

**Comparative effectiveness of tirzepatide vs sitagliptin in individuals at cardiovascular risk**

**NCT07203677**

**21<sup>st</sup> October 2025**

## 1. Title Page

<b>Title</b>	Comparative effectiveness of tirzepatide vs sitagliptin in individuals at cardiovascular risk.
<b>Research question &amp; Objectives</b>	The aim of this study is to assess the comparative effectiveness of tirzepatide vs sitagliptin in preventing atherosclerotic cardiovascular events in patients with type 2 diabetes and atherosclerotic cardiovascular disease.
<b>Protocol version</b>	Version 3
<b>Last update date</b>	October 21, 2025
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<b>Study registration</b>	<b>Site:</b> <a href="https://clinicaltrials.gov">ClinicalTrials.gov</a> and Open Science Framework <b>Identifier:</b> NCT07203677, <a href="https://osf.io/zmfke">osf.io/zmfke</a>
<b>Sponsor</b>	<b>Organization:</b> N/A <b>Contact:</b> N/A
<b>Conflict of interest</b>	Dr. Krüger has no conflict of interest. Dr. Wang has consulted for Cytel Incs, Exponent Inc, and MITRE an FFRDC for Centers for Medicare and Medicaid for unrelated work.

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## 2. Abstract

This is a non-randomized, non-interventional study that is part of the *Randomized Controlled Trials Duplicated Using Prospective Longitudinal Insurance Claims: Applying Techniques of Epidemiology* (RCT-DUPLICATE) initiative ([www.rctduplicate.org](http://www.rctduplicate.org)) of the Brigham and Women's Hospital, Harvard Medical School. It is intended to assess the comparative effectiveness of tirzepatide vs sitagliptin as a placebo proxy, after the pivotal RCT SURPASS-CVOT ([NCT04255433](https://clinicaltrials.gov/ct2/show/study/NCT04255433)) and its emulation ([NCT07088718](https://clinicaltrials.gov/ct2/show/study/NCT07088718)) demonstrated non-inferiority, leaving both regulators and clinical guideline committees uncertain whether to approve and recommend tirzepatide for a cardiovascular indication. This comparative effectiveness target trial described below draws from eligibility criteria from the SURPASS-CVOT trial and its emulation. Although many features of the target trial cannot be directly replicated in healthcare claims, key design features, including outcomes, exposures, and inclusion/exclusion criteria, were selected to proxy those features from the target trial. Randomization cannot be achieved in healthcare claims data but was proxied through a statistical balancing of measured covariates according to standard practice.

The database study will be a new-user active-comparative study, conducted using 2 national United States claims databases, where we compare the effect of tirzepatide vs sitagliptin in preventing atherosclerotic cardiovascular events. Clinical guidelines during the study period recommended both agents under investigation as second-line options for glucose lowering and were similarly costly.

The study will use two data sources: Optum Clinformatics and Merative MarketScan.

Optum: Study period between May 13, 2022 to May 31, 2025.

MarketScan: Study period between May 13, 2022 to December 31, 2023.

## 3. Amendments and updates

Version date	Version number	Section of protocol	Amendment or update	Reason
1	September 22, 2025			
2	October 15, 2025	6.5.1	Added subgroups for sex and age.	Exploratory analyses investigating potential effect measure modification by sex and age.
3	October 21, 2025	4, 5, 6.2, and 6.5.1	Adding outcomes for all-cause mortality, major adverse cardiovascular events (MACE, a composite of all-cause mortality, myocardial infarction, or stroke),	In light of the rapidly evolving evidence around GLP1 medicines indirect comparisons of tirzepatide versus placebo (comparing

			as well as the safety outcomes of serious bacterial infections, urinary tract infections, and gastrointestinal adverse events.	the exposure arm of the SURPASS-CVOT trial with the comparator arm of the REWIND trial) that aligns with our previous findings from the emulation of SUSTAIN-6 (semaglutide vs sitagliptin), we expanded our outcomes to include all-cause mortality, major adverse cardiovascular events, and relevant safety outcomes. This addition allows us to explore potential mortality benefits and potential underlying mechanisms, as well as to assess whether observed risk reductions align with those suggested by prior indirect evidence.
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#### 4. Rationale and background

The purpose of this protocol is to specify the target trial assessing the comparative effectiveness of the dual glucose-dependent insulinotropic polypeptide (GIP) and glucagon-like peptide-1 receptor agonist (GLP-1-RA) tirzepatide vs the dipeptidyl peptidase-4 inhibitors (DPP4i) sitagliptin on atherosclerotic cardiovascular end points in patients with type 2 diabetes and atherosclerotic cardiovascular disease.

The GIP/GLP-1-RA tirzepatide became available on May 13, 2022, when it was approved to treat T2DM.<sup>1</sup> A year later, on November 8, 2023 tirzepatide was approved for chronic weight management in adults with obesity or overweight who also have at least one weight-related comorbid condition, such as hypertension, dyslipidemia, T2DM, obstructive sleep apnea, or CVD. On December 20 2024, tirzepatide was approved to treat moderate to severe obstructive sleep apnea (OSA) in adults with obesity, to be used in combination with a reduced-calorie diet and increased physical activity.

Sitagliptin was specifically chosen as an active comparator that could proxy for placebo because a major randomized controlled trial on cardiovascular outcomes demonstrated that it does not affect the cardiovascular outcomes under investigation.<sup>2</sup> This contrasts with other DPP4i such as saxagliptin,

which has raised concerns regarding potential increased risks of heart failure,<sup>3-6</sup> and linagliptin, which is commonly prescribed for patients with renal impairment because it does not require dose modifications based on kidney function, potentially leading to increased confounding compared to sitagliptin.<sup>7,8</sup> Sodium-glucose cotransporter-2 (SGLT2) inhibitors would not be a neutral comparator, as they significantly reduce clinically important kidney events, kidney failure, and cardiovascular events.<sup>9-12</sup> Sulfonylureas (SUs), though inexpensive and widely used, are a poor comparator in cardiovascular outcome studies due to their association with hypoglycemia, weight gain, and channeling bias, as they are often prescribed to elderly, lower socioeconomic status patients with higher baseline cardiovascular risk, making direct comparisons to GLP-1-RAs less reliable.<sup>13</sup>

Due to the ongoing discussion about tirzepatide’s role in preventing atherosclerotic cardiovascular events, we will focus on the end points of myocardial infarction, stroke, coronary revascularization, and unstable angina in this study. In prior emulations of the SURPASS-CVOT and SUSTAIN-6 trials using the same real-world data sources, design, and analytic infrastructure, results were benchmarked against those of the reference trials, demonstrating highly concordant results for these non-fatal atherosclerotic cardiovascular outcomes. This provided support for the ability to validly evaluate these outcomes in the present study. All-cause mortality will not be included as an end point in this study, as the emulation of SUSTAIN-6 showed divergent results for mortality that were suggestive of residual confounding and informed the development of the current protocol.

## 5. Research question and objectives

**Table 2. Research questions and objectives**

### A. Research questions and objectives

<b>Objective:</b>	To evaluate the comparative effect of tirzepatide vs sitagliptin at preventing myocardial infarction in patients with type 2 diabetes and atherosclerotic cardiovascular disease when following the inclusion and exclusion criteria of the SURPASS-CVOT trial.
<b>Hypothesis:</b>	We hypothesize that tirzepatide will be superior to sitagliptin at preventing myocardial infarction in patients with type 2 diabetes and atherosclerotic cardiovascular disease.
<b>Population (mention key inclusion-exclusion criteria):</b>	Individuals aged 40 years or older with T2DM and atherosclerotic cardiovascular disease.
<b>Exposure:</b>	Tirzepatide.
<b>Comparator:</b>	Sitagliptin.
<b>Outcome:</b>	Myocardial infarction.

<b>Time (when follow-up begins and ends):</b>	1 day after cohort entry date until the first of outcome, disenrollment, end of study period, discontinuation (45 days grace and risk window), switch between the arms, nursing home admission, 365 days after cohort entry, or start of any other GLP-1-RA.
<b>Setting:</b>	The outcome will be measured from inpatient hospitalizations.
<b>Main measure of effect:</b>	Hazard ratio.

<b>Objective:</b>	To evaluate the comparative effect of tirzepatide vs sitagliptin at preventing stroke in patients with type 2 diabetes and atherosclerotic cardiovascular disease when following the inclusion and exclusion criteria of the SURPASS-CVOT trial.
<b>Hypothesis:</b>	We hypothesize that tirzepatide will be superior to sitagliptin at preventing stroke in patients with type 2 diabetes and atherosclerotic cardiovascular disease.
<b>Population (mention key inclusion-exclusion criteria):</b>	Individuals aged 40 years or older with T2DM and atherosclerotic cardiovascular disease.
<b>Exposure:</b>	Tirzepatide.
<b>Comparator:</b>	Sitagliptin.
<b>Outcome:</b>	Stroke.
<b>Time (when follow-up begins and ends):</b>	1 day after cohort entry date until the first of outcome, disenrollment, end of study period, discontinuation (45 days grace and risk window), switch between the arms, nursing home admission, 365 days after cohort entry, or start of any other GLP-1-RA.
<b>Setting:</b>	The outcome will be measured from inpatient hospitalizations.
<b>Main measure of effect:</b>	Hazard ratio.

<b>Objective:</b>	To evaluate the comparative effect of tirzepatide vs sitagliptin at preventing all-cause mortality in patients with type 2 diabetes and atherosclerotic cardiovascular disease when following the inclusion and exclusion criteria of the SURPASS-CVOT trial.
<b>Hypothesis:</b>	We hypothesize that tirzepatide will be superior to sitagliptin at preventing all-cause mortality in patients with type 2 diabetes and atherosclerotic cardiovascular disease.
<b>Population (mention key inclusion-exclusion criteria):</b>	Individuals aged 40 years or older with T2DM and atherosclerotic cardiovascular disease.
<b>Exposure:</b>	Tirzepatide.
<b>Comparator:</b>	Sitagliptin.
<b>Outcome:</b>	All-cause mortality.



<b>Time (when follow-up begins and ends):</b>	1 day after cohort entry date until the first of outcome, disenrollment, end of study period, discontinuation (45 days grace and risk window), switch between the arms, nursing home admission, 365 days after cohort entry, or start of any other GLP-1-RA.
<b>Setting:</b>	The outcome will be measured from death indicators.
<b>Main measure of effect:</b>	Hazard ratio.

<b>Objective:</b>	To evaluate the comparative effect of tirzepatide vs sitagliptin on the composite of myocardial infarction, stroke, or all-cause mortality in patients with type 2 diabetes and atherosclerotic cardiovascular disease when following the inclusion and exclusion criteria of the SURPASS-CVOT trial.
<b>Hypothesis:</b>	We hypothesize that tirzepatide will be superior to sitagliptin at preventing myocardial infarction, stroke, or all-cause mortality in patients with type 2 diabetes and atherosclerotic cardiovascular disease.
<b>Population (mention key inclusion-exclusion criteria):</b>	Individuals aged 40 years or older with T2DM and atherosclerotic cardiovascular disease.
<b>Exposure:</b>	Tirzepatide.
<b>Comparator:</b>	Sitagliptin.
<b>Outcome:</b>	Composite of myocardial infarction, stroke, or all-cause mortality.
<b>Time (when follow-up begins and ends):</b>	1 day after cohort entry date until the first of outcome, disenrollment, end of study period, discontinuation (45 days grace and risk window), switch between the arms, nursing home admission, 365 days after cohort entry, or start of any other GLP-1-RA.
<b>Setting:</b>	The outcome will be measured from inpatient hospitalizations.
<b>Main measure of effect:</b>	Hazard ratio.

<b>Objective:</b>	To evaluate the comparative effect of tirzepatide vs sitagliptin on the composite of myocardial infarction or stroke in patients with type 2 diabetes and atherosclerotic cardiovascular disease when following the inclusion and exclusion criteria of the SURPASS-CVOT trial.
<b>Hypothesis:</b>	We hypothesize that tirzepatide will be superior to sitagliptin at preventing myocardial infarction or stroke in patients with type 2 diabetes and atherosclerotic cardiovascular disease.
<b>Population (mention key inclusion-exclusion criteria):</b>	Individuals aged 40 years or older with T2DM and atherosclerotic cardiovascular disease.
<b>Exposure:</b>	Tirzepatide.
<b>Comparator:</b>	Sitagliptin.

<b>Outcome:</b>	Composite of myocardial infarction or stroke.
<b>Time (when follow-up begins and ends):</b>	1 day after cohort entry date until the first of outcome, disenrollment, end of study period, discontinuation (45 days grace and risk window), switch between the arms, nursing home admission, 365 days after cohort entry, or start of any other GLP-1-RA.
<b>Setting:</b>	The outcome will be measured from inpatient hospitalizations.
<b>Main measure of effect:</b>	Hazard ratio.

<b>Objective:</b>	To evaluate the comparative effect of tirzepatide vs sitagliptin on the composite of myocardial infarction, stroke, coronary revascularization, or hospitalization for unstable angina in patients with type 2 diabetes and atherosclerotic cardiovascular disease when following the inclusion and exclusion criteria of the SURPASS-CVOT trial.
<b>Hypothesis:</b>	We hypothesize that tirzepatide will be superior to sitagliptin at preventing myocardial infarction, stroke, coronary revascularization, or hospitalization for unstable angina in patients with type 2 diabetes and atherosclerotic cardiovascular disease.
<b>Population (mention key inclusion-exclusion criteria):</b>	Individuals aged 40 years or older with T2DM and atherosclerotic cardiovascular disease.
<b>Exposure:</b>	Tirzepatide.
<b>Comparator:</b>	Sitagliptin.
<b>Outcome:</b>	Composite of myocardial infarction, stroke, coronary revascularization, or hospitalization for unstable angina.
<b>Time (when follow-up begins and ends):</b>	1 day after cohort entry date until the first of outcome, disenrollment, end of study period, discontinuation (45 days grace and risk window), switch between the arms, nursing home admission, 365 days after cohort entry, or start of any other GLP-1-RA.
<b>Setting:</b>	The outcome will be measured from inpatient hospitalizations.
<b>Main measure of effect:</b>	Hazard ratio.

## B. Research questions for safety outcomes

<b>Objective:</b>	To evaluate the comparative effect of tirzepatide vs sitagliptin on the safety outcome of serious bacterial infections in patients with type 2 diabetes and atherosclerotic cardiovascular disease when following the inclusion and exclusion criteria of the SURPASS-CVOT trial.
<b>Hypothesis:</b>	We hypothesize that tirzepatide will have a decreased risk compared to sitagliptin.

<b>Population (mention key inclusion-exclusion criteria):</b>	Individuals aged 40 years or older with T2DM and atherosclerotic cardiovascular disease.
<b>Exposure:</b>	Tirzepatide.
<b>Comparator:</b>	Sitagliptin.
<b>Outcome:</b>	Serious bacterial infections.
<b>Time (when follow-up begins and ends):</b>	1 day after cohort entry date until the first of outcome, disenrollment, end of study period, discontinuation (45 days grace and risk window), switch between the arms, nursing home admission, 365 days after cohort entry, or start of any other GLP-1-RA.
<b>Setting:</b>	The outcome will be measured using primary diagnosis codes in an inpatient setting.
<b>Main measure of effect:</b>	Hazard ratio.

<b>Objective:</b>	To evaluate the comparative effect of tirzepatide vs sitagliptin on the safety outcome of urinary tract infections in patients with type 2 diabetes and atherosclerotic cardiovascular disease when following the inclusion and exclusion criteria of the SURPASS-CVOT trial.
<b>Hypothesis:</b>	We hypothesize that tirzepatide will have no different effect compared to sitagliptin.
<b>Population (mention key inclusion-exclusion criteria):</b>	Individuals aged 40 years or older with T2DM and atherosclerotic cardiovascular disease.
<b>Exposure:</b>	Tirzepatide.
<b>Comparator:</b>	Sitagliptin.
<b>Outcome:</b>	Urinary tract infections.
<b>Time (when follow-up begins and ends):</b>	1 day after cohort entry date until the first of outcome, disenrollment, end of study period, discontinuation (45 days grace and risk window), switch between the arms, nursing home admission, 365 days after cohort entry, or start of any other GLP-1-RA.
<b>Setting:</b>	The outcome will be measured using diagnosis codes in an inpatient or outpatient setting that are followed by an antibiotic prescription within 7 days of the diagnosis code.
<b>Main measure of effect:</b>	Hazard ratio.

<b>Objective:</b>	To evaluate the comparative effect of tirzepatide vs sitagliptin on the safety outcome of gastrointestinal adverse events in patients with type 2 diabetes and atherosclerotic cardiovascular disease when following the inclusion and exclusion criteria of the SURPASS-CVOT trial.
<b>Hypothesis:</b>	We hypothesize that tirzepatide will have an increased risk compared to sitagliptin.

<b>Population (mention key inclusion-exclusion criteria):</b>	Individuals aged 40 years or older with T2DM and atherosclerotic cardiovascular disease.
<b>Exposure:</b>	Tirzepatide.
<b>Comparator:</b>	Sitagliptin.
<b>Outcome:</b>	Gastrointestinal adverse events.
<b>Time (when follow-up begins and ends):</b>	1 day after cohort entry date until the first of outcome, disenrollment, end of study period, discontinuation (45 days grace and risk window), switch between the arms, nursing home admission, 365 days after cohort entry, or start of any other GLP-1-RA.
<b>Setting:</b>	The outcome will be measured using diagnosis codes in an inpatient and outpatient setting.
<b>Main measure of effect:</b>	Hazard ratio.

### C. Research questions for negative controls

<b>Objective:</b>	To evaluate the effect of tirzepatide vs sitagliptin on negative control outcomes, including (1) hernia and (2) lumbar radiculopathy in patients with type 2 diabetes and atherosclerotic cardiovascular disease when following the inclusion and exclusion criteria of the SURPASS-CVOT trial.
<b>Hypothesis:</b>	We hypothesize that tirzepatide will not have a different effect from sitagliptin.
<b>Population (mention key inclusion-exclusion criteria):</b>	Individuals aged 40 years or older with T2DM and atherosclerotic cardiovascular disease. In addition, patients will be excluded with recent hernia or lumbar radiculopathy prior to the follow-up time window (30 days) when studying the negative outcome hernia or lumbar radiculopathy, respectively.
<b>Exposure:</b>	Tirzepatide.
<b>Comparator:</b>	Sitagliptin.
<b>Outcome:</b>	Separate analyses for hernia and lumbar radiculopathy.
<b>Time (when follow-up begins and ends):</b>	1 day after cohort entry date until the first of outcome, disenrollment, end of study period, discontinuation (45 days grace and risk window), switch between the arms, nursing home admission, 365 days after cohort entry, or start of any other GLP-1-RA.
<b>Setting:</b>	The outcome will be measured using diagnosis codes in an inpatient or outpatient setting.
<b>Main measure of effect:</b>	Hazard ratio.

