Hallucinogen use, unspecified with hallucinogen-induced mood disorder	Diagnosis ICD-10-CM
F16.950	Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F16.951	Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F16.959	Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F16.980	Hallucinogen use, unspecified with hallucinogen-induced anxiety disorder	Diagnosis ICD-10-CM
F16.983	Hallucinogen use, unspecified with hallucinogen persisting perception disorder (flashbacks)	Diagnosis ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
F16.988	Hallucinogen use, unspecified with other hallucinogen-induced disorder	Diagnosis ICD-10-CM
F16.99	Hallucinogen use, unspecified with unspecified hallucinogen-induced disorder	Diagnosis ICD-10-CM
F17.203	Nicotine dependence unspecified, with withdrawal	Diagnosis ICD-10-CM
F17.208	Nicotine dependence, unspecified, with other nicotine-induced disorders	Diagnosis ICD-10-CM
F17.209	Nicotine dependence, unspecified, with unspecified nicotine-induced disorders	Diagnosis ICD-10-CM
F17.213	Nicotine dependence, cigarettes, with withdrawal	Diagnosis ICD-10-CM
F17.218	Nicotine dependence, cigarettes, with other nicotine-induced disorders	Diagnosis ICD-10-CM
F17.219	Nicotine dependence, cigarettes, with unspecified nicotine-induced disorders	Diagnosis ICD-10-CM
F17.223	Nicotine dependence, chewing tobacco, with withdrawal	Diagnosis ICD-10-CM
F17.228	Nicotine dependence, chewing tobacco, with other nicotine-induced disorders	Diagnosis ICD-10-CM
F17.229	Nicotine dependence, chewing tobacco, with unspecified nicotine-induced disorders	Diagnosis ICD-10-CM
F17.293	Nicotine dependence, other tobacco product, with withdrawal	Diagnosis ICD-10-CM
F17.298	Nicotine dependence, other tobacco product, with other nicotine-induced disorders	Diagnosis ICD-10-CM
F17.299	Nicotine dependence, other tobacco product, with unspecified nicotine-induced disorders	Diagnosis ICD-10-CM
F18.10	Inhalant abuse, uncomplicated	Diagnosis ICD-10-CM
F18.11	Inhalant abuse, in remission	Diagnosis ICD-10-CM
F18.120	Inhalant abuse with intoxication, uncomplicated	Diagnosis ICD-10-CM
F18.121	Inhalant abuse with intoxication delirium	Diagnosis ICD-10-CM
F18.129	Inhalant abuse with intoxication, unspecified	Diagnosis ICD-10-CM
F18.14	Inhalant abuse with inhalant-induced mood disorder	Diagnosis ICD-10-CM
F18.150	Inhalant abuse with inhalant-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F18.151	Inhalant abuse with inhalant-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F18.159	Inhalant abuse with inhalant-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F18.17	Inhalant abuse with inhalant-induced dementia	Diagnosis ICD-10-CM
F18.180	Inhalant abuse with inhalant-induced anxiety disorder	Diagnosis ICD-10-CM
F18.188	Inhalant abuse with other inhalant-induced disorder	Diagnosis ICD-10-CM
F18.19	Inhalant abuse with unspecified inhalant-induced disorder	Diagnosis ICD-10-CM
F18.220	Inhalant dependence with intoxication, uncomplicated	Diagnosis ICD-10-CM
F18.221	Inhalant dependence with intoxication delirium	Diagnosis ICD-10-CM
F18.229	Inhalant dependence with intoxication, unspecified	Diagnosis ICD-10-CM
F18.24	Inhalant dependence with inhalant-induced mood disorder	Diagnosis ICD-10-CM
F18.250	Inhalant dependence with inhalant-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F18.251	Inhalant dependence with inhalant-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F18.259	Inhalant dependence with inhalant-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F18.27	Inhalant dependence with inhalant-induced dementia	Diagnosis ICD-10-CM
F18.280	Inhalant dependence with inhalant-induced anxiety disorder	Diagnosis ICD-10-CM
F18.288	Inhalant dependence with other inhalant-induced disorder	Diagnosis ICD-10-CM
F18.29	Inhalant dependence with unspecified inhalant-induced disorder	Diagnosis ICD-10-CM
F18.90	Inhalant use, unspecified, uncomplicated	Diagnosis ICD-10-CM
F18.920	Inhalant use, unspecified with intoxication, uncomplicated	Diagnosis ICD-10-CM
F18.921	Inhalant use, unspecified with intoxication with delirium	Diagnosis ICD-10-CM
F18.929	Inhalant use, unspecified with intoxication, unspecified	Diagnosis ICD-10-CM
F18.94	Inhalant use, unspecified with inhalant-induced mood disorder	Diagnosis ICD-10-CM
F18.950	Inhalant use, unspecified with inhalant-induced psychotic disorder with delusions	Diagnosis ICD-10-CM
F18.951	Inhalant use, unspecified with inhalant-induced psychotic disorder with hallucinations	Diagnosis ICD-10-CM
F18.959	Inhalant use, unspecified with inhalant-induced psychotic disorder, unspecified	Diagnosis ICD-10-CM
F18.97	Inhalant use, unspecified with inhalant-induced persisting dementia	Diagnosis ICD-10-CM
F18.980	Inhalant use, unspecified with inhalant-induced anxiety disorder	Diagnosis ICD-10-CM
F18.988	Inhalant use, unspecified with other inhalant-induced disorder	Diagnosis ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
F18.99	Inhalant use, unspecified with unspecified inhalant-induced disorder	Diagnosis ICD-10-CM
F19.10	Other psychoactive substance abuse, uncomplicated	Diagnosis ICD-10-CM
F19.11	Other psychoactive substance abuse, in remission	Diagnosis ICD-10-CM
F19.120	Other psychoactive substance abuse with intoxication, uncomplicated	Diagnosis ICD-10-CM
F19.121	Other psychoactive substance abuse with intoxication delirium	Diagnosis ICD-10-CM
F19.122	Other psychoactive substance abuse with intoxication with perceptual disturbances	Diagnosis ICD-10-CM
F19.129	Other psychoactive substance abuse with intoxication, unspecified	Diagnosis ICD-10-CM
F19.14	Other psychoactive substance abuse with psychoactive substance-induced mood disorder	Diagnosis ICD-10-CM
F19.150	Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder with deli	Diagnosis ICD-10-CM
F19.151	Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder with hall	Diagnosis ICD-10-CM
F19.159	Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder, unspeci	Diagnosis ICD-10-CM
F19.16	Other psychoactive substance abuse with psychoactive substance-induced persisting amnesic disorde	Diagnosis ICD-10-CM
F19.17	Other psychoactive substance abuse with psychoactive substance-induced persisting dementia	Diagnosis ICD-10-CM
F19.180	Other psychoactive substance abuse with psychoactive substance-induced anxiety disorder	Diagnosis ICD-10-CM
F19.181	Other psychoactive substance abuse with psychoactive substance-induced sexual dysfunction	Diagnosis ICD-10-CM
F19.182	Other psychoactive substance abuse with psychoactive substance-induced sleep disorder	Diagnosis ICD-10-CM
F19.188	Other psychoactive substance abuse with other psychoactive substance-induced disorder	Diagnosis ICD-10-CM
F19.19	Other psychoactive substance abuse with unspecified psychoactive substance-induced disorder	Diagnosis ICD-10-CM
F19.21	Other psychoactive substance dependence, in remission	Diagnosis ICD-10-CM
F19.220	Other psychoactive substance dependence with intoxication, uncomplicated	Diagnosis ICD-10-CM
F19.221	Other psychoactive substance dependence with intoxication delirium	Diagnosis ICD-10-CM
F19.222	Other psychoactive substance dependence with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F19.229	Other psychoactive substance dependence with intoxication, unspecified	Diagnosis ICD-10-CM
F19.230	Other psychoactive substance dependence with withdrawal, uncomplicated	Diagnosis ICD-10-CM
F19.231	Other psychoactive substance dependence with withdrawal delirium	Diagnosis ICD-10-CM
F19.232	Other psychoactive substance dependence with withdrawal with perceptual disturbance	Diagnosis ICD-10-CM
F19.239	Other psychoactive substance dependence with withdrawal, unspecified	Diagnosis ICD-10-CM
F19.24	Other psychoactive substance dependence with psychoactive substance-induced mood disorder	Diagnosis ICD-10-CM
F19.250	Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder wi	Diagnosis ICD-10-CM
F19.251	Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder with	Diagnosis ICD-10-CM
F19.259	Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder, u	Diagnosis ICD-10-CM
F19.26	Other psychoactive substance dependence with psychoactive substance-induced persisting amnesic d	Diagnosis ICD-10-CM
F19.27	Other psychoactive substance dependence with psychoactive substance-induced persisting dementia	Diagnosis ICD-10-CM
F19.280	Other psychoactive substance dependence with psychoactive substance-induced anxiety disorder	Diagnosis ICD-10-CM
F19.281	Other psychoactive substance dependence with psychoactive substance-induced sexual dysfunction	Diagnosis ICD-10-CM
F19.282	Other psychoactive substance dependence with psychoactive substance-induced sleep disorder	Diagnosis ICD-10-CM
F19.288	Other psychoactive substance dependence with other psychoactive substance-induced disorder	Diagnosis ICD-10-CM
F19.29	Other psychoactive substance dependence with unspecified psychoactive substance-induced disorder	Diagnosis ICD-10-CM
F19.90	Other psychoactive substance use, unspecified, uncomplicated	Diagnosis ICD-10-CM
F19.920	Other psychoactive substance use, unspecified with intoxication, uncomplicated	Diagnosis ICD-10-CM
F19.921	Other psychoactive substance use, unspecified with intoxication with delirium	Diagnosis ICD-10-CM
F19.922	Other psychoactive substance use, unspecified with intoxication with perceptual disturbance	Diagnosis ICD-10-CM
F19.929	Other psychoactive substance use, unspecified with intoxication, unspecified	Diagnosis ICD-10-CM
F19.930	Other psychoactive substance use, unspecified with withdrawal, uncomplicated	Diagnosis ICD-10-CM
F19.931	Other psychoactive substance use, unspecified with withdrawal delirium	Diagnosis ICD-10-CM
F19.932	Other psychoactive substance use, unspecified with withdrawal with perceptual disturbance	Diagnosis ICD-10-CM
F19.939	Other psychoactive substance use, unspecified with withdrawal, unspecified	Diagnosis ICD-10-CM
F19.94	Other psychoactive substance use, unspecified with psychoactive substance-induced mood disorder	Diagnosis ICD-10-CM



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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
<b>Code</b>	<b>Category</b>	<b>Code Type</b>
F19.950	Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder with	Diagnosis ICD-10-CM
F19.951	Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder with	Diagnosis ICD-10-CM
F19.959	Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder	Diagnosis ICD-10-CM
F19.96	Other psychoactive substance use, unspecified with psychoactive substance-induced persisting amnesia	Diagnosis ICD-10-CM
F19.97	Other psychoactive substance use, unspecified with psychoactive substance-induced persisting dementia	Diagnosis ICD-10-CM
F19.980	Other psychoactive substance use, unspecified with psychoactive substance-induced anxiety disorder	Diagnosis ICD-10-CM
F19.981	Other psychoactive substance use, unspecified with psychoactive substance-induced sexual dysfunction	Diagnosis ICD-10-CM
F19.982	Other psychoactive substance use, unspecified with psychoactive substance-induced sleep disorder	Diagnosis ICD-10-CM
F19.988	Other psychoactive substance use, unspecified with other psychoactive substance-induced disorder	Diagnosis ICD-10-CM
F19.99	Other psychoactive substance use, unspecified with unspecified psychoactive substance-induced disorder	Diagnosis ICD-10-CM
F55.0	Abuse of antacids	Diagnosis ICD-10-CM
F55.1	Abuse of herbal or folk remedies	Diagnosis ICD-10-CM
F55.2	Abuse of laxatives	Diagnosis ICD-10-CM
F55.3	Abuse of steroids or hormones	Diagnosis ICD-10-CM
F55.4	Abuse of vitamins	Diagnosis ICD-10-CM
F55.8	Abuse of other non-psychoactive substances	Diagnosis ICD-10-CM
O99.320	Drug use complicating pregnancy, unspecified trimester	Diagnosis ICD-10-CM
O99.321	Drug use complicating pregnancy, first trimester	Diagnosis ICD-10-CM
O99.322	Drug use complicating pregnancy, second trimester	Diagnosis ICD-10-CM
O99.323	Drug use complicating pregnancy, third trimester	Diagnosis ICD-10-CM
O99.324	Drug use complicating childbirth	Diagnosis ICD-10-CM
O99.325	Drug use complicating the puerperium	Diagnosis ICD-10-CM
<b>Stroke</b>		
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
G45.8	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
G97.31	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating a nervous system	Diagnosis ICD-10-CM
G97.32	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating other	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
I60.20	Nontraumatic subarachnoid hemorrhage from unspecified anterior communicating artery	Diagnosis ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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
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
I63.039	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
I63.119	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
I63.139	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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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
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