## 6. Research methods

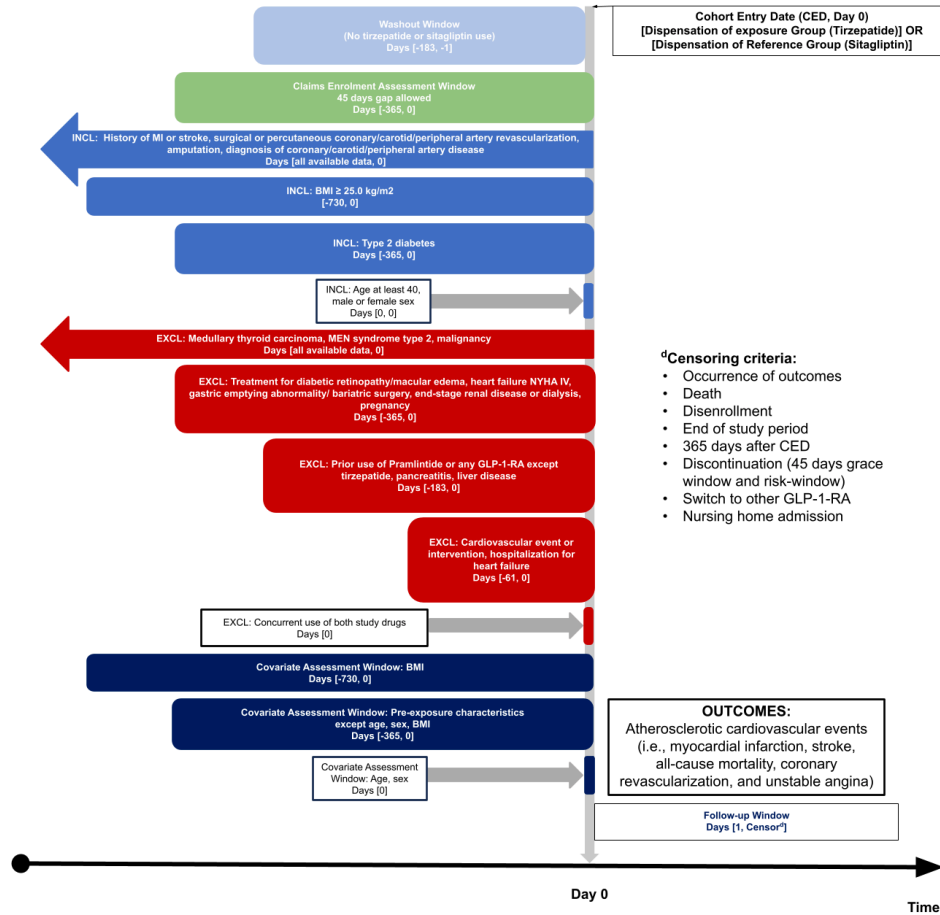
### 6.1 Study design

**Research design (e.g. cohort, case-control, etc.):** New user active-comparator cohort study.

**Rationale for study design choice:** The new user active-comparator design is a powerful design that may be able to address confounding by indication. It accomplishes this, in large part, through judicious selection of an appropriate active-comparator group.<sup>14,15</sup> While selection of an appropriate comparator in the design phase is crucial, cohort studies often require additional adjustment of measurable confounders. A common method for adjusting for confounding is via a propensity score.

## 6.2 Study design diagram (Figure 1).

Figure 1. Exposure-based cohort entry where the cohort entry date is selected after application of exclusion criteria



## **6.3 Setting**

### **6.3.1 Context and rationale for definition of time 0 (and other primary time anchors) for entry to the study population**

Time 0 in the database study was defined to emulate randomization to tirzepatide vs sitagliptin in the trial design. See appendix tables 1 and 2a for operational definitions and detailed code algorithms.

### **6.3.2 Context and rationale for study inclusion criteria:**

Study inclusion criteria were defined to emulate the inclusion criteria for the trial. See appendix tables 1 and 2 for operational definitions and detailed code algorithms. A flowchart of the study cohort assembly is provided in appendix 3.

### **6.3.3 Context and rationale for study exclusion criteria**

Study exclusion criteria were defined to emulate the exclusion criteria for the trial. See appendix tables 1 and 2 for operational definitions and detailed code algorithms. A flowchart of the study cohort assembly is provided in appendix 3.

## **6.4 Variables**

### **6.4.1 Context and rationale for exposure(s) of interest**

The exposure and comparator were defined to emulate the agents compared for the trial, tirzepatide vs sitagliptin (active-comparator). See appendix tables 1 and 2 for operational definitions and detailed code algorithms.

#### **Algorithm to define duration of exposure effect:**

Assuming the effect of the drug lasts for 45 days after the last day's supply, we allow a 45 days gap between the dispensation (grace period) and also add 45 days at the end of the last day's supply (exposure risk window).

### **6.4.2 Context and rationale for outcome(s) of interest**

The outcomes for the database study were defined to emulate the outcomes of the target trial, i.e., myocardial infarction, stroke, coronary revascularization, or unstable angina. See appendix tables 1 and 2 for operational definitions and detailed code algorithms. PPV for myocardial infarction using ICD9 codes was 94%.<sup>16-18</sup> PPV for ischemic stroke using ICD9 codes was 95%. Both of the above ICD9 codes were mapped to ICD10.<sup>19</sup>

Control outcomes of interest include:

1. Hernia (excluding patients with recent outcome prior to the follow-up time window). This is a negative control outcome where no difference in effect is expected for tirzepatide vs sitagliptin.
2. Lumbar radiculopathy (excluding patients with recent outcome prior to the follow-up time window). This is a negative control outcome where no difference in effect is expected for tirzepatide vs sitagliptin.

### 6.4.3 Context and rationale for follow-up

Both on-treatment (OT) and intention-to-treat (ITT) analyses will be conducted. Adherence in clinical practice databases is expected to be much worse than in the trial, therefore the OT analysis will be the primary analysis. The OT analysis targets the relative hazard of outcomes while on treatment and may more closely emulate the effect observed in highly adherent trial participants. Both OT and ITT analyses will be conducted with up to 1-year follow-up.

**Table 1. Operational Definitions of follow-up**

follow-up start	Day 1	
follow-up end <sup>1</sup>	<b>Select all that apply</b>	<b>Specify</b>
<b>Date of outcome</b>	Yes	
<b>Date of death</b>	Yes	
<b>End of observation in data</b>	Yes	Date of disenrollment.
<b>Day X following index date</b> (specify day)	Yes	Day 365.
<b>End of study period</b> (specify date)	Yes	Different dates for different databases (Optum: May 31, 2025; MarketScan: December 31, 2023).
<b>End of exposure</b> (specify operational details, e.g. stockpiling algorithm, grace period)	Yes	45 days grace window and 45 days risk window.
<b>Date of add to/switch from exposure</b> (specify algorithm)	Yes	Date of augmentation or switching from an exposure to a comparator and vice versa.
<b>Other date</b> (specify)	Yes	Censor upon nursing home admission or starting any other GLP-1-RA.



<sup>1</sup> follow-up ends at the first occurrence of any of the selected criteria that end follow-up.

#### 6.4.4 Context and rationale for covariates (confounding variables and effect modifiers, e.g. risk factors, comorbidities, comedICATIONS)

We identified a series of covariates that were likely confounders due to being strong risk factors for the primary outcome that were associated with choice of treatment. These include demographics, disease severity related variables, comorbid conditions, comedICATIONS, frailty, healthcare utilization and markers of health seeking behaviour.

**Table 2. Operational Definitions of Covariates**

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
<b>Demographics</b>									
Age	Cohort entry year – year of birth, (last observed value in the baseline)	Continuous	[0, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	n/a
Gender	Male, Female (last observed value in the baseline)	Categorical	[0, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	n/a
Race*	White, Black, Other (Asian, Hispanic), Missing/Unknown (last observed value in the baseline)	Categorical	[0, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	n/a

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
Region	Northeast, Midwest/North central, South, West (last observed value in the baseline)	Categorical	[0, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	n/a
<b>Lifestyle risk factors</b>									
Smoking / Tobacco use		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Overweight, if BMI is 25.0 to 29.9		Binary	[-730, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Class 1 (low-risk) obesity, if BMI is 30.0 to 34.9		Binary	[-730, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Class 2 (moderate-risk) obesity, if BMI is 35.0 to 39.9		Binary	[-730, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Class 3 (high-risk) obesity if BMI is equal to or greater than 40		Binary	[-730, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Unspecified obesity		Binary	[-730, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
<b>Diabetes complications</b>									

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
Diabetic retinopathy		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Diabetic neuropathy		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Diabetic nephropathy		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Diabetes with other ophthalmic complications		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Diabetes with peripheral circulatory disorders		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Diabetic foot		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Erectile dysfunction		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Hypoglycemia		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Hyperglycemia/DKA/HONK		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
Skin infections		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
<b>Cardiovascular-related conditions</b>									
Stable angina		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Unstable angina		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Hypertension		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Hypotension		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Hyperlipidemia		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Atrial fibrillation		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Acute myocardial infarction		Binary	[-365, 0]	Any	ICD-10-CM	Primary	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Old myocardial infarction		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
							Reference: Sitagliptin		
Cardiac conduction disorder		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Previous cardiac procedure (CABG, PTCA, Stent)		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Ischemic stroke		Binary	[-365, 0]	IP	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
PVD diagnosis or surgery PVD		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Other cardiac dysrhythmia		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Heart failure		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Acute heart failure		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Microalbuminuria/proteinuria		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Cardiomyopathy		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
							Reference: Sitagliptin		
Valve disorders		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Valve replacement		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
TIA		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Edema		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Venous thromboembolism / Pulmonary embolism		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Pulmonary hypertension		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Implantable cardioverter defibrillator		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Hyperkalemia		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
Coronary atherosclerosis		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Cerebrovascular procedure		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Insertion of pacemakers / removal of cardiac lead		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
<b>Renal-related conditions</b>									
CKD stage 1-2		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
CKD stage 3-4		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Unspecified CKD		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Acute kidney injury		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Hypertensive nephropathy		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
Urinary tract infections		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Genital infections		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Urolithiasis (kidney and urinary stones)		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
<b>Other comorbidities</b>									
COPD		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Asthma		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Obstructive sleep apnea		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Serious bacterial infections		Binary	[-365, 0]	Inpatient	ICD-10-CM	Primary	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Pneumonia		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Liver disease		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide	n/a	Appendix, Covariate – Algorithm



Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
							Reference: Sitagliptin		
MASH/MASLD		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Fractures / Falls		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Osteoporosis		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Osteoarthritis		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Depression		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Dementia		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Delirium or psychosis		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Anxiety		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Sleep disorder		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
							Reference: Sitagliptin		
Anemia		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Influenza		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
COVID-19		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Hyperthyroidism and other thyroid gland disorders		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Hypothyroidism		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Nephrotic syndrome		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Urinary incontinence		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Biliary disease		Binary	[-365, 0]	Inpatient	ICD-10-CM	Primary	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Pancreatitis		Binary	[-365, 0]	Inpatient	ICD-10-CM	Primary	Exposure: Tirzepatide	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
							Reference: Sitagliptin		
Bowel obstruction		Binary	[-365, 0]	Inpatient	ICD-10-CM	Primary	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Gastroparesis		Binary	[-365, 0]	Any	ICD-10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
<b>Diabetes medications</b>									
Number of antidiabetic drugs on CED		Continuous	[0, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Concomitant use or initiation of metformin		Binary	[0, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Concomitant use or initiation of insulin		Binary	[0, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Concomitant use or initiation of sulfonylureas		Binary	[0, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Concomitant use or initiation of DPP4i except sitagliptin		Binary	[0, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Concomitant use or initiation of SGLT2i		Binary	[0, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
Concomitant use or initiation of other glucose-lowering drugs		Binary	[0, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Past use of metformin		Binary	[-365, -1]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Past use of insulin		Binary	[-365, -1]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Past use of sulfonylureas		Binary	[-365, -1]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Past use of DPP4i except sitagliptin		Binary	[-365, -1]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Past use of SGLT2i		Binary	[-365, -1]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Past use of other glucose-lowering drugs		Binary	[-365, -1]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
<b>Heart failure medications</b>									
ACEi / ARB		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
ARNI		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Thiazides		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Beta-blockers		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Calcium channel blockers		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Digoxin / Digitoxin		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Loop diuretics		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Other diuretics		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Intravenous diuretics		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Nitrates		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
<b>Other medications</b>									
Anti-arrhythmics		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Statins		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
PCSK9 inhibitors and other lipid-lowering drugs		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Antiplatelet agents		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Oral anticoagulants		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
COPD/Asthma medication		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
NSAIDs		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Oral corticosteroids		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
Osteoporosis agents (incl. bisphosphonates)		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Opioids		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Anti-depressants		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Antipsychotics		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Anxiolytics/hypnotics, benzodiazepines		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Medication for dementia		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Urinary tract infections antibiotics		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Laxatives		Binary	[-365, 0]	n/a	generic	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
<b>Healthcare utilization markers</b>									
Number of distinct medications,		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnoses Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
median (iqr), mean (sd)							Reference: Sitagliptin		
Number of office visits, median (iqr), mean (sd)		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Number of endocrinologist visits, median (iqr), mean (sd)		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Number of cardiologist visits, median (iqr), mean (sd)		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Number of internal medicine/family medicine visits, median (iqr), mean (sd)		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Number of Electrocardiograms, median (iqr), mean (sd)		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Number of Echocardiograms, median (iqr), mean (sd)		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Pharmacy out-of-pocket cost, median (iqr),		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm



Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
mean (sd)									
Unique brand medications, median (iqr), mean (sd)**		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Unique generic medications, median (iqr), mean (sd)**		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Ratio of unique brand to generic medications, median (iqr), mean (sd)		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
<b>Healthy behavior markers</b>									
Colonoscopy / Sigmoidoscopy		Binary	[-365, 0]	Any	CPT/HCPCS	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Flu vaccine / Pneumococcal vaccine		Binary	[-365, 0]	Any	CPT/HCPCS	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Pap smear test		Binary	[-365, 0]	Any	CPT/HCPCS	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
PSA test		Binary	[-365, 0]	Any	CPT/HCPCS	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
Fecal occult blood test		Binary	[-365, 0]	Any	CPT/HCPCS	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Bone mineral density tests		Binary	[-365, 0]	Any	CPT/HCPCS	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Mammograms		Binary	[-365, 0]	Any	CPT/HCPCS	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Telemedicine		Binary	[-365, 0]	Any	CPT/HCPCS	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
<b>Laboratory and diagnostic tests</b>									
Number of HbA1c tests, median (iqr), mean (sd)		Continuous	[-365, 0]	Any	CPT/HCPCS	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Number of lipid panels, median (iqr), mean (sd)		Continuous	[-365, 0]	Any	CPT/HCPCS	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Number of creatinine tests, median (iqr), mean (sd)		Continuous	[-365, 0]	Any	CPT/HCPCS	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Number of natriuretic peptide tests, median (iqr), mean (sd)		Continuous	[-365, 0]	Any	CPT/HCPCS	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
Number of urine tests, median (iqr), mean (sd)		Continuous	[-365, 0]	Any	CPT/HCPCS	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
<b>Lab values</b>									
HbA1c**		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Glucose**		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Creatinine**		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Systolic blood pressure**		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Heart rate**		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
BMI**		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
eGFR**		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
LDL** (mg/dl; mean, sd)		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
							Reference: Sitagliptin		
HDL** (mg/dl; mean, sd)		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Total cholesterol** (mg/dl; mean, sd)		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Triglyceride** (mg/dl; mean, sd)		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
<b>Burden of comorbidities</b>									
Combined comorbidity score		Continuous	[-365, 0]	Any	ICD10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Gagne et al., Sun et al. <sup>20,21</sup>
Frailty score		Continuous	[-365, 0]	Any	ICD10-CM	Any	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Kim et al. <sup>22</sup>
<b>Baseline hospitalizations and hospital metrics</b>									
Number of any hospitalization, median (iqr), mean (sd)		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Any hospitalization within prior 91 days; n (%)		Binary	[-91, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm

Characteristics	Details	Type of variable	Assessment window	Care Settings <sup>1</sup>	Code Type <sup>2</sup>	Diagnosis Position <sup>3</sup>	Applied to study populations:	Measurement characteristics / validation	Source for algorithm
Any hospitalization within prior 92-365 days; n (%)		Binary	[-365, -92]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
0, 1, >1 hospitalizations (any)		Continuous	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Hospitalization for heart failure		Binary	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
Emergency department visits		Binary	[-365, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	Appendix, Covariate – Algorithm
<b>Calendar year of cohort entry</b>									
2022		Categorical	[0, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	n/a
2023		Categorical	[0, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	n/a
2024		Categorical	[0, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	n/a
2025		Categorical	[0, 0]	n/a	n/a	n/a	Exposure: Tirzepatide Reference: Sitagliptin	n/a	n/a

<sup>1</sup>IP = inpatient, OP = outpatient, ED = emergency department, OT = other, n/a = not applicable

<sup>2</sup> See appendix for listing of clinical codes for each study parameter

<sup>3</sup> Specify whether a diagnosis code is required to be in the primary position (main reason for encounter)

\*Available for Optum Clinformatics and Medicare

\*\*Not used in the PS model

## 6.5 Data analysis

### 6.5.1 Context and rationale for analysis plan

The study will use a propensity score based overlap weighting method. The propensity score will be estimated as the probability of initiating tirzepatide vs sitagliptin given the baseline patient characteristics using multivariable logistic regression models. As diagnostics for PS models, the study will evaluate distributional covariate balance using standardized differences and c-statistics post-matching. The study will estimate the hazard ratio for tirzepatide vs sitagliptin in preventing atherosclerotic cardiovascular events in the weighted population using a Cox proportional hazards model with robust standard errors.

**Table 3. Analysis specification**

#### A. Analyses

<b>Hypothesis:</b>	Tirzepatide does not increase the risk of myocardial infarction in patients with T2DM and an established CVD when following the eligibility criteria of the SURPASS-CVOT trial.
<b>Exposure contrast:</b>	Tirzepatide vs sitagliptin.
<b>Outcome:</b>	Myocardial infarction.
<b>Analytic software:</b>	Aetion, SAS 9.4, R.4.4.0, Python 3.13.3
<b>Model(s): (provide details or code)</b>	Outcome model: Cox proportional hazards Follow-up time * status(0) = exposure
<b>Confounding adjustment method</b>	<b>Name method and provide relevant details, e.g. bivariate, multivariable, propensity score weighting (specify weighting algorithm ratio and caliper), propensity score weighting (specify weight formula, trimming, truncation), propensity score stratification (specify strata definition), other.</b> Overlap weighting based on the propensity score.
<b>Missing data methods</b>	<b>Name method and provide relevant details, e.g. missing indicators, complete case, last value carried forward, multiple imputation (specify model/variables), other.</b> Assumption that if no relevant claims diagnoses/procedures are present, the condition is not present.
<b>Subgroup Analyses</b>	<b>List all subgroups</b> Individuals <70, Individuals ≥70, Male, Female (exploratory analyses).

<b>Hypothesis:</b>	Tirzepatide does not increase the risk of stroke in patients with T2DM and an established CVD when following the eligibility criteria of the SURPASS-CVOT trial.
<b>Exposure contrast:</b>	Tirzepatide vs sitagliptin.
<b>Outcome:</b>	Stroke.
<b>Analytic software:</b>	Aetion, SAS 9.4, R.4.4.0, Python 3.13.3
<b>Model(s): (provide details or code)</b>	Outcome model: Cox proportional hazards Follow-up time * status(0) = exposure
<b>Confounding adjustment method</b>	<b>Name method and provide relevant details, e.g. bivariate, multivariable, propensity score weighting (specify weighting algorithm ratio and caliper), propensity score weighting (specify weight formula, trimming, truncation), propensity score stratification (specify strata definition), other.</b>
	Overlap weighting based on the propensity score.
<b>Missing data methods</b>	<b>Name method and provide relevant details, e.g. missing indicators, complete case, last value carried forward, multiple imputation (specify model/variables), other.</b>
	Assumption that if no relevant claims diagnoses/procedures are present, the condition is not present.
<b>Subgroup Analyses</b>	<b>List all subgroups</b>
	Individuals <70, Individuals ≥70, Male, Female (exploratory analyses).