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

<b>Code</b>	<b>Code</b>	<b>Code</b>	<b>Code</b>
		<b>Category</b>	<b>Type</b>
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
I63.9	Cerebral infarction, unspecified	Diagnosis	ICD-10-CM
I66.01	Occlusion and stenosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I66.02	Occlusion and stenosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I66.03	Occlusion and stenosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I66.09	Occlusion and stenosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I66.11	Occlusion and stenosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I66.12	Occlusion and stenosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I66.13	Occlusion and stenosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I66.19	Occlusion and stenosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I66.21	Occlusion and stenosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I66.22	Occlusion and stenosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I66.23	Occlusion and stenosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I66.29	Occlusion and stenosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I66.3	Occlusion and stenosis of cerebellar arteries	Diagnosis	ICD-10-CM
I66.8	Occlusion and stenosis of other cerebral arteries	Diagnosis	ICD-10-CM
I66.9	Occlusion and stenosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
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
<b>Hypertension</b>			
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	Diagnosis	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 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	Diagnosis	ICD-10-CM

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

<b>Code</b>		<b>Code Category</b>	<b>Code Type</b>
I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end	Diagnosis	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end	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
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
<b>Glaucoma</b>			
H40.001	Preglaucoma, unspecified, right eye	Diagnosis	ICD-10-CM
H40.002	Preglaucoma, unspecified, left eye	Diagnosis	ICD-10-CM
H40.003	Preglaucoma, unspecified, bilateral	Diagnosis	ICD-10-CM
H40.009	Preglaucoma, unspecified, unspecified eye	Diagnosis	ICD-10-CM
H40.011	Open angle with borderline findings, low risk, right eye	Diagnosis	ICD-10-CM
H40.012	Open angle with borderline findings, low risk, left eye	Diagnosis	ICD-10-CM
H40.013	Open angle with borderline findings, low risk, bilateral	Diagnosis	ICD-10-CM
H40.019	Open angle with borderline findings, low risk, unspecified eye	Diagnosis	ICD-10-CM
H40.031	Anatomical narrow angle, right eye	Diagnosis	ICD-10-CM
H40.032	Anatomical narrow angle, left eye	Diagnosis	ICD-10-CM
H40.033	Anatomical narrow angle, bilateral	Diagnosis	ICD-10-CM
H40.039	Anatomical narrow angle, 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 D. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Fourth Edition (CPT-4), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request**

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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



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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
<b>Code</b>	<b>Category</b>	<b>Code Type</b>
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
<b>Heart Failure</b>		
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,	Diagnosis ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end	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

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

		Code	Code Type
Code		Category	
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
<b>Ischemic Heart Disease</b>			
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
I20.9	Angina pectoris, unspecified	Diagnosis	ICD-10-CM
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.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
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	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
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
I24.9	Acute ischemic heart disease, unspecified	Diagnosis	ICD-10-CM
I25.10	Atherosclerotic heart disease of native coronary artery without angina pectoris	Diagnosis	ICD-10-CM
I25.110	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.111	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
I25.2	Old myocardial infarction	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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
<b>Code</b>	<b>Category</b>	<b>Code Type</b>
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	Diagnosis ICD-10-CM
I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris	Diagnosis ICD-10-CM
I25.709	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unspecified angina pectoris	Diagnosis ICD-10-CM
I25.710	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 document	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 docume	Diagnosis ICD-10-CM
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pector	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 pectc	Diagnosis ICD-10-CM
I25.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented	Diagnosis ICD-10-CM
I25.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of angina	Diagnosis ICD-10-CM
I25.739	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unspecified angina pe	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	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 docu	Diagnosis ICD-10-CM
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pec	Diagnosis ICD-10-CM
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pector	Diagnosis ICD-10-CM
I25.790	Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis ICD-10-CM
I25.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis ICD-10-CM
I25.798	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
<b>Acute Myocardial Infarction</b>		
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

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

		Code	
Code		Category	Code Type
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
<b>Atrial Fibrillation</b>			
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
I48.91	Unspecified atrial fibrillation	Diagnosis	ICD-10-CM
<b>Arthritis</b>			
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
M05.20	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



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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
M05.241	Rheumatoid vasculitis with rheumatoid arthritis of right hand	Diagnosis ICD-10-CM
M05.242	Rheumatoid vasculitis with rheumatoid arthritis of left hand	Diagnosis ICD-10-CM
M05.249	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hand	Diagnosis ICD-10-CM
M05.251	Rheumatoid vasculitis with rheumatoid arthritis of right hip	Diagnosis ICD-10-CM
M05.252	Rheumatoid vasculitis with rheumatoid arthritis of left hip	Diagnosis ICD-10-CM
M05.259	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hip	Diagnosis ICD-10-CM
M05.261	Rheumatoid vasculitis with rheumatoid arthritis of right knee	Diagnosis ICD-10-CM
M05.262	Rheumatoid vasculitis with rheumatoid arthritis of left knee	Diagnosis ICD-10-CM
M05.269	Rheumatoid vasculitis with rheumatoid arthritis of unspecified knee	Diagnosis ICD-10-CM
M05.271	Rheumatoid vasculitis with rheumatoid arthritis of right ankle and foot	Diagnosis ICD-10-CM
M05.272	Rheumatoid vasculitis with rheumatoid arthritis of left ankle and foot	Diagnosis ICD-10-CM
M05.279	Rheumatoid vasculitis with rheumatoid arthritis of unspecified ankle and foot	Diagnosis ICD-10-CM
M05.29	Rheumatoid vasculitis with rheumatoid arthritis of multiple sites	Diagnosis ICD-10-CM
M05.30	Rheumatoid heart disease with rheumatoid arthritis of unspecified site	Diagnosis ICD-10-CM
M05.311	Rheumatoid heart disease with rheumatoid arthritis of right shoulder	Diagnosis ICD-10-CM
M05.312	Rheumatoid heart disease with rheumatoid arthritis of left shoulder	Diagnosis ICD-10-CM
M05.319	Rheumatoid heart disease with rheumatoid arthritis of unspecified shoulder	Diagnosis ICD-10-CM
M05.321	Rheumatoid heart disease with rheumatoid arthritis of right elbow	Diagnosis ICD-10-CM
M05.322	Rheumatoid heart disease with rheumatoid arthritis of left elbow	Diagnosis ICD-10-CM
M05.329	Rheumatoid heart disease with rheumatoid arthritis of unspecified elbow	Diagnosis ICD-10-CM
M05.331	Rheumatoid heart disease with rheumatoid arthritis of right wrist	Diagnosis ICD-10-CM
M05.332	Rheumatoid heart disease with rheumatoid arthritis of left wrist	Diagnosis ICD-10-CM
M05.339	Rheumatoid heart disease with rheumatoid arthritis of unspecified wrist	Diagnosis ICD-10-CM
M05.341	Rheumatoid heart disease with rheumatoid arthritis of right hand	Diagnosis ICD-10-CM
M05.342	Rheumatoid heart disease with rheumatoid arthritis of left hand	Diagnosis ICD-10-CM
M05.349	Rheumatoid heart disease with rheumatoid arthritis of unspecified hand	Diagnosis ICD-10-CM
M05.351	Rheumatoid heart disease with rheumatoid arthritis of right hip	Diagnosis ICD-10-CM
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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
M05.451	Rheumatoid myopathy with rheumatoid arthritis of right hip	Diagnosis ICD-10-CM
M05.452	Rheumatoid myopathy with rheumatoid arthritis of left hip	Diagnosis ICD-10-CM
M05.459	Rheumatoid myopathy with rheumatoid arthritis of unspecified hip	Diagnosis ICD-10-CM
M05.461	Rheumatoid myopathy with rheumatoid arthritis of right knee	Diagnosis ICD-10-CM
M05.462	Rheumatoid myopathy with rheumatoid arthritis of left knee	Diagnosis ICD-10-CM
M05.469	Rheumatoid myopathy with rheumatoid arthritis of unspecified knee	Diagnosis ICD-10-CM
M05.471	Rheumatoid myopathy with rheumatoid arthritis of right ankle and foot	Diagnosis ICD-10-CM
M05.472	Rheumatoid myopathy with rheumatoid arthritis of left ankle and foot	Diagnosis ICD-10-CM
M05.479	Rheumatoid myopathy with rheumatoid arthritis of unspecified ankle and foot	Diagnosis ICD-10-CM
M05.49	Rheumatoid myopathy with rheumatoid arthritis of multiple sites	Diagnosis ICD-10-CM
M05.50	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified site	Diagnosis ICD-10-CM
M05.511	Rheumatoid polyneuropathy with rheumatoid arthritis of right shoulder	Diagnosis ICD-10-CM
M05.512	Rheumatoid polyneuropathy with rheumatoid arthritis of left shoulder	Diagnosis ICD-10-CM
M05.519	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified shoulder	Diagnosis ICD-10-CM
M05.521	Rheumatoid polyneuropathy with rheumatoid arthritis of right elbow	Diagnosis ICD-10-CM
M05.522	Rheumatoid polyneuropathy with rheumatoid arthritis of left elbow	Diagnosis ICD-10-CM
M05.529	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified elbow	Diagnosis ICD-10-CM
M05.531	Rheumatoid polyneuropathy with rheumatoid arthritis of right wrist	Diagnosis ICD-10-CM
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
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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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 involve	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 involvem	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 involveme	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 involveme	Diagnosis ICD-10-CM
M05.751	Rheumatoid arthritis with rheumatoid factor of right hip without organ or systems involvement	Diagnosis ICD-10-CM
M05.752	Rheumatoid arthritis with rheumatoid factor of left hip without organ or systems involvement	Diagnosis ICD-10-CM
M05.759	Rheumatoid arthritis with rheumatoid factor of unspecified hip without organ or systems involvement	Diagnosis ICD-10-CM
M05.761	Rheumatoid arthritis with rheumatoid factor of right knee without organ or systems involvement	Diagnosis ICD-10-CM
M05.762	Rheumatoid arthritis with rheumatoid factor of left knee without organ or systems involvement	Diagnosis ICD-10-CM
M05.769	Rheumatoid arthritis with rheumatoid factor of unspecified knee without organ or systems involveme	Diagnosis ICD-10-CM
M05.771	Rheumatoid arthritis with rheumatoid factor of right ankle and foot without organ or systems involen	Diagnosis ICD-10-CM
M05.772	Rheumatoid arthritis with rheumatoid factor of left ankle and foot without organ or systems involme	Diagnosis ICD-10-CM
M05.779	Rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot without organ or systems ir	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 involerr	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