<b>Hypothesis:</b>	Tirzepatide does not increase the risk of all-cause death in patients with T2DM and an established CVD when following the eligibility criteria of the SURPASS-CVOT trial.
<b>Exposure contrast:</b>	Tirzepatide vs sitagliptin.
<b>Outcome:</b>	All-cause mortality.
<b>Analytic software:</b>	Aetion, SAS 9.4, R.4.4.0, Python 3.13.3
<b>Model(s): (provide details or code)</b>	Outcome model: Cox proportional hazards Follow-up time * status(0) = exposure
<b>Confounding adjustment method</b>	<b>Name method and provide relevant details, e.g. bivariate, multivariable, propensity score weighting (specify weighting algorithm ratio and caliper), propensity score weighting (specify weight formula, trimming, truncation), propensity score stratification (specify strata definition), other.</b>
	Overlap weighting based on the propensity score.
<b>Missing data methods</b>	<b>Name method and provide relevant details, e.g. missing indicators, complete case, last value carried forward, multiple imputation (specify model/variables), other.</b>
	Assumption that if no relevant claims diagnoses/procedures are present, the condition is not present.
<b>Subgroup Analyses</b>	<b>List all subgroups</b>
	Individuals <70, Individuals ≥70, Male, Female (exploratory analyses).

<b>Hypothesis:</b>	Tirzepatide does not increase the risk of a composite of myocardial infarction, stroke, or all-cause mortality in patients with T2DM and an established CVD when following the eligibility criteria of the SURPASS-CVOT trial.
<b>Exposure contrast:</b>	Tirzepatide vs sitagliptin.
<b>Outcome:</b>	Composite of myocardial infarction, stroke, or all-cause mortality.
<b>Analytic software:</b>	Aetion, SAS 9.4, R.4.4.0, Python 3.13.3
<b>Model(s): (provide details or code)</b>	Outcome model: Cox proportional hazards Follow-up time * status(0) = exposure
<b>Confounding adjustment method</b>	<b>Name method and provide relevant details, e.g. bivariate, multivariable, propensity score weighting (specify weighting algorithm ratio and caliper), propensity score weighting (specify weight formula, trimming, truncation), propensity score stratification (specify strata definition), other.</b> Overlap weighting based on the propensity score.
<b>Missing data methods</b>	<b>Name method and provide relevant details, e.g. missing indicators, complete case, last value carried forward, multiple imputation (specify model/variables), other.</b> Assumption that if no relevant claims diagnoses/procedures are present, the condition is not present.
<b>Subgroup Analyses</b>	<b>List all subgroups</b> Individuals <70, Individuals ≥70, Male, Female (exploratory analyses).

<b>Hypothesis:</b>	Tirzepatide does not increase the risk of a composite of myocardial infarction or stroke in patients with T2DM and an established CVD when following the eligibility criteria of the SURPASS-CVOT trial.
<b>Exposure contrast:</b>	Tirzepatide vs sitagliptin.
<b>Outcome:</b>	Composite of myocardial infarction or stroke.
<b>Analytic software:</b>	Aetion, SAS 9.4, R.4.4.0, Python 3.13.3
<b>Model(s): (provide details or code)</b>	Outcome model: Cox proportional hazards Follow-up time * status(0) = exposure
<b>Confounding adjustment method</b>	<b>Name method and provide relevant details, e.g. bivariate, multivariable, propensity score weighting (specify weighting algorithm ratio and caliper), propensity score weighting (specify weight formula, trimming, truncation), propensity score stratification (specify strata definition), other.</b> Overlap weighting based on the propensity score.
<b>Missing data methods</b>	<b>Name method and provide relevant details, e.g. missing indicators, complete case, last value carried forward, multiple imputation (specify model/variables), other.</b> Assumption that if no relevant claims diagnoses/procedures are present, the condition is not present.
<b>Subgroup Analyses</b>	<b>List all subgroups</b> Individuals <70, Individuals ≥70, Male, Female (exploratory analyses).



<b>Hypothesis:</b>	Tirzepatide does not increase the risk of a composite of myocardial infarction, stroke, coronary revascularization, or unstable angina in patients with T2DM and an established CVD when following the eligibility criteria of the SURPASS-CVOT trial.
<b>Exposure contrast:</b>	Tirzepatide vs sitagliptin.
<b>Outcome:</b>	Composite of myocardial infarction, stroke, coronary revascularization, or unstable angina.
<b>Analytic software:</b>	Aetion, SAS 9.4, R.4.4.0, Python 3.13.3
<b>Model(s): (provide details or code)</b>	Outcome model: Cox proportional hazards Follow-up time * status(0) = exposure
<b>Confounding adjustment method</b>	<b>Name method and provide relevant details, e.g. bivariate, multivariable, propensity score weighting (specify weighting algorithm ratio and caliper), propensity score weighting (specify weight formula, trimming, truncation), propensity score stratification (specify strata definition), other.</b> Overlap weighting based on the propensity score.
<b>Missing data methods</b>	<b>Name method and provide relevant details, e.g. missing indicators, complete case, last value carried forward, multiple imputation (specify model/variables), other.</b> Assumption that if no relevant claims diagnoses/procedures are present, the condition is not present.
<b>Subgroup Analyses</b>	<b>List all subgroups</b> Individuals <70, Individuals ≥70, Male, Female (exploratory analyses).

## B. Safety Outcomes

<b>Hypothesis:</b>	Tirzepatide decreases the risk of serious bacterial infections in patients with T2DM and an established CVD when following the eligibility criteria of the SURPASS-CVOT trial.
<b>Exposure contrast:</b>	Tirzepatide vs sitagliptin.
<b>Outcome:</b>	Serious bacterial infections.
<b>Analytic software:</b>	Aetion, SAS 9.4, R.4.4.0, Python 3.13.3
<b>Model(s): (provide details or code)</b>	Outcome model: Cox proportional hazards Follow-up time*status(0) = exposure
<b>Confounding adjustment method</b>	<b>Name method and provide relevant details, e.g. bivariate, multivariable, propensity score weighting (specify weighting algorithm ratio and caliper), propensity score weighting (specify weight formula, trimming, truncation), propensity score stratification (specify strata definition), other.</b> Overlap weighting based on the propensity score.
<b>Missing data methods</b>	<b>Name method and provide relevant details, e.g. missing indicators, complete case, last value carried forward, multiple imputation (specify model/variables), other.</b> Assumption that if no relevant claims diagnoses/procedures are present, the condition is not present.
<b>Subgroup Analyses</b>	<b>List all subgroups</b> N/A.

<b>Hypothesis:</b>	Tirzepatide has no increased or decreased risk of urinary tract infections in patients with T2DM and an established CVD when following the eligibility criteria of the SURPASS-CVOT trial.
<b>Exposure contrast:</b>	Tirzepatide vs sitagliptin.
<b>Outcome:</b>	Urinary tract infections.
<b>Analytic software:</b>	Aetion, SAS 9.4, R.4.4.0, Python 3.13.3
<b>Model(s): (provide details or code)</b>	Outcome model: Cox proportional hazards Follow-up time*status(0) = exposure
<b>Confounding adjustment method</b>	<b>Name method and provide relevant details, e.g. bivariate, multivariable, propensity score weighting (specify weighting algorithm ratio and caliper), propensity score weighting (specify weight formula, trimming, truncation), propensity score stratification (specify strata definition), other.</b>
	Overlap weighting based on the propensity score.
<b>Missing data methods</b>	<b>Name method and provide relevant details, e.g. missing indicators, complete case, last value carried forward, multiple imputation (specify model/variables), other.</b>
	Assumption that if no relevant claims diagnoses/procedures are present, the condition is not present.
<b>Subgroup Analyses</b>	<b>List all subgroups</b>
	N/A.

<b>Hypothesis:</b>	Tirzepatide increases the risk of gastrointestinal adverse events in patients with T2DM and an established CVD when following the eligibility criteria of the SURPASS-CVOT trial.
<b>Exposure contrast:</b>	Tirzepatide vs sitagliptin.
<b>Outcome:</b>	Gastrointestinal adverse events.
<b>Analytic software:</b>	Aetion, SAS 9.4, R.4.4.0, Python 3.13.3
<b>Model(s): (provide details or code)</b>	Outcome model: Cox proportional hazards Follow-up time*status(0) = exposure
<b>Confounding adjustment method</b>	<b>Name method and provide relevant details, e.g. bivariate, multivariable, propensity score weighting (specify weighting algorithm ratio and caliper), propensity score weighting (specify weight formula, trimming, truncation), propensity score stratification (specify strata definition), other.</b>
	Overlap weighting based on the propensity score.
<b>Missing data methods</b>	<b>Name method and provide relevant details, e.g. missing indicators, complete case, last value carried forward, multiple imputation (specify model/variables), other.</b>
	Assumption that if no relevant claims diagnoses/procedures are present, the condition is not present.
<b>Subgroup Analyses</b>	<b>List all subgroups</b>
	N/A.

### C. Negative Control Analyses

<b>Hypothesis:</b>	Tirzepatide vs sitagliptin has no effect on risk of negative control outcomes compared to sitagliptin. Negative control outcomes include (1) hernia and (2) lumbar radiculopathy.
<b>Exposure contrast:</b>	Tirzepatide vs sitagliptin.
<b>Outcome:</b>	Separate analyses for each negative control outcome, including hernia and lumbar radiculopathy
<b>Analytic software:</b>	Aetion, SAS 9.4, R.4.4.0, Python 3.13.3
<b>Model(s): (provide details or code)</b>	Outcome model: Cox proportional hazards Follow-up time*status(0) = exposure
<b>Confounding adjustment method</b>	<b>Name method and provide relevant details, e.g. bivariate, multivariable, propensity score weighting (specify weighting algorithm ratio and caliper), propensity score weighting (specify weight formula, trimming, truncation), propensity score stratification (specify strata definition), other.</b>  Overlap weighting based on the propensity score.
<b>Missing data methods</b>	<b>Name method and provide relevant details, e.g. missing indicators, complete case, last value carried forward, multiple imputation (specify model/variables), other.</b>  Assumption that if no relevant claims diagnoses/procedures are present, the condition is not present.
<b>Subgroup Analyses</b>	<b>List all subgroups</b>  N/A.

**Table 4. Sensitivity analyses – rationale, strengths and limitations**

	What is being varied? How?	Why? (What do you expect to learn?)	Strengths of the sensitivity analysis compared to the primary	Limitations of the sensitivity analysis compared to the primary
Negative control outcomes, including hernia, lumbar radiculopathy	We evaluate negative control outcomes of hernia and lumbar radiculopathy, where no causal effect is expected from tirzepatide, or sitagliptin.	We will evaluate the potential impact of residual confounding on this outcome for which there is not expected to be a causal effect	The evaluates the robustness of the interpretation of the primary analysis by evaluating the potential magnitude of unmeasured confounding	This analysis assumes that the confounding structure is the same or similar for the negative control outcome as the outcome of interest

Accounting for the competing event of death.	We will account for the competing event of death in our primary outcome model by using the Fine-Gray method.	To assess the impact of the competing event of death on the primary end point.	Accounts for the fact that death is a competing event, yielding clinically relevant cumulative incidence estimates and avoiding bias from treating death as non-informative censoring.	Targets a slightly different estimand than Cox, may have lower power, and interpretation can be difficult if treatment also affects death or confounding affects death differently than the primary end point.
As-started analyses (observational analogue to intention-to-treat) to address potential informative censoring.	To address potential informative censoring.	We will consider the first-used medication for 365 days without considering drug discontinuation or switching, mimicking an “intention-to-treat” approach.	Reflects follow-up regimen of RCT.	Persistence of drug use is shorter in clinical practice whereas adherence is typically higher in RCTs. Therefore, we expect the estimated effects will be diluted toward the null, underestimating the true treatment effect had patients remained on therapy.

## 6.6 Data sources

### 6.6.1 Context and rationale for data sources

**Reason for selection:** The study will be conducted in 2 US health care claims databases: Optum Clinformatics (2022-2025), and Merative MarketScan (2022-2023). Data from the Merative MarketScan database will only be included if sufficient sample size can be accrued.

**Strengths of data source(s):** Each data source contains deidentified, longitudinal, date-stamped information on patient enrollment, demographics, inpatient/outpatient diagnosis and procedures, admission and discharge dates, and medication dispensation. The death data is captured in the Optum database from inpatient discharge status, social security death master file, and deaths scraped from obituaries or other sources. The death data in MarketScan is captured from the social security death master file and inpatient discharge status. It is recognized that the social security death master file has high specificity and positive predictive value for deaths. While this data resource has under captured deaths since 2011, the capture of deaths is not expected to be differential between compared exposure groups.

**Limitations of data source(s):** Patient healthcare encounters are only observable when they are enrolled in an insurance plan that contributes to the database. Patients may change insurance plans for multiple reasons. Both Optum Clinformatics and Merative MarketScan are primarily employer based insurance databases where patients may disenroll with job changes. In claims data, dispensing data for inpatient medication is unavailable. Diagnoses reflect billing practices, therefore algorithms (preferably validated) are needed for accurate phenotyping of patient conditions. Services that are not covered by insurance do not appear in the data. The trial evaluated cardiovascular deaths, however we will evaluate all-cause mortality in the emulation

because most deaths in this cohort of patients at high cardiovascular risk will be related to cardiovascular reasons, the cause of death is not recorded for databases not linked to NDI, and the performance of NDI at identifying cardiovascular causes of death may be suboptimal.<sup>23</sup>

**Data source provenance/curation:**

Information about Optum Clinformatics and Merative MarketScan can be found in data dictionaries and user guides that are provided to clients.

**Table 5. Metadata about data sources and software**

	Data 1	Data 2
<b>Data Source(s):</b>	Optum Clinformatics	Merative MarketScan
<b>Study Period:</b>	13 <sup>th</sup> May 2022	13 <sup>th</sup> May 2022
<b>Eligible Cohort Entry Period:</b>	May 31, 2025	December 31, 2023
<b>Data Version (or date of last update):</b>	April 2025	Mortality Cut Set A Received 2024-03-01
<b>Data sampling/extraction criteria:</b>	n/a	n/a
<b>Type(s) of data:</b>	Administrative claims	Administrative claims
<b>Data linkage:</b>	n/a	n/a
<b>Conversion to CDM*:</b>	n/a	n/a
<b>Software for data management:</b>	Aetion Evidence Platform® (2025)	Aetion Evidence Platform® (2025)

\*CDM = Common Data Model

**6.7 Data management**

Tracking data: The Data Use Agreement (DUA) Custodian (Principal Investigator) and the Division Operations Manager (Winta Tekle) are responsible for receiving and creating a record of new data associated with the given request. The Operations Manager is responsible for all indexing and archiving of documents and electronic media related to data that the Division receives and will log data location, data contents, and associated DUA and Institutional Review Board (IRB) numbers in the Division’s centralized tracking system.

Handling and storage: In-scope data will be stored utilizing Mass General Brigham approved information systems – i.e., Division servers and Mass General Brigham network storage.

Archiving: Data retention and any removal will be executed by the Division Operations Manager (Winta Tekle) and Data Manager (Todd MacGarvey). The Division follows Mass General Brigham enterprise record retention policies and follow the terms of the agreement through which the in-scope data was received.

Information security: The Division follows Mass General Brigham's Enterprise Information Security Program (EISP). The EISP helps by providing assurance that Mass General Brigham information and information systems are protected from unauthorized access, use, disclosure, duplication, modification, or destruction in order to maintain their confidentiality, integrity, and availability. To that end, the EISP policies, standards and procedures create an information security framework that is aligned with the recommendations of the International Organization for Standardization's (ISO) publication 27001 and the National Institute of Standards and Technology's (NIST) publication 800-53 Family of Controls and MGB regulatory and legal requirements (as a HIPAA covered entity).

Mass General Brigham workforce members are required to complete new workforce privacy and information security training upon hire and annually thereafter. Refresh training is provided as appropriate. Mass General Brigham workforce members are required to review and sign a Confidentiality Agreement upon hire and annually thereafter. Additionally, we follow Enterprise Information Security and Privacy policies, including Managing Workforce Members Information Security Responsibilities Policy, which was developed to help assure that Mass General Brigham workforce members are competent and eligible to support the information security responsibilities associated with their role. Mass General Brigham workforce, including Division staff, are required to comply with Enterprise Information Security and Privacy Policies.

Facilities: The research team uses a highly secure, state-of-the-art, computing facility housed at Mass General Brigham's Corporate Data Centers in Needham and Marlborough, Massachusetts as well as Amazon Web Services (AWS). We maintain redundant storage for maximal data integrity and high-speed data access.

The Division uses Mass General Brigham corporate provisioned servers to analyze and store data in connection with this project. There are strict access controls enforced by technical means to ensure that only study staff who have been approved to conduct data analyses and contracted data engineers are able to access data (e.g., Mass General Brigham Authentication (Active Directory) utilized; auditing, logging, and monitoring enabled; firewalls enabled; etc.). All Division servers used in this study are accessible to only authorized staff only through the MGB network and utilizing VPN as appropriate (i.e., users must be on the network and logged into VPN to access). Mass General Brigham has a network information security monitoring team and in-scope servers are enrolled in enterprise security tools (e.g., vulnerability scanning service, antivirus, etc.).

The Division also uses AWS. In-scope AWS services / resources have undergone review and assessment by Mass General Brigham's Information Security Risk Assessment Team/ InfoSec Risk Management Team as required and in alignment with NIST 800-30: Guide for Conducting Risk Assessments. In-scope AWS servers are for our exclusive use (reserved instances), are covered under our organization's Business Associate Agreement with AWS. In-scope servers are housed in anonymous facilities that are not branded as AWS facilities. Physical access is strictly controlled both at the perimeter and at building ingress points by professional security staff utilizing video surveillance, intrusion detection systems, and other electronic means.

Security attributes and controls for the Division's use of in-scope AWS in connection with this project include: encryption at rest and in transit (industry standard AES-256 encryption, SSL/TSL), anti-malware, latest OS updates and patches as well as anti-virus; multi-factor authentication (MFA), Identity and Access Management, including SSO; auditing and logging; principle of least privilege, including for traffic and ports (e.g., deny all default configurations), use of VPC enabled Step functions, etc.; separation between environments; minimum necessary (out of the box AWS roles are not used as they can be overly permissive); all data would reside in the US domestic regions – use only US east HIPAA compliant region; performance monitoring enabled and reviewed as per internal processes; passwords compliant with enterprise password policy and, as appropriate, more protective password requirements; etc. Our Division's AWS use is also subject to ongoing evaluation and monitoring as well – e.g., vulnerability scanning and management, access review, etc.

A data file list will be maintained in Amazon S3 and tracked through Cloudtrail and Cloudwatch. Reporting of data file availability for any file stored in an S3 bucket will be controlled by MGB.

Amazon EC2, Amazon EBS, and Amazon VPC are integrated with AWS CloudTrail, a service that provides a record of actions taken by a user, role, or an AWS service in Amazon EC2, Amazon EBS, and Amazon VPC. CloudTrail captures all API calls for Amazon EC2, Amazon EBS, and Amazon VPC as events, including calls from the console and from code calls to the APIs. MGB IT/security staff have full access to CloudTrail to ensure that CloudTrail monitoring is available at all times. Amazon CloudWatch Events delivers a near-real-time stream of system events that describe changes in AWS resources. Amazon CloudTrail can log, continuously monitor, and retain account activity related to actions across the MGB AWS infrastructure. CloudTrail provides event history of MGB AWS account activity. This event history simplifies security analysis, resource change tracking, and troubleshooting and complies with requirements to ensure the data file inventory is controlled by MGB.

Backups: Backups are created using industry recognized Cryptographic mechanisms (e.g., 256-bit AES encryption) as appropriate and required. Data are backed up within the MGB network from the MGB Needham data center to the MGB Marlborough data center via replication/mirroring and volume-level snapshots. AWS Backup supports both instance-level backups as Amazon Machine Images (AMIs) and volume-level backups as separate snapshots based on the resource tags. AMIs allow MGB IT and security staff to create backups of all S3 and EC2 instances.

In addition to the safeguards listed above, the Division follows enterprise privacy and information security policies and maintains internally procedures in connection with this project to safeguard the data in connection with this project as appropriate and required including: Physical Security and Environmental Controls for Electronic Information Policy; IT Access Control Standards for Users policy; Safeguarding Fax Copiers Printers Telephone Use and Pagers; Physical Removal and Transport of Protected Health Information and Personal Information policy, etc.

## **6.8 Quality control**

Senior Programmers and Research Specialists perform QA/QC on raw or common data model converted data via SAS/R/Aetion software. The protocol will be iteratively developed and pre-specified data checks including feasibility counts and balance on baseline covariates will be conducted with outputs reviewed by MGB team members. Team members will review code lists to ensure fidelity to intended algorithms.

## 6.9 Study size and feasibility

See appendix 4 and appendix 5 (feasibility, weighting on age, sex, comorbidity score as well as all predefined propensity score variables). Propensity score distribution plots with c-statistics are available in appendix 6. Table 1 showing prevalence of baseline characteristics and standardized differences in distribution are available in appendix 7. Additional diagnostic evaluations, including balance assessments of laboratory and clinical examination test results not included in the propensity score as well as assessment of heart failure-related medication after follow-up, will be conducted to assess potential residual confounding and divergence of treatment over time.

## 7. Limitation of the methods

As we are using secondary data and the data were not collected for research purposes, some important variables may not be collected or will be measured imperfectly. We have selected validated algorithms when possible and we have created proxies for important variables that are not directly captured in the data to reduce confounding by unmeasured factors.

When comparing results from an RCT to a database study that emulates the design, we assume that the findings from the single RCT are internally valid.

Although we plan to emulate the important features of each trial as closely as possible in healthcare claims, there may be some elements of the RCT design that are not emulable with a database study, which means that the real-world evidence obtained from the database study and trial will address slightly different clinical questions. For example, in routine clinical care, adherence to treatment is typically not as high as it is in an RCT with strong measures in place to encourage adherence to the study protocol. This means that there is more discontinuation and short-term medication use in the patients identified in claims databases than trial participants.

Apparent agreement between RCT and database study results could occur if the effects of multiple factors (chance, emulation differences, bias) cancel each other out.

## 8. Protection of human subjects

This study has been approved by the Brigham and Women's Hospital Institutional Review Board.

## 9. References

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## 10. Appendices

See accompanying excel files that specify the cohort study.

### 1 Target Trial Framework, Operational Definitions, and Data Fitness Assessment

#### 2 Code algorithms

- 2a Exposure
- 2a Inclusion
- 2c Exclusion
- 2d Outcome

### 3 Flowchart for cohort assembly

#### 4 1st feasibility assessment

#### 5 2nd feasibility assessment

### 6 Balance Assessment - PS Distribution and C-Statistic

#### 7 Balance Assessment - Table 1

### 8 Covariate - Algorithm Sources

## Appendices

- 1 Target Trial Framework, Operational Definitions and Data Fitness Assessment
- 2 Code algorithms
  - 2a Exposure
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- 3 Flowchart for cohort assembly
- 4 1st feasibility assessment
- 5 2nd feasibility assessment
- 6 Balance Assessment - PS Distribution and C-Statistic
- 7 Balance Assessment - Table 1
- 8 Covariate - Algorithm Sources

	TIRZSITA-CVOT	OPTUM	MARKETSCAN	Notes/Questions	Color coding
<b>Treatment assignment (time 0, index date)</b>	International, double-blind, randomized, active-controlled trial to treatment A vs B	Non-randomized initiation of treatment Tirzepatide vs Sitagliptin (first eligible entry to study population)	Non-randomized initiation of treatment Tirzepatide vs Sitagliptin (first eligible entry to study population)		
<b>Exposure</b>	Tirzepatide (subcutaneously once per week)	<b>Code type:</b> RX <b>Care setting:</b> N/A <b>Diagnosis position:</b> N/A <b>Washout window:</b> [-183, -1] <b>Incident with respect to:</b> Tirzepatide and sitagliptin in any formulation or dose <b>Assessment window:</b> N/A <b>Source of algorithm:</b> N/A <b>Measurement characteristics:</b> N/A	<b>Code type:</b> RX <b>Care setting:</b> N/A <b>Diagnosis position:</b> N/A <b>Washout window:</b> [-183, -1] <b>Incident with respect to:</b> Tirzepatide and sitagliptin in any formulation or dose <b>Assessment window:</b> N/A <b>Source of algorithm:</b> N/A <b>Measurement characteristics:</b> N/A		Good proxy definition
<b>Comparator</b>	Placebo	<b>Code type:</b> RX <b>Care setting:</b> N/A <b>Diagnosis position:</b> N/A <b>Washout window:</b> [-183, -1] <b>Incident with respect to:</b> Tirzepatide and sitagliptin in any formulation or dose <b>Assessment window:</b> N/A <b>Source of algorithm:</b> N/A <b>Measurement characteristics:</b> N/A <b>Code type:</b> DX, PX <b>Care setting:</b> Inpatient for MI, stroke, unstable angina. Any for coronary revascularization <b>Diagnosis position:</b> Primary <b>Washout window:</b> <b>Source of algorithm:</b> See below. <b>Measurement characteristics:</b> Death includes information from the inpatient discharged dead status, social security death master file, and deaths scraped from obituaries or other sources.	<b>Code type:</b> RX <b>Care setting:</b> N/A <b>Diagnosis position:</b> N/A <b>Washout window:</b> [-183, -1] <b>Incident with respect to:</b> Tirzepatide and sitagliptin in any formulation or dose <b>Assessment window:</b> N/A <b>Source of algorithm:</b> N/A <b>Measurement characteristics:</b> N/A <b>Code type:</b> DX, PX <b>Care setting:</b> Inpatient for MI, stroke, unstable angina. Any for coronary revascularization <b>Diagnosis position:</b> Primary <b>Washout window:</b> <b>Source of algorithm:</b> See below. <b>Measurement characteristics:</b> Death includes information from the inpatient discharged dead status, social security death master file, and deaths scraped from obituaries or other sources.		Moderate proxy definition
<b>Effectiveness outcomes to be emulated</b>	Atherosclerotic cardiovascular events, i.e., myocardial infarction, stroke, all-cause mortality, coronary revascularization, unstable angina	PPV for MI using ICD9 codes was <a href="#">88.4%</a> and <a href="#">94%</a> . PPV for ischemic stroke using ICD9 codes was <a href="#">88%</a> and <a href="#">95%</a> . Both of the above ICD9 codes were mapped to ICD10, but no validation study was performed.	PPV for MI using ICD9 codes was <a href="#">88.4%</a> and <a href="#">94%</a> . PPV for ischemic stroke using ICD9 codes was <a href="#">88%</a> and <a href="#">95%</a> . Both of the above ICD9 codes were mapped to ICD10, but no validation study was performed.		Poorly measured in database
<b>Follow up start</b>	Randomization date	One day after initiation of treatment with tirzepatide or sitagliptin Earliest of: Outcome, end of observation in data, end of study period (365 days), discontinuation of study drug (45 days grace window and risk-window), switch to other GLP-1-RA, nursing home admission	One day after initiation of treatment with tirzepatide or sitagliptin Earliest of: Outcome, end of observation in data, end of study period (365 days), discontinuation of study drug (45 days grace window and risk-window), switch to other GLP-1-RA, nursing home admission		
<b>Follow up end</b>	Expected mean follow-up: 1 year				
<b>Causal estimand</b>	Intention-to-treat effect	On-treatment effect	On-treatment effect		
<b>Effect estimation</b>	Cox proportional hazards model	Cox proportional hazards regression model	Cox proportional hazards regression model		
<b>Inclusion criteria</b>					
<b>1</b>	Men and women aged 40 years or older	<b>Applied before/after selection of index date:</b> Before <b>Assessment window:</b> [0, 0] <b>Code type:</b> N/A <b>Care setting:</b> N/A <b>Diagnosis position:</b> N/A <b>Source of algorithm:</b> N/A <b>Measurement characteristics:</b> N/A	<b>Applied before/after selection of index date:</b> Before <b>Assessment window:</b> [0, 0] <b>Code type:</b> N/A <b>Care setting:</b> N/A <b>Diagnosis position:</b> N/A <b>Source of algorithm:</b> N/A <b>Measurement characteristics:</b> N/A		
<b>2</b>	Type 2 diabetes mellitus	<b>Applied before/after selection of index date:</b> Before <b>Assessment window:</b> [-365, 0] <b>Code type:</b> DX <b>Care setting:</b> Any <b>Diagnosis position:</b> Any <b>Source of algorithm:</b> PROMISE team <b>Measurement characteristics:</b> N/A	<b>Applied before/after selection of index date:</b> Before <b>Assessment window:</b> [-365, 0] <b>Code type:</b> DX <b>Care setting:</b> Any <b>Diagnosis position:</b> Any <b>Source of algorithm:</b> PROMISE team <b>Measurement characteristics:</b> N/A		
<b>3</b>	HbA1c $\geq 7\%$ and $\leq 10.5\%$	<b>Applied before/after selection of index date:</b> Before <b>Assessment window:</b> [-120, 0] <b>Code type:</b> DX <b>Care setting:</b> Any <b>Diagnosis position:</b> Any <b>Source of algorithm:</b> PROMISE team <b>Measurement characteristics:</b> N/A	<b>Applied before/after selection of index date:</b> Before <b>Assessment window:</b> [-120, 0] <b>Code type:</b> DX <b>Care setting:</b> Any <b>Diagnosis position:</b> Any <b>Source of algorithm:</b> PROMISE team <b>Measurement characteristics:</b> N/A	Algorithm detail: Not considered in the main cohort due to high missingness of HbA1c measurements. A sensitivity analyses on a subset of the cohort with HbA1c measurements will be conducted in the cohort from the Optum database, including the last recorded value in the propensity score.	
<b>4</b>	BMI $\geq 25\text{kg/m}^2$	<b>Applied before/after selection of index date:</b> Before <b>Assessment window:</b> [-730, 0] <b>Code type:</b> DX, LOINC <b>Care setting:</b> Any <b>Diagnosis position:</b> Any <b>Source of algorithm:</b> <a href="#">Validation of obesity-related diagnosis codes in claims data</a> ; <a href="#">Validation of body mass index (BMI)-related ICD-9-CM, and ICD-10-CM administrative diagnosis codes recorded in US claims data</a> <b>Measurement characteristics:</b> N/A	<b>Applied before/after selection of index date:</b> Before <b>Assessment window:</b> [-730, 0] <b>Code type:</b> DX, LOINC <b>Care setting:</b> Any <b>Diagnosis position:</b> Any <b>Source of algorithm:</b> <a href="#">Validation of obesity-related diagnosis codes in claims data</a> ; <a href="#">Validation of body mass index (BMI)-related ICD-9-CM, and ICD-10-CM administrative diagnosis codes recorded in US claims data</a> <b>Measurement characteristics:</b> N/A	Algorithm detail: If BMI measurement via LOINC code is below 10 or above 100 then measurement is set to missing.	
<b>5</b>	Established atherosclerotic cardiovascular disease, either one of:				
<b>5.1</b>	Coronary artery disease, either one of:				

5.1.1	Documented history of myocardial infarction	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p> <p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p> <p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>
5.1.2	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p> <p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p> <p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>
5.1.3	≥50% stenosis in 2 or more major coronary arteries	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX, PX  Care setting: Any  Diagnosis position: N/A  Source of algorithm: N/A  Measurement characteristics: N/A</p>	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX, PX  Care setting: Any  Diagnosis position: N/A  Source of algorithm: N/A  Measurement characteristics: N/A</p>
5.1.4	History of surgical or percutaneous coronary revascularization procedure	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>
5.2	Cerebrovascular disease, either one of:		
5.2.1	Documented history of ischemic stroke	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>
5.2.2	Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX, PX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX, PX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>
5.2.3	History of carotid stenting or surgical revascularization	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX, PX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>	<p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX, PX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>
5.3	Peripheral arterial disease, either one of:		
5.3.1	Intermittent claudication and ankle-brachial index <0.9	<p>Applied before/after selection of index date: Before  Assessment window: [-all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p> <p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX, PX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>	<p>Applied before/after selection of index date: Before  Assessment window: [-all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p> <p>Applied before/after selection of index date: Before  Assessment window: [all available data, 0]  Code type: DX, PX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	<p>Applied before/after selection of index date: Before  Assessment window: [-all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>	<p>Applied before/after selection of index date: Before  Assessment window: [-all available data, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: N/A  Measurement characteristics: N/A</p>

Algorithm detail: ≥50% stenosis was proxied by ICD-10 codes, based on the premise that most patients are coded only after surpassing the [symptomatic threshold of 50-70%](#).

See 5.1.2

See 5.1.2

Algorithm detail: Intermittent claudication was proxied by ICD-10-CM codes for peripheral vascular disease.

Algorithm detail: Not considered in the main cohort due to high missingness of HbA1c measurements. A sensitivity analyses on a subset of the cohort with HbA1c measurements will be conducted in the cohort from the Optum database, including the last recorded value in the propensity score.

Algorithm detail: Planned treatment will be proxied by a history of treatment (e.g. codes for intravitreal injection of anti-VEGFi OR photocoagulation)

**Exclusion criteria**

6	HbA1c >10.5%	<p>Applied before/after selection of index date: Before  Assessment window: [-120, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: PROMISE team  Measurement characteristics: N/A</p> <p>Applied before/after selection of index date: Before  Assessment window: [-365, 0]  Code type: PX  Care setting: Any  Diagnosis position: Any  Source of algorithm: PROMISE team  Measurement characteristics: N/A</p>	<p>Applied before/after selection of index date: Before  Assessment window: [-120, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: PROMISE team  Measurement characteristics: N/A</p> <p>Applied before/after selection of index date: Before  Assessment window: [-365, 0]  Code type: PX  Care setting: Any  Diagnosis position: Any  Source of algorithm: PROMISE team  Measurement characteristics: N/A</p>
7	Planning treatment for diabetic retinopathy and/or macular edema	<p>Applied before/after selection of index date: Before  Assessment window: [-120, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: PROMISE team  Measurement characteristics: N/A</p>	<p>Applied before/after selection of index date: Before  Assessment window: [-120, 0]  Code type: DX  Care setting: Any  Diagnosis position: Any  Source of algorithm: PROMISE team  Measurement characteristics: N/A</p>

8	Hospitalized for chronic heart failure within 2 months prior to screening	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-60, 0] for HF diagnosis or HHF</p> <p><b>Code type:</b> DX, RX</p> <p><b>Care setting:</b> Inpatient</p> <p><b>Diagnosis position:</b> Primary</p> <p><b>Source of algorithm:</b> DUPLICATE team, investigator reviewed codes</p> <p><b>Measurement characteristics:</b> N/A</p>	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-60, 0] for HF diagnosis or HHF</p> <p><b>Code type:</b> DX, RX</p> <p><b>Care setting:</b> Inpatient</p> <p><b>Diagnosis position:</b> Primary</p> <p><b>Source of algorithm:</b> DUPLICATE team, investigator reviewed codes</p> <p><b>Measurement characteristics:</b> N/A</p>	
9	Chronic New York Heart Association Functional Classification IV heart failure	Can't be measured in claims.	Can't be measured in claims.	Algorithm detail: A proportion of patients with NYHA class IV will be excluded from the cohort by exclusion criterion 8.
10	Planned coronary, carotid, or peripheral artery revascularization	Can't be measured in claims.	Can't be measured in claims.	
11	History of chronic or acute pancreatitis	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-183, 0]</p> <p><b>Code type:</b> DX</p> <p><b>Care setting:</b> Any</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> PROMISE team</p> <p><b>Measurement characteristics:</b> N/A</p> <p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-365, 0]</p> <p><b>Code type:</b> DX,</p> <p><b>Care setting:</b> Inpatient</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> PROMISE team, <a href="https://pubmed.ncbi.nlm.nih.gov/35857336/">https://pubmed.ncbi.nlm.nih.gov/35857336/</a>, Investigator reviewed codes</p> <p><b>Measurement characteristics:</b> N/A</p>	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-183, 0]</p> <p><b>Code type:</b> DX</p> <p><b>Care setting:</b> Any</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> PROMISE team</p> <p><b>Measurement characteristics:</b> N/A</p> <p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-365, 0]</p> <p><b>Code type:</b> DX,</p> <p><b>Care setting:</b> Inpatient</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> PROMISE team, <a href="https://pubmed.ncbi.nlm.nih.gov/35857336/">https://pubmed.ncbi.nlm.nih.gov/35857336/</a>, Investigator reviewed codes</p> <p><b>Measurement characteristics:</b> N/A</p>	
12	Known clinically significant gastric emptying abnormality or bariatric surgery	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-183, 0]</p> <p><b>Code type:</b> DX, PX</p> <p><b>Care setting:</b> Any</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> Investigator reviewed codes</p> <p><b>Measurement characteristics:</b> N/A</p>	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-183, 0]</p> <p><b>Code type:</b> DX, PX</p> <p><b>Care setting:</b> Any</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> Investigator reviewed codes</p> <p><b>Measurement characteristics:</b> N/A</p>	See SUMMIT
13	Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq 3X$ the ULN	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-365, 0]</p> <p><b>Code type:</b> DX, PX</p> <p><b>Care setting:</b> Any</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> PROMISE team</p> <p><b>Measurement characteristics:</b> N/A</p>	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-365, 0]</p> <p><b>Code type:</b> DX, PX</p> <p><b>Care setting:</b> Any</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> PROMISE team</p> <p><b>Measurement characteristics:</b> N/A</p>	Algorithm detail: Based on diagnostic codes rather than laboratory values.
14	eGFR $< 15$ mL/Min/1.73 m <sup>2</sup> or on chronic dialysis	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [all available data, 0]</p> <p><b>Code type:</b> DX</p> <p><b>Care setting:</b> Any</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> PROMISE team</p> <p><b>Measurement characteristics:</b> N/A</p>	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [all available data, 0]</p> <p><b>Code type:</b> DX</p> <p><b>Care setting:</b> Any</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> PROMISE team</p> <p><b>Measurement characteristics:</b> N/A</p>	Algorithm detail: Proxied by ICD-10-CM codes for chronic kidney disease stage 5 OR end-stage renal disease OR ICD-10-CM procedure codes for dialysis.
15	Family or personal history of multiple endocrine neoplasia or medullary thyroid carcinoma	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-60, 0] for all except unstable angina [-30, 0]</p> <p><b>Code type:</b> DX, PX</p> <p><b>Care setting:</b> Inpatient/ED for MI, Stroke, TIA, inpatient for procedures</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> PROMISE team, Investigator reviewed codes</p> <p><b>Measurement characteristics:</b> N/A</p>	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-60, 0] for all except unstable angina [-30, 0]</p> <p><b>Code type:</b> DX, PX</p> <p><b>Care setting:</b> Inpatient/ED for MI, Stroke, TIA, inpatient for procedures</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> PROMISE team, Investigator reviewed codes</p> <p><b>Measurement characteristics:</b> N/A</p>	
16	Elevated serum calcitonin level	Can't be measured in claims.	Can't be measured in claims.	
17	Cardiovascular event or intervention $< 60$ days prior to screening	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-183, 0]</p> <p><b>Code type:</b> RX</p> <p><b>Care setting:</b> N/A</p> <p><b>Diagnosis position:</b> N/A</p> <p><b>Source of algorithm:</b> N/A</p> <p><b>Measurement characteristics:</b> n/a</p>	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-183, 0]</p> <p><b>Code type:</b> RX</p> <p><b>Care setting:</b> N/A</p> <p><b>Diagnosis position:</b> N/A</p> <p><b>Source of algorithm:</b> N/A</p> <p><b>Measurement characteristics:</b> n/a</p>	
18	GLP-1-RA or pramlintide treatment within 3 months prior to Visit 1	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-365, 0]</p> <p><b>Code type:</b> DX</p> <p><b>Care setting:</b> Any</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> Pregnancy team</p> <p><b>Measurement characteristics:</b> N/A</p>	<p><b>Applied before/after selection of index date:</b> Before</p> <p><b>Assessment window:</b> [-365, 0]</p> <p><b>Code type:</b> DX</p> <p><b>Care setting:</b> Any</p> <p><b>Diagnosis position:</b> Any</p> <p><b>Source of algorithm:</b> Pregnancy team</p> <p><b>Measurement characteristics:</b> N/A</p>	
19	Women who are pregnant or breastfeeding	Can't be measured in claims.	Can't be measured in claims.	Algorithm detail: Proxied by ICD-10-CM codes indicative of pregnancy at baseline.