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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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
M06.259	Rheumatoid bursitis, unspecified hip	Diagnosis ICD-10-CM

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
M08.851	Other juvenile arthritis, right hip	Diagnosis ICD-10-CM
M08.852	Other juvenile arthritis, left hip	Diagnosis ICD-10-CM
M08.859	Other juvenile arthritis, unspecified hip	Diagnosis ICD-10-CM
M08.861	Other juvenile arthritis, right knee	Diagnosis ICD-10-CM
M08.862	Other juvenile arthritis, left knee	Diagnosis ICD-10-CM
M08.869	Other juvenile arthritis, unspecified knee	Diagnosis ICD-10-CM
M08.871	Other juvenile arthritis, right ankle and foot	Diagnosis ICD-10-CM
M08.872	Other juvenile arthritis, left ankle and foot	Diagnosis ICD-10-CM
M08.879	Other juvenile arthritis, unspecified ankle and foot	Diagnosis ICD-10-CM
M08.88	Other juvenile arthritis, other specified site	Diagnosis ICD-10-CM
M08.89	Other juvenile arthritis, multiple sites	Diagnosis ICD-10-CM
M08.90	Juvenile arthritis, unspecified, unspecified site	Diagnosis ICD-10-CM
M08.911	Juvenile arthritis, unspecified, right shoulder	Diagnosis ICD-10-CM
M08.912	Juvenile arthritis, unspecified, left shoulder	Diagnosis ICD-10-CM
M08.919	Juvenile arthritis, unspecified, unspecified shoulder	Diagnosis ICD-10-CM
M08.921	Juvenile arthritis, unspecified, right elbow	Diagnosis ICD-10-CM
M08.922	Juvenile arthritis, unspecified, left elbow	Diagnosis ICD-10-CM
M08.929	Juvenile arthritis, unspecified, unspecified elbow	Diagnosis ICD-10-CM
M08.931	Juvenile arthritis, unspecified, right wrist	Diagnosis ICD-10-CM
M08.932	Juvenile arthritis, unspecified, left wrist	Diagnosis ICD-10-CM
M08.939	Juvenile arthritis, unspecified, unspecified wrist	Diagnosis ICD-10-CM
M08.941	Juvenile arthritis, unspecified, right hand	Diagnosis ICD-10-CM
M08.942	Juvenile arthritis, unspecified, left hand	Diagnosis ICD-10-CM
M08.949	Juvenile arthritis, unspecified, unspecified hand	Diagnosis ICD-10-CM
M08.951	Juvenile arthritis, unspecified, right hip	Diagnosis ICD-10-CM
M08.952	Juvenile arthritis, unspecified, left hip	Diagnosis ICD-10-CM
M08.959	Juvenile arthritis, unspecified, unspecified hip	Diagnosis ICD-10-CM
M08.961	Juvenile arthritis, unspecified, right knee	Diagnosis ICD-10-CM
M08.962	Juvenile arthritis, unspecified, left knee	Diagnosis ICD-10-CM
M08.969	Juvenile arthritis, unspecified, unspecified knee	Diagnosis ICD-10-CM
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