Variable Name	Code	Code Category	Code Type	Notes
<b>Exposure</b>				
Tirzepatide	TIRZEPATIDE	RX	Generic	NDC Route of administration: SUBCUTANEOUS
Tirzepatide	0002115201	RX	NDC	
Tirzepatide	0002124301	RX	NDC	
Tirzepatide	0002145701	RX	NDC	
Tirzepatide	0002145780	RX	NDC	
Tirzepatide	0002146001	RX	NDC	
Tirzepatide	0002146080	RX	NDC	
Tirzepatide	0002147101	RX	NDC	
Tirzepatide	0002147180	RX	NDC	
Tirzepatide	0002148401	RX	NDC	
Tirzepatide	0002148480	RX	NDC	
Tirzepatide	0002149501	RX	NDC	
Tirzepatide	0002149580	RX	NDC	
Tirzepatide	0002150601	RX	NDC	
Tirzepatide	0002150661	RX	NDC	
Tirzepatide	0002150680	RX	NDC	
Tirzepatide	0002221401	RX	NDC	
Tirzepatide	0002234001	RX	NDC	
Tirzepatide	0002242301	RX	NDC	
Tirzepatide	0002300201	RX	NDC	
Tirzepatide	MOUNJARO	RX	Brand	NDC Route of administration: SUBCUTANEOUS
Tirzepatide	ZEPBOUND	RX	Brand	NDC Route of administration: SUBCUTANEOUS
<b>Comparator</b>				
Sitagliptin	SITAGLIPTIN	RX	Generic	NDC Route of Administration: ORAL
Sitagliptin	0006011201	RX	NDC	
Sitagliptin	0006011228	RX	NDC	
Sitagliptin	0006011231	RX	NDC	
Sitagliptin	0006011254	RX	NDC	
Sitagliptin	0006022101	RX	NDC	
Sitagliptin	0006022128	RX	NDC	
Sitagliptin	0006022131	RX	NDC	
Sitagliptin	0006022154	RX	NDC	
Sitagliptin	0006027701	RX	NDC	
Sitagliptin	0006027702	RX	NDC	
Sitagliptin	0006027714	RX	NDC	

Sitagliptin	0006027727	RX	NDC	
Sitagliptin	0006027728	RX	NDC	
Sitagliptin	0006027730	RX	NDC	
Sitagliptin	0006027731	RX	NDC	
Sitagliptin	0006027733	RX	NDC	
Sitagliptin	0006027754	RX	NDC	
Sitagliptin	0006027782	RX	NDC	
Sitagliptin	0006057501	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057502	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057503	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057552	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057556	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057561	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057562	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057582	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057701	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057702	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057703	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057752	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057756	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057761	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057762	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006057782	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006007814	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006007828	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006007861	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006007862	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006007882	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006008014	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006008028	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006008061	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006008062	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006008082	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006008107	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006008114	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006008131	RX	NDC	Sitagliptin/metformin
Sitagliptin	0006008154	RX	NDC	Sitagliptin/metformin



Sitagliptin  
Sitagliptin  
Sitagliptin

0006008182 RX  
JANUVIA RX  
SITAGLIPTIN / METFORMIN HYD RX

NDC Sitagliptin/metformin  
Generic NDC Route of Administration: ORAL  
Generic NDC Route of Administration: ORAL

Category	Variable Name	Code	Code Category	Description	Code Type
1	Patients > 40				
2	Diagnosed with T2DM	E11.0	DX	TYPE 2 DIABETES MELLITUS WITH HYPEROSMOLARITY	ICD-10-CM
				TYPE 2 DIABETES MELLITUS WITH HYPEROSMOLARITY WITHOUT NONKETOTIC HYPERGLYCEMIC-HYPEROSMOLAR COMA	
2	Diagnosed with T2DM	E11.00	DX	(NKHHC)	ICD-10-CM
2	Diagnosed with T2DM	E11.01	DX	TYPE 2 DIABETES MELLITUS WITH HYPEROSMOLARITY WITH COMA	ICD-10-CM
2	Diagnosed with T2DM	E11.1	DX	TYPE 2 DIABETES MELLITUS WITH KETOACIDOSIS	ICD-10-CM
2	Diagnosed with T2DM	E11.10	DX	TYPE 2 DIABETES MELLITUS WITH KETOACIDOSIS WITHOUT COMA	ICD-10-CM
2	Diagnosed with T2DM	E11.11	DX	TYPE 2 DIABETES MELLITUS WITH KETOACIDOSIS WITH COMA	ICD-10-CM
2	Diagnosed with T2DM	E11.2	DX	TYPE 2 DIABETES MELLITUS WITH KIDNEY COMPLICATIONS	ICD-10-CM
2	Diagnosed with T2DM	E11.21	DX	TYPE 2 DIABETES MELLITUS WITH DIABETIC NEPHROPATHY	ICD-10-CM
2	Diagnosed with T2DM	E11.22	DX	TYPE 2 DIABETES MELLITUS WITH DIABETIC CHRONIC KIDNEY DISEASE	ICD-10-CM
2	Diagnosed with T2DM	E11.29	DX	TYPE 2 DIABETES MELLITUS WITH OTHER DIABETIC KIDNEY COMPLICATION	ICD-10-CM
2	Diagnosed with T2DM	E11.3	DX	TYPE 2 DIABETES MELLITUS WITH OPHTHALMIC COMPLICATIONS	ICD-10-CM
2	Diagnosed with T2DM	E11.31	DX	TYPE 2 DIABETES MELLITUS WITH UNSPECIFIED DIABETIC RETINOPATHY	ICD-10-CM
2	Diagnosed with T2DM	E11.311	DX	TYPE 2 DIABETES MELLITUS WITH UNSPECIFIED DIABETIC RETINOPATHY WITH MACULAR EDEMA	ICD-10-CM
2	Diagnosed with T2DM	E11.319	DX	TYPE 2 DIABETES MELLITUS WITH UNSPECIFIED DIABETIC RETINOPATHY WITHOUT MACULAR EDEMA	ICD-10-CM
2	Diagnosed with T2DM	E11.32	DX	TYPE 2 DIABETES MELLITUS WITH MILD NONPROLIFERATIVE DIABETIC RETINOPATHY	ICD-10-CM
2	Diagnosed with T2DM	E11.321	DX	TYPE 2 DIABETES MELLITUS WITH MILD NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA	ICD-10-CM
2	Diagnosed with T2DM	E11.3211	DX	TYPE 2 DIABETES MELLITUS WITH MILD NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA, RIGHT EYE	ICD-10-CM
2	Diagnosed with T2DM	E11.3212	DX	TYPE 2 DIABETES MELLITUS WITH MILD NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA, LEFT EYE	ICD-10-CM
2	Diagnosed with T2DM	E11.3213	DX	TYPE 2 DIABETES MELLITUS WITH MILD NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA, BILATERAL	ICD-10-CM
				TYPE 2 DIABETES MELLITUS WITH MILD NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA, UNSPECIFIED EYE	
2	Diagnosed with T2DM	E11.3219	DX		ICD-10-CM
2	Diagnosed with T2DM	E11.329	DX	TYPE 2 DIABETES MELLITUS WITH MILD NONPROLIFERATIVE DIABETIC RETINOPATHY WITHOUT MACULAR EDEMA	ICD-10-CM
2	Diagnosed with T2DM	E11.3291	DX	TYPE 2 DIABETES MELLITUS WITH MILD NONPROLIFERATIVE DIABETIC RETINOPATHY WITHOUT MACULAR EDEMA, RIGHT EYE	ICD-10-CM
2	Diagnosed with T2DM	E11.3292	DX	TYPE 2 DIABETES MELLITUS WITH MILD NONPROLIFERATIVE DIABETIC RETINOPATHY WITHOUT MACULAR EDEMA, LEFT EYE	ICD-10-CM
2	Diagnosed with T2DM	E11.3293	DX	TYPE 2 DIABETES MELLITUS WITH MILD NONPROLIFERATIVE DIABETIC RETINOPATHY WITHOUT MACULAR EDEMA, BILATERAL	ICD-10-CM
				TYPE 2 DIABETES MELLITUS WITH MILD NONPROLIFERATIVE DIABETIC RETINOPATHY WITHOUT MACULAR EDEMA, UNSPECIFIED EYE	
2	Diagnosed with T2DM	E11.3299	DX		ICD-10-CM
2	Diagnosed with T2DM	E11.33	DX	TYPE 2 DIABETES MELLITUS WITH MODERATE NONPROLIFERATIVE DIABETIC RETINOPATHY	ICD-10-CM
2	Diagnosed with T2DM	E11.331	DX	TYPE 2 DIABETES MELLITUS WITH MODERATE NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA	ICD-10-CM
2	Diagnosed with T2DM	E11.3311	DX	TYPE 2 DIABETES MELLITUS WITH MODERATE NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA, RIGHT EYE	ICD-10-CM
2	Diagnosed with T2DM	E11.3312	DX	TYPE 2 DIABETES MELLITUS WITH MODERATE NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA, LEFT EYE	ICD-10-CM
2	Diagnosed with T2DM	E11.3313	DX	TYPE 2 DIABETES MELLITUS WITH MODERATE NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA, BILATERAL	ICD-10-CM
				TYPE 2 DIABETES MELLITUS WITH MODERATE NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA, UNSPECIFIED EYE	
2	Diagnosed with T2DM	E11.3319	DX		ICD-10-CM
2	Diagnosed with T2DM	E11.339	DX	TYPE 2 DIABETES MELLITUS WITH MODERATE NONPROLIFERATIVE DIABETIC RETINOPATHY WITHOUT MACULAR EDEMA	ICD-10-CM
				TYPE 2 DIABETES MELLITUS WITH MODERATE NONPROLIFERATIVE DIABETIC RETINOPATHY WITHOUT MACULAR EDEMA, RIGHT EYE	
2	Diagnosed with T2DM	E11.3391	DX		ICD-10-CM
				TYPE 2 DIABETES MELLITUS WITH MODERATE NONPROLIFERATIVE DIABETIC RETINOPATHY WITHOUT MACULAR EDEMA, LEFT EYE	
2	Diagnosed with T2DM	E11.3392	DX		ICD-10-CM
				TYPE 2 DIABETES MELLITUS WITH MODERATE NONPROLIFERATIVE DIABETIC RETINOPATHY WITHOUT MACULAR EDEMA, BILATERAL	
2	Diagnosed with T2DM	E11.3393	DX		ICD-10-CM
				TYPE 2 DIABETES MELLITUS WITH MODERATE NONPROLIFERATIVE DIABETIC RETINOPATHY WITHOUT MACULAR EDEMA, UNSPECIFIED EYE	
2	Diagnosed with T2DM	E11.3399	DX		ICD-10-CM
2	Diagnosed with T2DM	E11.34	DX	TYPE 2 DIABETES MELLITUS WITH SEVERE NONPROLIFERATIVE DIABETIC RETINOPATHY	ICD-10-CM
2	Diagnosed with T2DM	E11.341	DX	TYPE 2 DIABETES MELLITUS WITH SEVERE NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA	ICD-10-CM
2	Diagnosed with T2DM	E11.3411	DX	TYPE 2 DIABETES MELLITUS WITH SEVERE NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA, RIGHT EYE	ICD-10-CM
2	Diagnosed with T2DM	E11.3412	DX	TYPE 2 DIABETES MELLITUS WITH SEVERE NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA, LEFT EYE	ICD-10-CM
2	Diagnosed with T2DM	E11.3413	DX	TYPE 2 DIABETES MELLITUS WITH SEVERE NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA, BILATERAL	ICD-10-CM
				TYPE 2 DIABETES MELLITUS WITH SEVERE NONPROLIFERATIVE DIABETIC RETINOPATHY WITH MACULAR EDEMA, UNSPECIFIED EYE	
2	Diagnosed with T2DM	E11.3419	DX		ICD-10-CM
2	Diagnosed with T2DM	E11.349	DX	TYPE 2 DIABETES MELLITUS WITH SEVERE NONPROLIFERATIVE DIABETIC RETINOPATHY WITHOUT MACULAR EDEMA	ICD-10-CM
2	Diagnosed with T2DM	E11.3491	DX	TYPE 2 DIABETES MELLITUS WITH SEVERE NONPROLIFERATIVE DIABETIC RETINOPATHY WITHOUT MACULAR EDEMA, RIGHT EYE	ICD-10-CM



2 Diagnosed with T2DM	E11.42	DX	TYPE 2 DIABETES MELLITUS WITH DIABETIC POLYNEUROPATHY	ICD-10-CM
2 Diagnosed with T2DM	E11.43	DX	TYPE 2 DIABETES MELLITUS WITH DIABETIC AUTONOMIC (POLY)NEUROPATHY	ICD-10-CM
2 Diagnosed with T2DM	E11.44	DX	TYPE 2 DIABETES MELLITUS WITH DIABETIC AMYOTROPHY	ICD-10-CM
2 Diagnosed with T2DM	E11.49	DX	TYPE 2 DIABETES MELLITUS WITH OTHER DIABETIC NEUROLOGICAL COMPLICATION	ICD-10-CM
2 Diagnosed with T2DM	E11.5	DX	TYPE 2 DIABETES MELLITUS WITH CIRCULATORY COMPLICATIONS	ICD-10-CM
2 Diagnosed with T2DM	E11.51	DX	TYPE 2 DIABETES MELLITUS WITH DIABETIC PERIPHERAL ANGIOPATHY WITHOUT GANGRENE	ICD-10-CM
2 Diagnosed with T2DM	E11.52	DX	TYPE 2 DIABETES MELLITUS WITH DIABETIC PERIPHERAL ANGIOPATHY WITH GANGRENE	ICD-10-CM
2 Diagnosed with T2DM	E11.59	DX	TYPE 2 DIABETES MELLITUS WITH OTHER CIRCULATORY COMPLICATIONS	ICD-10-CM
2 Diagnosed with T2DM	E11.6	DX	TYPE 2 DIABETES MELLITUS WITH OTHER SPECIFIED COMPLICATIONS	ICD-10-CM
2 Diagnosed with T2DM	E11.61	DX	TYPE 2 DIABETES MELLITUS WITH DIABETIC ARTHROPATHY	ICD-10-CM
2 Diagnosed with T2DM	E11.610	DX	TYPE 2 DIABETES MELLITUS WITH DIABETIC NEUROPATHIC ARTHROPATHY	ICD-10-CM
2 Diagnosed with T2DM	E11.618	DX	TYPE 2 DIABETES MELLITUS WITH OTHER DIABETIC ARTHROPATHY	ICD-10-CM
2 Diagnosed with T2DM	E11.62	DX	TYPE 2 DIABETES MELLITUS WITH SKIN COMPLICATIONS	ICD-10-CM
2 Diagnosed with T2DM	E11.620	DX	TYPE 2 DIABETES MELLITUS WITH DIABETIC DERMATITIS	ICD-10-CM
2 Diagnosed with T2DM	E11.621	DX	TYPE 2 DIABETES MELLITUS WITH FOOT ULCER	ICD-10-CM
2 Diagnosed with T2DM	E11.622	DX	TYPE 2 DIABETES MELLITUS WITH OTHER SKIN ULCER	ICD-10-CM
2 Diagnosed with T2DM	E11.628	DX	TYPE 2 DIABETES MELLITUS WITH OTHER SKIN COMPLICATIONS	ICD-10-CM
2 Diagnosed with T2DM	E11.63	DX	TYPE 2 DIABETES MELLITUS WITH ORAL COMPLICATIONS	ICD-10-CM
2 Diagnosed with T2DM	E11.630	DX	TYPE 2 DIABETES MELLITUS WITH PERIODONTAL DISEASE	ICD-10-CM
2 Diagnosed with T2DM	E11.638	DX	TYPE 2 DIABETES MELLITUS WITH OTHER ORAL COMPLICATIONS	ICD-10-CM
2 Diagnosed with T2DM	E11.64	DX	TYPE 2 DIABETES MELLITUS WITH HYPOGLYCEMIA	ICD-10-CM
2 Diagnosed with T2DM	E11.641	DX	TYPE 2 DIABETES MELLITUS WITH HYPOGLYCEMIA WITH COMA	ICD-10-CM
2 Diagnosed with T2DM	E11.649	DX	TYPE 2 DIABETES MELLITUS WITH HYPOGLYCEMIA WITHOUT COMA	ICD-10-CM
2 Diagnosed with T2DM	E11.65	DX	TYPE 2 DIABETES MELLITUS WITH HYPERGLYCEMIA	ICD-10-CM
2 Diagnosed with T2DM	E11.69	DX	TYPE 2 DIABETES MELLITUS WITH OTHER SPECIFIED COMPLICATION	ICD-10-CM
2 Diagnosed with T2DM	E11.8	DX	TYPE 2 DIABETES MELLITUS WITH UNSPECIFIED COMPLICATIONS	ICD-10-CM
2 Diagnosed with T2DM	E11.9	DX	TYPE 2 DIABETES MELLITUS WITHOUT COMPLICATIONS	ICD-10-CM
3 HbA1c ≥7% and ≤10.5%	17855-8	LOINC		
3 HbA1c ≥7% and ≤10.5%	17856-6	LOINC		
3 HbA1c ≥7% and ≤10.5%	41995-2	LOINC		
3 HbA1c ≥7% and ≤10.5%	43150-2	LOINC		
3 HbA1c ≥7% and ≤10.5%	4548-4	LOINC		
3 HbA1c ≥7% and ≤10.5%	71875-9	LOINC		
3 HbA1c ≥7% and ≤10.5%	74246-0	LOINC		
3 HbA1c ≥7% and ≤10.5%	62388-4	LOINC		
3 HbA1c ≥7% and ≤10.5%	59261-8	LOINC		
3 HbA1c ≥7% and ≤10.5%	55454-3	LOINC		
3 HbA1c ≥7% and ≤10.5%	4549-2	LOINC		
4 BMI ≥ 25kg/m2	39156-5	LOINC	BODY MASS INDEX (BMI) [Ratio]	
4 BMI ≥ 25kg/m2	Z68.25	DX	BMI 25.0-25.9, ADULT	ICD-10-CM
4 BMI ≥ 25kg/m2	Z68.26	DX	BMI 26.0-26.9, ADULT	ICD-10-CM
4 BMI ≥ 25kg/m2	Z68.27	DX	BMI 27.0-27.9, ADULT	ICD-10-CM
4 BMI ≥ 25kg/m2	Z68.28	DX	BMI 28.0-28.9, ADULT	ICD-10-CM
4 BMI ≥ 25kg/m2	Z68.29	DX	BMI 29.0-29.9, ADULT	ICD-10-CM
4 BMI ≥ 25kg/m2	E66	DX	OVERWEIGHT AND OBESITY	ICD-10-CM
4 BMI ≥ 25kg/m2	E66.0	DX	OBESITY DUE TO EXCESS CALORIES	ICD-10-CM
4 BMI ≥ 25kg/m2	E66.01	DX	MORBID (SEVERE) OBESITY DUE TO EXCESS CALORIES	ICD-10-CM
4 BMI ≥ 25kg/m2	E66.09	DX	OTHER OBESITY DUE TO EXCESS CALORIES	ICD-10-CM
4 BMI ≥ 25kg/m2	E66.1	DX	DRUG-INDUCED OBESITY	ICD-10-CM
4 BMI ≥ 25kg/m2	E66.2	DX	MORBID (SEVERE) OBESITY WITH ALVEOLAR HYPOVENTILATION	ICD-10-CM
4 BMI ≥ 25kg/m2	E66.3	DX	OVERWEIGHT	ICD-10-CM
4 BMI ≥ 25kg/m2	E66.30	DX		ICD-10-CM
4 BMI ≥ 25kg/m2	E66.31	DX		ICD-10-CM
4 BMI ≥ 25kg/m2	E66.32	DX		ICD-10-CM
4 BMI ≥ 25kg/m2	E66.36	DX		ICD-10-CM
4 BMI ≥ 25kg/m2	E66.8	DX	OTHER OBESITY	ICD-10-CM
4 BMI ≥ 25kg/m2	E66.81	DX	OBESITY CLASS	ICD-10-CM
4 BMI ≥ 25kg/m2	E66.811	DX	OBESITY, CLASS 1	ICD-10-CM
4 BMI ≥ 25kg/m2	E66.812	DX	OBESITY, CLASS 2	ICD-10-CM
4 BMI ≥ 25kg/m2	E66.813	DX	OBESITY, CLASS 3	ICD-10-CM
4 BMI ≥ 25kg/m2	E66.89	DX	OTHER OBESITY NOT ELSEWHERE CLASSIFIED	ICD-10-CM
4 BMI ≥ 25kg/m2	E66.9	DX	OBESITY, UNSPECIFIED	ICD-10-CM

4	BMI ≥ 25kg/m2	Z68.30	DX	BODY MASS INDEX [BMI] 30.0-30.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.31	DX	BODY MASS INDEX [BMI] 31.0-31.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.32	DX	BODY MASS INDEX [BMI] 32.0-32.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.33	DX	BODY MASS INDEX [BMI] 33.0-33.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.34	DX	BODY MASS INDEX [BMI] 34.0-34.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.35	DX	BODY MASS INDEX [BMI] 35.0-35.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.36	DX	BODY MASS INDEX [BMI] 36.0-36.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.37	DX	BODY MASS INDEX [BMI] 37.0-37.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.38	DX	BODY MASS INDEX [BMI] 38.0-38.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.39	DX	BODY MASS INDEX [BMI] 39.0-39.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.4	DX	BODY MASS INDEX [BMI] 40 OR GREATER, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.41	DX	BODY MASS INDEX [BMI] 40.0-44.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.42	DX	BODY MASS INDEX [BMI] 45.0-49.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.43	DX	BODY MASS INDEX [BMI] 50.0-59.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.44	DX	BODY MASS INDEX [BMI] 60.0-69.9, ADULT	ICD-10-CM
4	BMI ≥ 25kg/m2	Z68.45	DX	BODY MASS INDEX [BMI] 70 OR GREATER, ADULT	ICD-10-CM
5	Established CV-disease				
5.1	Coronary artery disease with any of the following:				
5.1.1	Documented history of myocardial infarction	I21	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF OTHER SITES	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.0	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF ANTERIOR WALL	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.01	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING LEFT MAIN CORONARY ARTERY	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.02	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING LEFT ANTERIOR DESCENDING CORONARY ARTERY	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.09	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING OTHER CORONARY ARTERY OF ANTERIOR WALL	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.1	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF INFERIOR WALL	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.11	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING RIGHT CORONARY ARTERY	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.19	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING OTHER CORONARY ARTERY OF INFERIOR WALL	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.2	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF OTHER SITES	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.21	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING LEFT CIRCUMFLEX CORONARY ARTERY	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.29	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING OTHER SITES	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.3	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF UNSPECIFIED SITE	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.4	DX	NON-ST ELEVATION (NSTEMI) MYOCARDIAL INFARCTION	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.9	DX	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.A	DX	OTHER TYPE OF MYOCARDIAL INFARCTION	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.A1	DX	MYOCARDIAL INFARCTION TYPE 2	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.A9	DX	OTHER MYOCARDIAL INFARCTION TYPE	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I21.B	DX	Myocardial infarction with coronary microvascular dysfunction	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I22	DX	SUBSEQUENT ST ELEVATION (STEMI) AND NON-ST ELEVATION (NSTEMI) MYOCARDIAL INFARCTION	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I22.0	DX	SUBSEQUENT ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF ANTERIOR WALL	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I22.1	DX	SUBSEQUENT ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF INFERIOR WALL	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I22.2	DX	SUBSEQUENT NON-ST ELEVATION (NSTEMI) MYOCARDIAL INFARCTION	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I22.8	DX	SUBSEQUENT ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF OTHER SITES	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I22.9	DX	SUBSEQUENT ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF UNSPECIFIED SITE	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I23.0	DX	HEMOPERICARDIUM AS CURRENT COMPLICATION FOLLOWING ACUTE MYOCARDIAL INFARCTION	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I23.1	DX	ATRIAL SEPTAL DEFECT AS CURRENT COMPLICATION FOLLOWING ACUTE MYOCARDIAL INFARCTION	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I23.2	DX	VENTRICULAR SEPTAL DEFECT AS CURRENT COMPLICATION FOLLOWING ACUTE MYOCARDIAL INFARCTION	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I23.3	DX	RUPTURE OF CARDIAC WALL WITHOUT HEMOPERICARDIUM AS CURRENT COMPLICATION FOLLOWING ACUTE MYOCARDIAL INFARCTION	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I23.4	DX	RUPTURE OF CHORDAE TENDINEAE AS CURRENT COMPLICATION FOLLOWING ACUTE MYOCARDIAL INFARCTION	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I23.5	DX	RUPTURE OF PAPILLARY MUSCLE AS CURRENT COMPLICATION FOLLOWING ACUTE MYOCARDIAL INFARCTION	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I23.6	DX	THROMBOSIS OF ATRIUM, AURICULAR APPENDAGE, AND VENTRICLE AS CURRENT COMPLICATIONS FOLLOWING ACUTE MYOCARDIAL INFARCTION	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I23.7	DX	POSTINFARCTION ANGINA	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I23.8	DX	OTHER CURRENT COMPLICATIONS FOLLOWING ACUTE MYOCARDIAL INFARCTION	ICD-10-CM
5.1.1	Documented history of myocardial infarction	I25.2	DX	OLD MYOCARDIAL INFARCTION	ICD-10-CM
5.1.2/5.1.3	2 or more major coronary arteries ≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in	I20	DX	Angina pectoris	ICD-10-CM
5.1.2/5.1.3	2 or more major coronary arteries ≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in	I20.0	DX	Unstable angina	ICD-10-CM

5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	120.2	DX	Refractory angina pectoris	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	120.81	DX	Angina pectoris with coronary microvascular dysfunction	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	120.89	DX	Other forms of angina pectoris	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	120.1	DX	ANGINA PECTORIS WITH DOCUMENTED SPASM	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	120.8	DX	OTHER FORMS OF ANGINA PECTORIS	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	120.9	DX	ANGINA PECTORIS, UNSPECIFIED	ICD-10-CM
5.1.2/5.1.4	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.10	DX	ATHEROSCLEROTIC HEART DISEASE OF NATIVE CORONARY ARTERY WITHOUT ANGINA PECTORIS	ICD-10-CM
5.1.2/5.1.5	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.110	DX	ATHEROSCLEROTIC HEART DISEASE OF NATIVE CORONARY ARTERY WITH UNSTABLE ANGINA PECTORIS	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.111	DX	ATHEROSCLEROTIC HEART DISEASE OF NATIVE CORONARY ARTERY WITH ANGINA PECTORIS WITH DOCUMENTED SPASM	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.118	DX	ATHEROSCLEROTIC HEART DISEASE OF NATIVE CORONARY ARTERY WITH OTHER FORMS OF ANGINA PECTORIS	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.119	DX	ATHEROSCLEROTIC HEART DISEASE OF NATIVE CORONARY ARTERY WITH UNSPECIFIED ANGINA PECTORIS	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.701	DX	ATHEROSCLEROSIS OF CORONARY ARTERY BYPASS GRAFT(S), UNSPECIFIED, WITH ANGINA PECTORIS WITH DOCUMENTED SPASM	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.708	DX	ATHEROSCLEROSIS OF CORONARY ARTERY BYPASS GRAFT(S), UNSPECIFIED, WITH OTHER FORMS OF ANGINA PECTORIS	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.709	DX	ATHEROSCLEROSIS OF CORONARY ARTERY BYPASS GRAFT(S), UNSPECIFIED, WITH UNSPECIFIED ANGINA PECTORIS	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.711	DX	ATHEROSCLEROSIS OF AUTOLOGOUS VEIN CORONARY ARTERY BYPASS GRAFT(S) WITH ANGINA PECTORIS WITH DOCUMENTED SPASM	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.718	DX	ATHEROSCLEROSIS OF AUTOLOGOUS VEIN CORONARY ARTERY BYPASS GRAFT(S) WITH OTHER FORMS OF ANGINA PECTORIS	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.719	DX	ATHEROSCLEROSIS OF AUTOLOGOUS VEIN CORONARY ARTERY BYPASS GRAFT(S) WITH UNSPECIFIED ANGINA PECTORIS	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.721	DX	ATHEROSCLEROSIS OF AUTOLOGOUS ARTERY CORONARY ARTERY BYPASS GRAFT(S) WITH ANGINA PECTORIS WITH DOCUMENTED SPASM	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.728	DX	ATHEROSCLEROSIS OF AUTOLOGOUS ARTERY CORONARY ARTERY BYPASS GRAFT(S) WITH OTHER FORMS OF ANGINA PECTORIS	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.729	DX	ATHEROSCLEROSIS OF AUTOLOGOUS ARTERY CORONARY ARTERY BYPASS GRAFT(S) WITH UNSPECIFIED ANGINA PECTORIS	ICD-10-CM
5.1.2/5.1.3	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.731	DX	ATHEROSCLEROSIS OF NONAUTOLOGOUS BIOLOGICAL CORONARY ARTERY BYPASS GRAFT(S) WITH ANGINA PECTORIS WITH DOCUMENTED SPASM	ICD-10-CM

<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.738	DX	ATHEROSCLEROSIS OF NONAUTOLOGOUS BIOLOGICAL CORONARY ARTERY BYPASS GRAFT(S) WITH OTHER FORMS OF ANGINA PECTORIS	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.739	DX	ATHEROSCLEROSIS OF NONAUTOLOGOUS BIOLOGICAL CORONARY ARTERY BYPASS GRAFT(S) WITH UNSPECIFIED ANGINA PECTORIS	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.751	DX	ATHEROSCLEROSIS OF NATIVE CORONARY ARTERY OF TRANSPLANTED HEART WITH ANGINA PECTORIS WITH DOCUMENTED SPASM	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.758	DX	ATHEROSCLEROSIS OF NATIVE CORONARY ARTERY OF TRANSPLANTED HEART WITH OTHER FORMS OF ANGINA PECTORIS	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.759	DX	ATHEROSCLEROSIS OF NATIVE CORONARY ARTERY OF TRANSPLANTED HEART WITH UNSPECIFIED ANGINA PECTORIS	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.761	DX	ATHEROSCLEROSIS OF BYPASS GRAFT OF CORONARY ARTERY OF TRANSPLANTED HEART WITH ANGINA PECTORIS WITH DOCUMENTED SPASM	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.768	DX	ATHEROSCLEROSIS OF BYPASS GRAFT OF CORONARY ARTERY OF TRANSPLANTED HEART WITH OTHER FORMS OF ANGINA PECTORIS	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.769	DX	ATHEROSCLEROSIS OF BYPASS GRAFT OF CORONARY ARTERY OF TRANSPLANTED HEART WITH UNSPECIFIED ANGINA PECTORIS	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.791	DX	ATHEROSCLEROSIS OF OTHER CORONARY ARTERY BYPASS GRAFT(S) WITH ANGINA PECTORIS WITH DOCUMENTED SPASM	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.798	DX	ATHEROSCLEROSIS OF OTHER CORONARY ARTERY BYPASS GRAFT(S) WITH OTHER FORMS OF ANGINA PECTORIS	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.799	DX	ATHEROSCLEROSIS OF OTHER CORONARY ARTERY BYPASS GRAFT(S) WITH UNSPECIFIED ANGINA PECTORIS	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.3	DX	ANEURYSM OF HEART	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.41	DX	CORONARY ARTERY ANEURYSM	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.42	DX	CORONARY ARTERY DISSECTION	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.5	DX	ISCHEMIC CARDIOMYOPATHY	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.6	DX	SILENT MYOCARDIAL ISCHEMIA	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.810	DX	ATHEROSCLEROSIS OF CORONARY ARTERY BYPASS GRAFT(S) WITHOUT ANGINA PECTORIS	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.811	DX	ATHEROSCLEROSIS OF NATIVE CORONARY ARTERY OF TRANSPLANTED HEART WITHOUT ANGINA PECTORIS	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.812	DX	ATHEROSCLEROSIS OF BYPASS GRAFT OF CORONARY ARTERY OF TRANSPLANTED HEART WITHOUT ANGINA PECTORIS	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.82	DX	CHRONIC TOTAL OCCLUSION OF CORONARY ARTERY	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	125.83	DX	CORONARY ATHEROSCLEROSIS DUE TO LIPID RICH PLAQUE	ICD-10-CM

	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	I25.84	DX	CORONARY ATHEROSCLEROSIS DUE TO CALCIFIED CORONARY LESION	ICD-10-CM
<b>5.1.2/5.1.3</b>	≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography/ ≥50% stenosis in 2 or more major coronary arteries	I25.89	DX	OTHER FORMS OF CHRONIC ISCHEMIC HEART DISEASE	ICD-10-CM
<b>5.1.2/5.1.3</b>	History of surgical or percutaneous coronary revascularization procedure	I25.9	DX	CHRONIC ISCHEMIC HEART DISEASE, UNSPECIFIED	ICD-10-CM
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	T82.211A	DX	BREAKDOWN (MECHANICAL) OF CORONARY ARTERY BYPASS GRAFT, INITIAL ENCOUNTER	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	T82.212A	DX	DISPLACEMENT OF CORONARY ARTERY BYPASS GRAFT, INITIAL ENCOUNTER	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	T82.213A	DX	LEAKAGE OF CORONARY ARTERY BYPASS GRAFT, INITIAL ENCOUNTER	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	T82.218A	DX	OTHER MECHANICAL COMPLICATION OF CORONARY ARTERY BYPASS GRAFT, INITIAL ENCOUNTER	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	0210083	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM CORONARY ARTERY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	0210088	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM RIGHT INTERNAL MAMMARY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	0210089	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM LEFT INTERNAL MAMMARY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	021008C	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM THORACIC ARTERY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	021008F	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM ABDOMINAL ARTERY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	021008W	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM AORTA WITH ZOOPLASTIC TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	0210093	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM CORONARY ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	0210098	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM RIGHT INTERNAL MAMMARY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	0210099	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM LEFT INTERNAL MAMMARY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	021009C	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM THORACIC ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	021009F	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM ABDOMINAL ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	021009W	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM AORTA WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	02100A3	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM CORONARY ARTERY WITH AUTOLOGOUS ARTERIAL TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	02100A8	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM RIGHT INTERNAL MAMMARY WITH AUTOLOGOUS ARTERIAL TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	02100A9	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM LEFT INTERNAL MAMMARY WITH AUTOLOGOUS ARTERIAL TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	02100AC	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM THORACIC ARTERY WITH AUTOLOGOUS ARTERIAL TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	02100AF	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM ABDOMINAL ARTERY WITH AUTOLOGOUS ARTERIAL TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	02100AW	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM AORTA WITH AUTOLOGOUS ARTERIAL TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	02100I3	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM CORONARY ARTERY WITH SYNTHETIC SUBSTITUTE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	02100I8	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM RIGHT INTERNAL MAMMARY WITH SYNTHETIC SUBSTITUTE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	02100I9	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM LEFT INTERNAL MAMMARY WITH SYNTHETIC SUBSTITUTE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	02100I0	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM THORACIC ARTERY WITH SYNTHETIC SUBSTITUTE, OPEN APPROACH	ICD-10-PCS
<b>5.1.4</b>	History of surgical or percutaneous coronary revascularization procedure	02100I1	PX	BYPASS CORONARY ARTERY, ONE ARTERY FROM ABDOMINAL ARTERY WITH SYNTHETIC SUBSTITUTE, OPEN APPROACH	ICD-10-PCS









