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

<b>Code</b>		<b>Code Category</b>	<b>Code Type</b>
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
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
M18.30	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, unspecified hand	Diagnosis	ICD-10-CM
M18.31	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, right hand	Diagnosis	ICD-10-CM
M18.32	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, left hand	Diagnosis	ICD-10-CM
M18.4	Other bilateral secondary osteoarthritis of first carpometacarpal joints	Diagnosis	ICD-10-CM
M18.50	Other unilateral secondary osteoarthritis of first carpometacarpal joint, unspecified hand	Diagnosis	ICD-10-CM
M18.51	Other unilateral secondary osteoarthritis of first carpometacarpal joint, right hand	Diagnosis	ICD-10-CM
M18.52	Other unilateral secondary osteoarthritis of first carpometacarpal joint, left hand	Diagnosis	ICD-10-CM
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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
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
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

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

<b>Code</b>	<b>Code</b>	<b>Code Type</b>
	<b>Category</b>	
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
M47.20	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
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



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

<b>Code</b>		<b>Code Category</b>	<b>Code Type</b>
<b>Osteoporosis</b>			
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
<b>Benign Prostatic Hyperplasia</b>			
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
N42.83	Cyst of prostate	Diagnosis	ICD-10-CM
<b>Cardiac Arrest</b>			
Z86.74	Personal history of sudden cardiac arrest	Diagnosis	ICD-10-CM
<b>Coronary Bypass</b>			
Z95.1	Presence of aortocoronary bypass graft	Diagnosis	ICD-10-CM
Z95.5	Presence of coronary angioplasty implant and graft	Diagnosis	ICD-10-CM
Z98.61	Coronary angioplasty status	Diagnosis	ICD-10-CM

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

Generic Name	Brand Name
<b>Smoking</b>	
nicotine	Nicoderm CQ
nicotine	Nicotrol
nicotine	Nicotrol NS
nicotine	nicotine
nicotine bitartrate	Nicotine Tartrate
nicotine polacrilex	Nicorelief
nicotine polacrilex	Nicorette
nicotine polacrilex	Quit 2
nicotine polacrilex	Quit 4
nicotine polacrilex	Stop Smoking Aid
nicotine polacrilex	nicotine (polacrilex)
nicotine polacrilex	nicotine polacrilex (bulk)
varenicline tartrate	Chantix
varenicline tartrate	Chantix Continuing Month Box
varenicline tartrate	Chantix Starting Month Box
<b>Obesity</b>	
amino acids/multivit-minerals/dietary supplement/protein sup	Optifast 70
benzphetamine HCl	Regimex
benzphetamine HCl	benzphetamine
diethylpropion HCl	diethylpropion
diethylpropion HCl	diethylpropion HCl (bulk)
liraglutide	Saxenda
lorcaserin HCl	Belviq
lorcaserin HCl	Belviq XR
naltrexone HCl/bupropion HCl	Contrave
orlistat	Alli
orlistat	Xenical
phendimetrazine tartrate	phendimetrazine tartrate
phentermine HCl	Adipex-P
phentermine HCl	Lomaira
phentermine HCl	phentermine
phentermine HCl	phentermine HCl (bulk)
phentermine HCl/topiramate	Qsymia
resveratrol/chromium pico/green tea/EGCG/caffeine/digestive3	Resveratrol Diet
setmelanotide acetate	Imcivree

**Appendix F. Specifications for Type 1 Request: cder\_mpl1r\_wp211**

This request evaluated the uptake and length of follow-up time of New Molecular Entities (NMEs) approved in 2019 in the Sentinel Distributed Database (SDD).

**Query period:** January 1, 2019 - Most recent available data  
**Coverage requirement:** Medical & Drug Coverage  
**Pre-index enrollment requirement:** 365 days  
**Post-index enrollment requirement:** 0 days  
**Enrollment gap:** 45 days  
**Age groups:** 0-18, 19-64, 65+  
**Stratifications:** Age, sex, calendar year, year-month  
**Censor output categorization:** Follow up time intervals: 1-364, 365-729, 730+ days  
**Restrictions:** None  
**Distribution of index-defining codes:** No  
**Envelope macro:** No  
**Freeze data:** No

Scenario	Group	Exposure/Event				Follow-up				Baseline Characteristics
		Index Exposure/Event	Cohort Definition	Washout Period	Incident with Respect to:	Exclude Evidence of Days Supply if Exposure Includes Dispensings	Care Setting	Follow-up Start	Censor Enrollment at Evidence of	Baseline Characteristics
1	Accrufer	Accrufer	First valid index date during query period	183	Accrufer	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
2	Adakveo	Adakveo	First valid index date during query period	183	Adakveo	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
3	Aklief	Aklief	First valid index date during query period	183	Aklief	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
4	Balversa	Balversa	First valid index date during query period	183	Balversa	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
5	Beovu	Beovu	First valid index date during query period	183	Beovu	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab

Appendix F. Specifications for Type 1 Request: cder_mpl1r_wp211										
Scenario	Group	Exposure/Event				Follow-up				Baseline Characteristics
		Index Exposure/Event	Cohort Definition	Washout Period	Incident with Respect to:	Exclude Evidence of Days Supply if Exposure Washout Includes Dispensings	Care Setting	Follow-up Start	Censor Enrollment at Evidence of	Baseline Characteristics
6	Brukinsa	Brukinsa	First valid index date during query period	183	Brukinsa	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
7	Cablivi	Cablivi	First valid index date during query period	183	Cablivi	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
8	Caplyta	Caplyta	First valid index date during query period	183	Caplyta	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
9	Dayvigo	Dayvigo	First valid index date during query period	183	Dayvigo	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
10	Egaten	Egaten	First valid index date during query period	183	Egaten	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
11	Enhertu	Enhertu	First valid index date during query period	183	Enhertu	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
12	Evenity	Evenity	First valid index date during query period	183	Evenity	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
13	ExEm_Foam	ExEm Foam	First valid index date during query period	183	ExEm Foam	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
14	Fetroja	Fetroja	First valid index date during query period	183	Fetroja	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
15	fluorodopa_F_18	fluorodopa F 18	First valid index date during query period	183	fluorodopa F 18	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
16	Ga_68_DOT ATOC	Ga-68-DOTATOC	First valid index date during query period	183	Ga-68-DOTATOC	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab

Appendix F. Specifications for Type 1 Request: cder_mpl1r_wp211										
Scenario	Group	Exposure/Event				Follow-up				Baseline Characteristics
		Index Exposure/Event	Cohort Definition	Washout Period	Incident with Respect to:	Exclude Evidence of Days Supply if Exposure Washout Includes Dispensings	Care Setting	Follow-up Start	Censor Enrollment at Evidence of	Baseline Characteristics
17	Givlaari	Givlaari	First valid index date during query period	183	Givlaari	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
18	lbsrela	lbsrela	First valid index date during query period	183	lbsrela	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
19	Inrebic	Inrebic	First valid index date during query period	183	Inrebic	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
20	Jeuveau	Jeuveau	First valid index date during query period	183	Jeuveau	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
21	Mayzent	Mayzent	First valid index date during query period	183	Mayzent	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
22	Nourianz	Nourianz	First valid index date during query period	183	Nourianz	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
23	Nubeqa	Nubeqa	First valid index date during query period	183	Nubeqa	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab
24	Oxbryta	Oxbryta	First valid index date during query period	183	Oxbryta	Washout lookback period should search for evidence of days supply	Any	First exposure	Disenrollment, Death, Data Partner End Date, Query End Date	See Baseline Characteristics tab

ICD-9, ICD-10, HCPCS, and CPT codes are provided by Optum360.  
NDC codes are checked against First Data Bank's FDB MedKnowledge®.