5.1.4	History of surgical or percutaneous coronary revascularization procedure	02C24Z6	PX	EXTIRPATION OF MATTER FROM CORONARY ARTERY, THREE ARTERIES, BIFURCATION, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02C24ZZ	PX	EXTIRPATION OF MATTER FROM CORONARY ARTERY, THREE ARTERIES, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02C30Z6	PX	EXTIRPATION OF MATTER FROM CORONARY ARTERY, FOUR OR MORE ARTERIES, BIFURCATION, OPEN APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02C30ZZ	PX	EXTIRPATION OF MATTER FROM CORONARY ARTERY, FOUR OR MORE ARTERIES, OPEN APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02C33Z6	PX	EXTIRPATION OF MATTER FROM CORONARY ARTERY, FOUR OR MORE ARTERIES, BIFURCATION, PERCUTANEOUS APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02C33ZZ	PX	EXTIRPATION OF MATTER FROM CORONARY ARTERY, FOUR OR MORE ARTERIES, PERCUTANEOUS APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02C34Z6	PX	EXTIRPATION OF MATTER FROM CORONARY ARTERY, FOUR OR MORE ARTERIES, BIFURCATION, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02C34ZZ	PX	EXTIRPATION OF MATTER FROM CORONARY ARTERY, FOUR OR MORE ARTERIES, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02QA0ZZ	PX	REPAIR HEART, OPEN APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02QA3ZZ	PX	REPAIR HEART, PERCUTANEOUS APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02QA4ZZ	PX	REPAIR HEART, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02QB0ZZ	PX	REPAIR RIGHT HEART, OPEN APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02QB3ZZ	PX	REPAIR RIGHT HEART, PERCUTANEOUS APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02QB4ZZ	PX	REPAIR RIGHT HEART, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02QC0ZZ	PX	REPAIR LEFT HEART, OPEN APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02QC3ZZ	PX	REPAIR LEFT HEART, PERCUTANEOUS APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	02QC4ZZ	PX	REPAIR LEFT HEART, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33140	PX	TRANSMYOCARDIAL LASER REVASCLARIZATION, BY THORACOTOMY; (SEPARATE PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33141	PX	TRANSMYOCARDIAL LASER REVASCLARIZATION, BY THORACOTOMY; PERFORMED AT THE TIME OF OTHER OPEN CARDIAC PROCEDURE(S) (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33510	PX	CORONARY ARTERY BYPASS, VEIN ONLY; SINGLE CORONARY VENOUS GRAFT	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33511	PX	CORONARY ARTERY BYPASS, VEIN ONLY; 2 CORONARY VENOUS GRAFTS	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33512	PX	CORONARY ARTERY BYPASS, VEIN ONLY; 3 CORONARY VENOUS GRAFTS	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33513	PX	CORONARY ARTERY BYPASS, VEIN ONLY; 4 CORONARY VENOUS GRAFTS	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33514	PX	CORONARY ARTERY BYPASS, VEIN ONLY; 5 CORONARY VENOUS GRAFTS	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33516	PX	CORONARY ARTERY BYPASS, VEIN ONLY; 6 OR MORE CORONARY VENOUS GRAFTS	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33517	PX	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); SINGLE VEIN GRAFT (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33518	PX	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 2 VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33519	PX	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 3 VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33521	PX	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 4 VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33522	PX	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 5 VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33523	PX	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 6 OR MORE VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33530	PX	REOPERATION, CORONARY ARTERY BYPASS PROCEDURE OR VALVE PROCEDURE, MORE THAN 1 MONTH AFTER ORIGINAL OPERATION (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS

5.1.4	History of surgical or percutaneous coronary revascularization procedure	33533 PX	CORONARY ARTERY BYPASS, USING ARTERIAL GRAFT(S); SINGLE ARTERIAL GRAFT	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33534 PX	CORONARY ARTERY BYPASS, USING ARTERIAL GRAFT(S); 2 CORONARY ARTERIAL GRAFTS	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33535 PX	CORONARY ARTERY BYPASS, USING ARTERIAL GRAFT(S); 3 CORONARY ARTERIAL GRAFTS	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33536 PX	CORONARY ARTERY BYPASS, USING ARTERIAL GRAFT(S); 4 OR MORE CORONARY ARTERIAL GRAFTS	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33545 PX	REPAIR OF POSTINFARCTION VENTRICULAR SEPTAL DEFECT, WITH OR WITHOUT MYOCARDIAL RESECTION	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	33572 PX	CORONARY ENDARTERECTOMY, OPEN, ANY METHOD, OF LEFT ANTERIOR DESCENDING, CIRCUMFLEX, OR RIGHT CORONARY ARTERY PERFORMED IN CONJUNCTION WITH CORONARY ARTERY BYPASS GRAFT PROCEDURE, EACH VESSEL (LIST SEPARATELY IN ADDITION TO PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92920 PX	PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY; SINGLE MAJOR CORONARY ARTERY OR BRANCH	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92921 PX	PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY; EACH ADDITIONAL BRANCH OF A MAJOR CORONARY ARTERY (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92924 PX	PERCUTANEOUS TRANSLUMINAL CORONARY ATHERECTOMY, WITH CORONARY ANGIOPLASTY WHEN PERFORMED; SINGLE MAJOR CORONARY ARTERY OR BRANCH	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92925 PX	PERCUTANEOUS TRANSLUMINAL CORONARY ATHERECTOMY, WITH CORONARY ANGIOPLASTY WHEN PERFORMED; EACH ADDITIONAL BRANCH OF A MAJOR CORONARY ARTERY (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92928 PX	PERCUTANEOUS TRANSCATHETER PLACEMENT OF INTRACORONARY STENT(S), WITH CORONARY ANGIOPLASTY WHEN PERFORMED; SINGLE MAJOR CORONARY ARTERY OR BRANCH	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92929 PX	PERCUTANEOUS TRANSCATHETER PLACEMENT OF INTRACORONARY STENT(S), WITH CORONARY ANGIOPLASTY WHEN PERFORMED; EACH ADDITIONAL BRANCH OF A MAJOR CORONARY ARTERY (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92933 PX	PERCUTANEOUS TRANSLUMINAL CORONARY ATHERECTOMY, WITH INTRACORONARY STENT, WITH CORONARY ANGIOPLASTY WHEN PERFORMED; SINGLE MAJOR CORONARY ARTERY OR BRANCH	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92934 PX	PERCUTANEOUS TRANSLUMINAL CORONARY ATHERECTOMY, WITH INTRACORONARY STENT, WITH CORONARY ANGIOPLASTY WHEN PERFORMED; EACH ADDITIONAL BRANCH OF A MAJOR CORONARY ARTERY (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92937 PX	PERCUTANEOUS TRANSLUMINAL REVASCULARIZATION OF OR THROUGH CORONARY ARTERY BYPASS GRAFT (INTERNAL MAMMARY, FREE ARTERIAL, VENOUS), ANY COMBINATION OF INTRACORONARY STENT, ATHERECTOMY AND ANGIOPLASTY, INCLUDING DISTAL PROTECTION WHEN PERFORMED; SINGLE VESSEL	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92938 PX	PERCUTANEOUS TRANSLUMINAL REVASCULARIZATION OF OR THROUGH CORONARY ARTERY BYPASS GRAFT (INTERNAL MAMMARY, FREE ARTERIAL, VENOUS), ANY COMBINATION OF INTRACORONARY STENT, ATHERECTOMY AND ANGIOPLASTY, INCLUDING DISTAL PROTECTION WHEN PERFORMED; EACH ADDITIONAL BRANCH SUBTENDED BY THE BYPASS GRAFT (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92941 PX	PERCUTANEOUS TRANSLUMINAL REVASCULARIZATION OF ACUTE TOTAL/SUBTOTAL OCCLUSION DURING ACUTE MYOCARDIAL INFARCTION, CORONARY ARTERY OR CORONARY ARTERY BYPASS GRAFT, ANY COMBINATION OF INTRACORONARY STENT, ATHERECTOMY AND ANGIOPLASTY, INCLUDING ASPIRATION THROMBECTOMY WHEN PERFORMED, SINGLE VESSEL	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92943 PX	PERCUTANEOUS TRANSLUMINAL REVASCULARIZATION OF CHRONIC TOTAL OCCLUSION, CORONARY ARTERY, CORONARY ARTERY BRANCH, OR CORONARY ARTERY BYPASS GRAFT, ANY COMBINATION OF INTRACORONARY STENT, ATHERECTOMY AND ANGIOPLASTY; SINGLE VESSEL	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92944 PX	PERCUTANEOUS TRANSLUMINAL REVASCULARIZATION OF CHRONIC TOTAL OCCLUSION, CORONARY ARTERY, CORONARY ARTERY BRANCH, OR CORONARY ARTERY BYPASS GRAFT, ANY COMBINATION OF INTRACORONARY STENT, ATHERECTOMY AND ANGIOPLASTY; EACH ADDITIONAL CORONARY ARTERY, CORONARY ARTERY BRANCH, OR BYPASS GRAFT (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92973 PX	PERCUTANEOUS TRANSLUMINAL CORONARY THROMBECTOMY MECHANICAL (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92980 PX	TRANSCATHETER PLACEMENT OF AN INTRACORONARY STENT(S), PERCUTANEOUS, WITH OR WITHOUT OTHER THERAPEUTIC INTERVENTION, ANY METHOD; SINGLE VESSEL	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92981 PX	TRANSCATHETER PLACEMENT OF AN INTRACORONARY STENT(S), PERCUTANEOUS, WITH OR WITHOUT OTHER THERAPEUTIC INTERVENTION, ANY METHOD; EACH ADDITIONAL VESSEL (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92982 PX	PERCUTANEOUS TRANSLUMINAL CORONARY BALLOON ANGIOPLASTY; SINGLE VESSEL	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92984 PX	PERCUTANEOUS TRANSLUMINAL CORONARY BALLOON ANGIOPLASTY; EACH ADDITIONAL VESSEL (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	92995 PX	PERCUTANEOUS TRANSLUMINAL CORONARY ATHERECTOMY, BY MECHANICAL OR OTHER METHOD, WITH OR WITHOUT BALLOON ANGIOPLASTY; SINGLE VESSEL	CPT/HCPCS

5.1.4	History of surgical or percutaneous coronary revascularization procedure	92996	PX	PERCUTANEOUS TRANSLUMINAL CORONARY ATHERECTOMY, BY MECHANICAL OR OTHER METHOD, WITH OR WITHOUT BALLOON ANGIOPLASTY; EACH ADDITIONAL VESSEL (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.1.4	History of surgical or percutaneous coronary revascularization procedure	295.1	DX	PRESENCE OF AORTOCORONARY BYPASS GRAFT	ICD-10-CM
5.1.4	History of surgical or percutaneous coronary revascularization procedure	295.5	DX	PRESENCE OF CORONARY ANGIOPLASTY IMPLANT AND GRAFT	ICD-10-CM
5.1.4	History of surgical or percutaneous coronary revascularization procedure	298.61	DX	CORONARY ANGIOPLASTY STATUS	ICD-10-CM
5.2.1	Documented history of ischemic stroke	G43.609	DX	PERSISTENT MIGRAINE AURA WITH CEREBRAL INFARCTION, NOT INTRACTABLE, WITHOUT STATUS MIGRAINOSUS	ICD-10-CM
5.2.1	Documented history of ischemic stroke	G43.619	DX	PERSISTENT MIGRAINE AURA WITH CEREBRAL INFARCTION, INTRACTABLE, WITHOUT STATUS MIGRAINOSUS	ICD-10-CM
5.2.1	Documented history of ischemic stroke	G46.3	DX	BRAIN STEM STROKE SYNDROME	ICD-10-CM
5.2.1	Documented history of ischemic stroke	G46.4	DX	CEREBELLAR STROKE SYNDROME	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.0	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF PRECEREBRAL ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.00	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF UNSPECIFIED PRECEREBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.01	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF VERTEBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.011	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF RIGHT VERTEBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.012	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF LEFT VERTEBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.013	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF BILATERAL VERTEBRAL ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.019	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF UNSPECIFIED VERTEBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.02	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF BASILAR ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.03	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF CAROTID ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.031	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF RIGHT CAROTID ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.032	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF LEFT CAROTID ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.033	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF BILATERAL CAROTID ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.039	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF UNSPECIFIED CAROTID ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.09	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF OTHER PRECEREBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.1	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF PRECEREBRAL ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.10	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF UNSPECIFIED PRECEREBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.11	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF VERTEBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.111	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF RIGHT VERTEBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.112	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF LEFT VERTEBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.113	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF BILATERAL VERTEBRAL ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.119	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF UNSPECIFIED VERTEBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.12	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF BASILAR ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.13	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF CAROTID ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.131	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF RIGHT CAROTID ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.132	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF LEFT CAROTID ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.133	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF BILATERAL CAROTID ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.139	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF UNSPECIFIED CAROTID ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.19	DX	CEREBRAL INFARCTION DUE TO EMBOLISM OF OTHER PRECEREBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.2	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF PRECEREBRAL ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.20	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.21	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF VERTEBRAL ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.211	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF RIGHT VERTEBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.212	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF LEFT VERTEBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.213	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF BILATERAL VERTEBRAL ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.219	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF UNSPECIFIED VERTEBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.22	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF BASILAR ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.23	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF CAROTID ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.231	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF RIGHT CAROTID ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.232	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF LEFT CAROTID ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.233	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF BILATERAL CAROTID ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.239	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF UNSPECIFIED CAROTID ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.29	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF OTHER PRECEREBRAL ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.3	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF CEREBRAL ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.30	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF UNSPECIFIED CEREBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.31	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF MIDDLE CEREBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.311	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF RIGHT MIDDLE CEREBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.312	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF LEFT MIDDLE CEREBRAL ARTERY	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.313	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF BILATERAL MIDDLE CEREBRAL ARTERIES	ICD-10-CM
5.2.1	Documented history of ischemic stroke	I63.319	DX	CEREBRAL INFARCTION DUE TO THROMBOSIS OF UNSPECIFIED MIDDLE CEREBRAL ARTERY	ICD-10-CM



5.2.1 Documented history of ischemic stroke	163.59	DX	CEREBRAL INFARCTION DUE TO UNSPECIFIED OCCLUSION OR STENOSIS OF OTHER CEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	163.6	DX	CEREBRAL INFARCTION DUE TO CEREBRAL VENOUS THROMBOSIS, NONPYOGENIC	ICD-10-CM
5.2.1 Documented history of ischemic stroke	163.8	DX	OTHER CEREBRAL INFARCTION	ICD-10-CM
5.2.1 Documented history of ischemic stroke	163.81	DX	OTHER CEREBRAL INFARCTION DUE TO OCCLUSION OR STENOSIS OF SMALL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	163.89	DX	OTHER CEREBRAL INFARCTION	ICD-10-CM
5.2.1 Documented history of ischemic stroke	163.9	DX	CEREBRAL INFARCTION, UNSPECIFIED	ICD-10-CM
5.2.1 Documented history of ischemic stroke	165.0	DX	OCCLUSION AND STENOSIS OF VERTEBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	165.01	DX	OCCLUSION AND STENOSIS OF RIGHT VERTEBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	165.02	DX	OCCLUSION AND STENOSIS OF LEFT VERTEBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	165.03	DX	OCCLUSION AND STENOSIS OF BILATERAL VERTEBRAL ARTERIES	ICD-10-CM
5.2.1 Documented history of ischemic stroke	165.09	DX	OCCLUSION AND STENOSIS OF UNSPECIFIED VERTEBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	165.1	DX	OCCLUSION AND STENOSIS OF BASILAR ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	165.8	DX	OCCLUSION AND STENOSIS OF OTHER PRECEREBRAL ARTERIES	ICD-10-CM
5.2.1 Documented history of ischemic stroke	165.9	DX	OCCLUSION AND STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.0	DX	OCCLUSION AND STENOSIS OF MIDDLE CEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.01	DX	OCCLUSION AND STENOSIS OF RIGHT MIDDLE CEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.02	DX	OCCLUSION AND STENOSIS OF LEFT MIDDLE CEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.03	DX	OCCLUSION AND STENOSIS OF BILATERAL MIDDLE CEREBRAL ARTERIES	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.09	DX	OCCLUSION AND STENOSIS OF UNSPECIFIED MIDDLE CEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.1	DX	OCCLUSION AND STENOSIS OF ANTERIOR CEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.11	DX	OCCLUSION AND STENOSIS OF RIGHT ANTERIOR CEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.12	DX	OCCLUSION AND STENOSIS OF LEFT ANTERIOR CEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.13	DX	OCCLUSION AND STENOSIS OF BILATERAL ANTERIOR CEREBRAL ARTERIES	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.19	DX	OCCLUSION AND STENOSIS OF UNSPECIFIED ANTERIOR CEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.2	DX	OCCLUSION AND STENOSIS OF POSTERIOR CEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.21	DX	OCCLUSION AND STENOSIS OF RIGHT POSTERIOR CEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.22	DX	OCCLUSION AND STENOSIS OF LEFT POSTERIOR CEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.23	DX	OCCLUSION AND STENOSIS OF BILATERAL POSTERIOR CEREBRAL ARTERIES	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.29	DX	OCCLUSION AND STENOSIS OF UNSPECIFIED POSTERIOR CEREBRAL ARTERY	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.3	DX	OCCLUSION AND STENOSIS OF CEREBELLAR ARTERIES	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.8	DX	OCCLUSION AND STENOSIS OF OTHER CEREBRAL ARTERIES	ICD-10-CM
5.2.1 Documented history of ischemic stroke	166.9	DX	OCCLUSION AND STENOSIS OF UNSPECIFIED CEREBRAL ARTERY	ICD-10-CM
5.2.2 Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	163.03	DX	Cerebral infarction due to thrombosis of carotid artery	ICD-10-CM
5.2.2 Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	163.031	DX	Cerebral infarction due to thrombosis of right carotid artery	ICD-10-CM
5.2.2 Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	163.032	DX	Cerebral infarction due to thrombosis of left carotid artery	ICD-10-CM
5.2.2 Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	163.033	DX	Cerebral infarction due to thrombosis of bilateral carotid arteries	ICD-10-CM
5.2.2 Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	163.039	DX	Cerebral infarction due to thrombosis of unspecified carotid artery	ICD-10-CM
5.2.2 Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	163.13	DX	Cerebral infarction due to embolism of carotid artery	ICD-10-CM
5.2.2 Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	163.131	DX	Cerebral infarction due to embolism of right carotid artery	ICD-10-CM
5.2.2 Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	163.132	DX	Cerebral infarction due to embolism of left carotid artery	ICD-10-CM
5.2.2 Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	163.133	DX	Cerebral infarction due to embolism of bilateral carotid arteries	ICD-10-CM
5.2.2 Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	163.139	DX	Cerebral infarction due to embolism of unspecified carotid artery	ICD-10-CM