**Appendix G. Baseline Characteristics for Request: cder\_mpl1r\_wp211**
**Covariates**

Covariate	Care Setting/Principal Diagnosis Position	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	Forced Supply to Attach to Dispensings
<i>Chronic Conditions Data Warehouse</i>						
Acute Myocardial Infarction	IPP, IPS	-365	-1	n/a	1	n/a
Alzheimer's Disease and related conditions	Any	-365	-1	n/a	1	n/a
Atrial Fibrillation	IPP, IPS or	-365	-1	n/a	1	n/a
	AV*, ED*, OA*	-365	-1	n/a	2	n/a
Diabetes	IP*, IS*	-365	-1	n/a	1	n/a
	AV*, ED*, OA*	-365	-1	n/a	2	n/a
Heart Failure	IP*, AV*, ED*	-365	-1	n/a	1	n/a
Hyperlipidemia	IP*, IS*	-365	-1	n/a	1	n/a
	AV*, ED*, OA*	-365	-1	n/a	2	n/a
Hypertension	IP*, IS*	-365	-1	n/a	1	n/a
	AV*, ED*, OA*	-365	-1	n/a	2	n/a
Depression	Any	-365	-1	n/a	1	n/a
Ischemic Heart Disease	Any	-365	-1	n/a	1	n/a
Rheumatoid Arthritis/Osteoarthritis	Any	-365	-1	n/a	2	n/a
Stroke/TIA	IP*	-365	-1	n/a	1	n/a
	AV*, ED*, OA*	-365	-1	n/a	2	n/a
Breast Cancer	IP*, IS* or	-365	-1	n/a	1	n/a
	AV*, ED* OA*	-365	-1	n/a	2	n/a
Colorectal Cancer	IP*, IS* or	-365	-1	n/a	1	n/a
	AV*, ED* OA*	-365	-1	n/a	2	n/a
Prostate Cancer	IP*, IS* or	-365	-1	n/a	1	n/a
	AV*, ED* OA*	-365	-1	n/a	2	n/a
Lung Cancer	IP*, IS* or	-365	-1	n/a	1	n/a
	AV*, ED* OA*	-365	-1	n/a	2	n/a
Endometrial Cancer	IP*, IS* or	-365	-1	n/a	1	n/a
	AV*, ED* OA*	-365	-1	n/a	2	n/a
Acquired Hypothyroidism	IP*, IS*, or	-365	-1	n/a	1	n/a
	AV*, ED* OA*	-365	-1	n/a	2	n/a
Anemia	Any	-365	-1	n/a	1	n/a
Asthma	IP*, IS*, or	-365	-1	n/a	1	n/a
	AV*, ED* OA*	-365	-1	n/a	2	n/a
Benign Prostatic Hyperplasia	IP*, IS*, or	-365	-1	n/a	1	n/a
	AV*, ED* OA*	-365	-1	n/a	2	n/a
Chronic Kidney Disease	IP*, IS*, or	-365	-1	n/a	1	n/a
	AV*, ED* OA*	-365	-1	n/a	2	n/a
COPD and Bronchiectasis	IP*, IS*, or	-365	-1	n/a	1	n/a
	AV*, ED* OA*	-365	-1	n/a	2	n/a
Glaucoma	AV*, ED* OA*	-365	-1	n/a	1	n/a
Osteoporosis	IP*, IS*, or	-365	-1	n/a	1	n/a
	AV*, ED* OA*	-365	-1	n/a	2	n/a
<i>Other</i>						
Obesity	Any	-365	-1	Evaluation period should search for evidence of days supply	1	

**Appendix G. Baseline Characteristics for Request: cder\_mpl1r\_wp211**

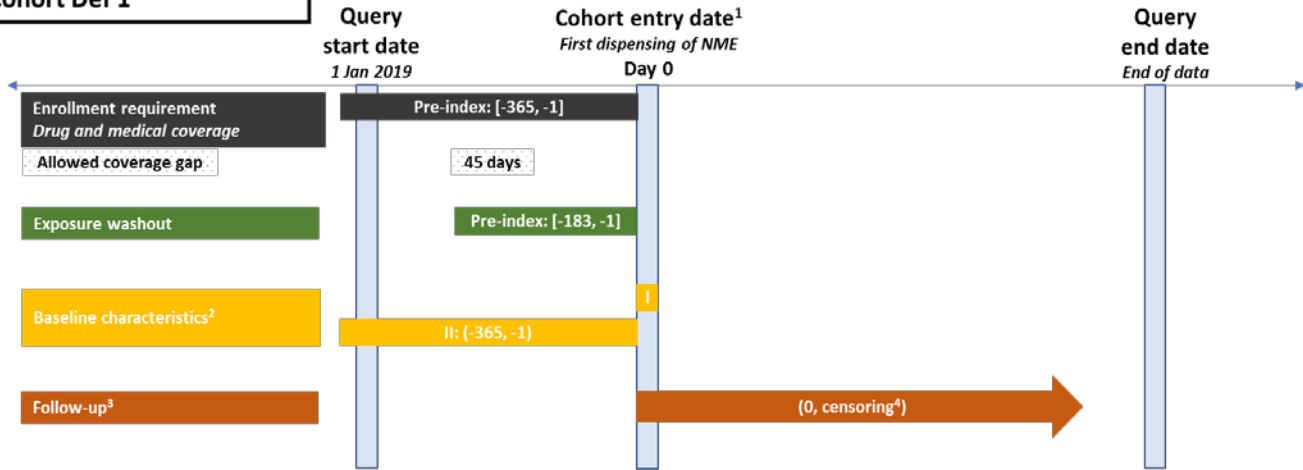
**Covariates**

Covariate	Care Setting/Principal Diagnosis Position	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	Forced Supply to Attach to Dispensings
<i>Chronic Conditions Data Warehouse</i>						
Overweight	Any	-365	-1	n/a	1	n/a
Smoking	Any	-365	-1	Evaluation period should search for evidence of days supply	1	
Alcohol Abuse or Dependence	Any	-365	-1	n/a	1	n/a
Drug Abuse or Dependence	Any	-365	-1	n/a	1	n/a
History of Cardiac Arrest	Any	-365	-1	n/a	1	n/a
History of Coronary Angioplasty or Bypass	Any	-365	-1	n/a	1	n/a



Appendix H. Design Diagrams for Type 1 Request: cder\_mpl1r\_wp211

**Design diagram for QF4640  
Cohort Def 1**



<sup>1</sup>48 scenarios defined based on initiation of NMEs approved in 2019 (one scenario per NME); Cohort entry date = first dispensing date for qualifying NME

<sup>2</sup>Baseline characteristics:

Window I: Age, sex, year

Window II: Chronic conditions (CCW), alcohol abuse or dependence, drug abuse or dependence, history of cardiac arrest, history of coronary angioplasty or bypass, obesity, overweight, and smoking

<sup>3</sup>Follow-up intervals: 1-364, 365-729, 730+ days

<sup>4</sup>Censoring: earliest of death, disenrollment, data partner data end date, query end date