5.2.2	Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	163.19	DX	Cerebral infarction due to embolism of other precerebral artery	ICD-10-CM
5.2.2	Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	165.2	DX	OCCLUSION AND STENOSIS OF CAROTID ARTERY	ICD-10-CM
5.2.2	Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	165.21	DX	OCCLUSION AND STENOSIS OF RIGHT CAROTID ARTERY	ICD-10-CM
5.2.2	Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	165.22	DX	OCCLUSION AND STENOSIS OF LEFT CAROTID ARTERY	ICD-10-CM
5.2.2	Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	165.23	DX	OCCLUSION AND STENOSIS OF BILATERAL CAROTID ARTERIES	ICD-10-CM
5.2.2	Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography	165.29	DX	OCCLUSION AND STENOSIS OF UNSPECIFIED CAROTID ARTERY	ICD-10-CM
5.2.3	History of carotid stenting or surgical revascularization	031H09G	PX	BYPASS RIGHT COMMON CAROTID ARTERY TO INTRACRANIAL ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	031H0AG	PX	BYPASS RIGHT COMMON CAROTID ARTERY TO INTRACRANIAL ARTERY WITH AUTOLOGOUS ARTERIAL TISSUE, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	031H0JG	PX	BYPASS RIGHT COMMON CAROTID ARTERY TO INTRACRANIAL ARTERY WITH SYNTHETIC SUBSTITUTE, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	031H0KG	PX	BYPASS RIGHT COMMON CAROTID ARTERY TO INTRACRANIAL ARTERY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	031H0ZG	PX	BYPASS RIGHT COMMON CAROTID ARTERY TO INTRACRANIAL ARTERY, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	031J09G	PX	BYPASS LEFT COMMON CAROTID ARTERY TO INTRACRANIAL ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	031J0AG	PX	BYPASS LEFT COMMON CAROTID ARTERY TO INTRACRANIAL ARTERY WITH AUTOLOGOUS ARTERIAL TISSUE, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	031J0JG	PX	BYPASS LEFT COMMON CAROTID ARTERY TO INTRACRANIAL ARTERY WITH SYNTHETIC SUBSTITUTE, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	031J0KG	PX	BYPASS LEFT COMMON CAROTID ARTERY TO INTRACRANIAL ARTERY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	031J0ZG	PX	BYPASS LEFT COMMON CAROTID ARTERY TO INTRACRANIAL ARTERY, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	037G04Z	PX	DILATION OF INTRACRANIAL ARTERY WITH DRUG-ELUTING INTRALUMINAL DEVICE, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	037G05Z	PX	DILATION OF INTRACRANIAL ARTERY WITH TWO DRUG-ELUTING INTRALUMINAL DEVICE, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	037G06Z	PX	DILATION OF INTRACRANIAL ARTERY WITH THREE DRUG-ELUTING INTRALUMINAL DEVICE, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	037G07Z	PX	DILATION OF INTRACRANIAL ARTERY WITH FOUR OR MORE DRUG-ELUTING INTRALUMINAL DEVICE, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	037G0DZ	PX	DILATION OF INTRACRANIAL ARTERY WITH INTRALUMINAL DEVICE, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	037G0EZ	PX	DILATION OF INTRACRANIAL ARTERY WITH TWO INTRALUMINAL DEVICES, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	037G0FZ	PX	DILATION OF INTRACRANIAL ARTERY WITH THREE INTRALUMINAL DEVICES, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	037G0GZ	PX	DILATION OF INTRACRANIAL ARTERY WITH FOUR OR MORE INTRALUMINAL DEVICES, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	037G0ZZ	PX	DILATION OF INTRACRANIAL ARTERY, OPEN APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	037G346	PX	DILATION OF INTRACRANIAL ARTERY, BIFURCATION, WITH DRUG-ELUTING INTRALUMINAL DEVICE, PERCUTANEOUS APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	037G34Z	PX	DILATION OF INTRACRANIAL ARTERY WITH DRUG-ELUTING INTRALUMINAL DEVICE, PERCUTANEOUS APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	037G356	PX	DILATION OF INTRACRANIAL ARTERY, BIFURCATION, WITH TWO DRUG-ELUTING INTRALUMINAL DEVICES, PERCUTANEOUS APPROACH	ICD-10-PCS
5.2.3	History of carotid stenting or surgical revascularization	037G35Z	PX	DILATION OF INTRACRANIAL ARTERY WITH TWO DRUG-ELUTING INTRALUMINAL DEVICES, PERCUTANEOUS APPROACH	ICD-10-PCS

















<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CH4Z6	PX	EXTIRPATION OF MATTER FROM RIGHT COMMON CAROTID ARTERY, BIFURCATION, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CH4ZZ	PX	EXTIRPATION OF MATTER FROM RIGHT COMMON CAROTID ARTERY, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CJ0Z6	PX	EXTIRPATION OF MATTER FROM LEFT COMMON CAROTID ARTERY, BIFURCATION, OPEN APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CJ0ZZ	PX	EXTIRPATION OF MATTER FROM LEFT COMMON CAROTID ARTERY, OPEN APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CJ3Z6	PX	EXTIRPATION OF MATTER FROM LEFT COMMON CAROTID ARTERY, BIFURCATION, PERCUTANEOUS APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CJ3Z7	PX	EXTIRPATION OF MATTER FROM LEFT COMMON CAROTID ARTERY USING STENT RETRIEVER, PERCUTANEOUS APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CJ3ZZ	PX	EXTIRPATION OF MATTER FROM LEFT COMMON CAROTID ARTERY, PERCUTANEOUS APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CJ4Z6	PX	EXTIRPATION OF MATTER FROM LEFT COMMON CAROTID ARTERY, BIFURCATION, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CJ4ZZ	PX	EXTIRPATION OF MATTER FROM LEFT COMMON CAROTID ARTERY, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CK0Z6	PX	EXTIRPATION OF MATTER FROM RIGHT INTERNAL CAROTID ARTERY, BIFURCATION, OPEN APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CK0ZZ	PX	EXTIRPATION OF MATTER FROM RIGHT INTERNAL CAROTID ARTERY, OPEN APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CK3Z6	PX	EXTIRPATION OF MATTER FROM RIGHT INTERNAL CAROTID ARTERY, BIFURCATION, PERCUTANEOUS APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CK3Z7	PX	EXTIRPATION OF MATTER FROM RIGHT INTERNAL CAROTID ARTERY USING STENT RETRIEVER, PERCUTANEOUS APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CK3ZZ	PX	EXTIRPATION OF MATTER FROM RIGHT INTERNAL CAROTID ARTERY, PERCUTANEOUS APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CK4Z6	PX	EXTIRPATION OF MATTER FROM RIGHT INTERNAL CAROTID ARTERY, BIFURCATION, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CK4ZZ	PX	EXTIRPATION OF MATTER FROM RIGHT INTERNAL CAROTID ARTERY, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CL0Z6	PX	EXTIRPATION OF MATTER FROM LEFT INTERNAL CAROTID ARTERY, BIFURCATION, OPEN APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CL0ZZ	PX	EXTIRPATION OF MATTER FROM LEFT INTERNAL CAROTID ARTERY, OPEN APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CL3Z6	PX	EXTIRPATION OF MATTER FROM LEFT INTERNAL CAROTID ARTERY, BIFURCATION, PERCUTANEOUS APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CL3Z7	PX	EXTIRPATION OF MATTER FROM LEFT INTERNAL CAROTID ARTERY USING STENT RETRIEVER, PERCUTANEOUS APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CL3ZZ	PX	EXTIRPATION OF MATTER FROM LEFT INTERNAL CAROTID ARTERY, PERCUTANEOUS APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CL4Z6	PX	EXTIRPATION OF MATTER FROM LEFT INTERNAL CAROTID ARTERY, BIFURCATION, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	03CL4ZZ	PX	EXTIRPATION OF MATTER FROM LEFT INTERNAL CAROTID ARTERY, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	T82.311A	DX	BREAKDOWN (MECHANICAL) OF CAROTID ARTERIAL GRAFT (BYPASS), INITIAL ENCOUNTER	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	T82.311D	DX	BREAKDOWN (MECHANICAL) OF CAROTID ARTERIAL GRAFT (BYPASS), SUBSEQUENT ENCOUNTER	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	T82.311S	DX	BREAKDOWN (MECHANICAL) OF CAROTID ARTERIAL GRAFT (BYPASS), SEQUELA	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	T82.321A	DX	DISPLACEMENT OF CAROTID ARTERIAL GRAFT (BYPASS), INITIAL ENCOUNTER	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	T82.321D	DX	DISPLACEMENT OF CAROTID ARTERIAL GRAFT (BYPASS), SUBSEQUENT ENCOUNTER	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	T82.321S	DX	DISPLACEMENT OF CAROTID ARTERIAL GRAFT (BYPASS), SEQUELA	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	T82.331A	DX	LEAKAGE OF CAROTID ARTERIAL GRAFT (BYPASS), INITIAL ENCOUNTER	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	T82.331D	DX	LEAKAGE OF CAROTID ARTERIAL GRAFT (BYPASS), SUBSEQUENT ENCOUNTER	ICD-10-PCS
<b>5.2.3</b>	History of carotid stenting or surgical revascularization	T82.331S	DX	LEAKAGE OF CAROTID ARTERIAL GRAFT (BYPASS), SEQUELA	ICD-10-PCS

<b>5.2.3</b> History of carotid stenting or surgical revascularization	T82.391A	DX	OTHER MECHANICAL COMPLICATION OF CAROTID ARTERIAL GRAFT (BYPASS), INITIAL ENCOUNTER	ICD-10-PCS
<b>5.2.3</b> History of carotid stenting or surgical revascularization	T82.391D	DX	OTHER MECHANICAL COMPLICATION OF CAROTID ARTERIAL GRAFT (BYPASS), SUBSEQUENT ENCOUNTER	ICD-10-PCS
<b>5.2.3</b> History of carotid stenting or surgical revascularization	T82.391S	DX	OTHER MECHANICAL COMPLICATION OF CAROTID ARTERIAL GRAFT (BYPASS), SEQUELA	ICD-10-PCS
<b>5.3</b> Peripheral arterial disease, either one of:				
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.211	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH INTERMITTENT CLAUDICATION, RIGHT LEG	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.212	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH INTERMITTENT CLAUDICATION, LEFT LEG	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.213	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH INTERMITTENT CLAUDICATION, BILATERAL LEGS	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.218	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH INTERMITTENT CLAUDICATION, OTHER EXTREMITY	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.219	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH INTERMITTENT CLAUDICATION, UNSPECIFIED EXTREMITY	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.221	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH REST PAIN, RIGHT LEG	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.222	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH REST PAIN, LEFT LEG	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.223	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH REST PAIN, BILATERAL LEGS	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.228	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH REST PAIN, OTHER EXTREMITY	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.229	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH REST PAIN, UNSPECIFIED EXTREMITY	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.231	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF RIGHT LEG WITH ULCERATION OF THIGH	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.232	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF RIGHT LEG WITH ULCERATION OF CALF	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.233	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF RIGHT LEG WITH ULCERATION OF ANKLE	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.234	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF RIGHT LEG WITH ULCERATION OF HEEL AND MIDFOOT	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.235	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF RIGHT LEG WITH ULCERATION OF OTHER PART OF FOOT	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.238	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF RIGHT LEG WITH ULCERATION OF OTHER PART OF LOWER LEG	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.239	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF RIGHT LEG WITH ULCERATION OF UNSPECIFIED SITE	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.241	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF LEFT LEG WITH ULCERATION OF THIGH	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.242	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF LEFT LEG WITH ULCERATION OF CALF	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.243	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF LEFT LEG WITH ULCERATION OF ANKLE	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.244	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF LEFT LEG WITH ULCERATION OF HEEL AND MIDFOOT	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.245	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF LEFT LEG WITH ULCERATION OF OTHER PART OF FOOT	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.248	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF LEFT LEG WITH ULCERATION OF OTHER PART OF LOWER LEG	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.249	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF LEFT LEG WITH ULCERATION OF UNSPECIFIED SITE	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.25	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF OTHER EXTREMITIES WITH ULCERATION	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.261	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH GANGRENE, RIGHT LEG	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.262	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH GANGRENE, LEFT LEG	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.263	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH GANGRENE, BILATERAL LEGS	ICD-10-CM
<b>5.3.1</b> Intermittent claudication and ankle-brachial index <0.9	I70.268	DX	ATHEROSCLEROSIS OF NATIVE ARTERIES OF EXTREMITIES WITH GANGRENE, OTHER EXTREMITY	ICD-10-CM















<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.745	DX	ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF THE LEFT LEG WITH ULCERATION OF OTHER PART OF FOOT	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.748	DX	ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF THE LEFT LEG WITH ULCERATION OF OTHER PART OF LOWER LEG	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.749	DX	ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF THE LEFT LEG WITH ULCERATION OF UNSPECIFIED SITE	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.75	DX	ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF OTHER EXTREMITY WITH ULCERATION	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.761	DX	ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF THE EXTREMITIES WITH GANGRENE, RIGHT LEG	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.762	DX	ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF THE EXTREMITIES WITH GANGRENE, LEFT LEG	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.763	DX	ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF THE EXTREMITIES WITH GANGRENE, BILATERAL LEGS	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.768	DX	ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF THE EXTREMITIES WITH GANGRENE, OTHER EXTREMITY	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.769	DX	ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF THE EXTREMITIES WITH GANGRENE, UNSPECIFIED EXTREMITY	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.791	DX	OTHER ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF THE EXTREMITIES, RIGHT LEG	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.792	DX	OTHER ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF THE EXTREMITIES, LEFT LEG	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.793	DX	OTHER ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF THE EXTREMITIES, BILATERAL LEGS	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.798	DX	OTHER ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF THE EXTREMITIES, OTHER EXTREMITY	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.799	DX	OTHER ATHEROSCLEROSIS OF OTHER TYPE OF BYPASS GRAFT(S) OF THE EXTREMITIES, UNSPECIFIED EXTREMITY	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I70.92	DX	CHRONIC TOTAL OCCLUSION OF ARTERY OF THE EXTREMITIES	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I73.89	DX	OTHER SPECIFIED PERIPHERAL VASCULAR DISEASES	ICD-10-CM
<b>5.3.1</b>	Intermittent claudication and ankle-brachial index <0.9	I73.9	DX	PERIPHERAL VASCULAR DISEASE, UNSPECIFIED	ICD-10-CM
<b>5.3.2</b>	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	0410096	PX	BYPASS ABDOMINAL AORTA TO RIGHT COMMON ILIAC ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.3.2</b>	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	0410097	PX	BYPASS ABDOMINAL AORTA TO LEFT COMMON ILIAC ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.3.2</b>	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	0410098	PX	BYPASS ABDOMINAL AORTA TO BILATERAL COMMON ILIAC ARTERIES WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.3.2</b>	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	0410099	PX	BYPASS ABDOMINAL AORTA TO RIGHT INTERNAL ILIAC ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.3.2</b>	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	041009B	PX	BYPASS ABDOMINAL AORTA TO LEFT INTERNAL ILIAC ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.3.2</b>	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	041009C	PX	BYPASS ABDOMINAL AORTA TO BILATERAL INTERNAL ILIAC ARTERIES WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.3.2</b>	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	041009D	PX	BYPASS ABDOMINAL AORTA TO RIGHT EXTERNAL ILIAC ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.3.2</b>	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	041009F	PX	BYPASS ABDOMINAL AORTA TO LEFT EXTERNAL ILIAC ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.3.2</b>	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	041009G	PX	BYPASS ABDOMINAL AORTA TO BILATERAL EXTERNAL ILIAC ARTERIES WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS
<b>5.3.2</b>	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	041009H	PX	BYPASS ABDOMINAL AORTA TO RIGHT FEMORAL ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	ICD-10-PCS

















































































































































































































5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	04NY3ZZ	PX	RELEASE LOWER ARTERY, PERCUTANEOUS APPROACH	ICD-10-PCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	04NY4ZZ	PX	RELEASE LOWER ARTERY, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.310A	DX	BREAKDOWN (MECHANICAL) OF AORTIC (BIFURCATION) GRAFT (REPLACEMENT), INITIAL ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.310D	DX	BREAKDOWN (MECHANICAL) OF AORTIC (BIFURCATION) GRAFT (REPLACEMENT), SUBSEQUENT ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.310S	DX	BREAKDOWN (MECHANICAL) OF AORTIC (BIFURCATION) GRAFT (REPLACEMENT), SEQUELA	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.312A	DX	BREAKDOWN (MECHANICAL) OF FEMORAL ARTERIAL GRAFT (BYPASS), INITIAL ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.312D	DX	BREAKDOWN (MECHANICAL) OF FEMORAL ARTERIAL GRAFT (BYPASS), SUBSEQUENT ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.312S	DX	BREAKDOWN (MECHANICAL) OF FEMORAL ARTERIAL GRAFT (BYPASS), SEQUELA	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.320A	DX	DISPLACEMENT OF AORTIC (BIFURCATION) GRAFT (REPLACEMENT), INITIAL ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.320D	DX	DISPLACEMENT OF AORTIC (BIFURCATION) GRAFT (REPLACEMENT), SUBSEQUENT ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.320S	DX	DISPLACEMENT OF AORTIC (BIFURCATION) GRAFT (REPLACEMENT), SEQUELA	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.322A	DX	DISPLACEMENT OF FEMORAL ARTERIAL GRAFT (BYPASS), INITIAL ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.322D	DX	DISPLACEMENT OF FEMORAL ARTERIAL GRAFT (BYPASS), SUBSEQUENT ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.322S	DX	DISPLACEMENT OF FEMORAL ARTERIAL GRAFT (BYPASS), SEQUELA	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.330A	DX	LEAKAGE OF AORTIC (BIFURCATION) GRAFT (REPLACEMENT), INITIAL ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.330D	DX	LEAKAGE OF AORTIC (BIFURCATION) GRAFT (REPLACEMENT), SUBSEQUENT ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.330S	DX	LEAKAGE OF AORTIC (BIFURCATION) GRAFT (REPLACEMENT), SEQUELA	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.332A	DX	LEAKAGE OF FEMORAL ARTERIAL GRAFT (BYPASS), INITIAL ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.332D	DX	LEAKAGE OF FEMORAL ARTERIAL GRAFT (BYPASS), SUBSEQUENT ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.332S	DX	LEAKAGE OF FEMORAL ARTERIAL GRAFT (BYPASS), SEQUELA	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.390A	DX	OTHER MECHANICAL COMPLICATION OF AORTIC (BIFURCATION) GRAFT (REPLACEMENT), INITIAL ENCOUNTER	ICD-10-CM

5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.390D	DX	OTHER MECHANICAL COMPLICATION OF AORTIC (BIFURCATION) GRAFT (REPLACEMENT), SUBSEQUENT ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.390S	DX	OTHER MECHANICAL COMPLICATION OF AORTIC (BIFURCATION) GRAFT (REPLACEMENT), SEQUELA	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.392A	DX	OTHER MECHANICAL COMPLICATION OF FEMORAL ARTERIAL GRAFT (BYPASS), INITIAL ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.392D	DX	OTHER MECHANICAL COMPLICATION OF FEMORAL ARTERIAL GRAFT (BYPASS), SUBSEQUENT ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.392S	DX	OTHER MECHANICAL COMPLICATION OF FEMORAL ARTERIAL GRAFT (BYPASS), SEQUELA	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.856A	DX	STENOSIS OF PERIPHERAL VASCULAR STENT, INITIAL ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.856D	DX	STENOSIS OF PERIPHERAL VASCULAR STENT, SUBSEQUENT ENCOUNTER	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	T82.856S	DX	STENOSIS OF PERIPHERAL VASCULAR STENT, SEQUELA	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z98.62	DX	PERIPHERAL VASCULAR ANGIOPLASTY STATUS	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35256	PX	REPAIR BLOOD VESSEL WITH VEIN GRAFT; LOWER EXTREMITY	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35286	PX	REPAIR BLOOD VESSEL WITH GRAFT OTHER THAN VEIN; LOWER EXTREMITY	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35351	PX	THROMBOENDARTERECTOMY, INCLUDING PATCH GRAFT, IF PERFORMED; ILIAC	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35355	PX	THROMBOENDARTERECTOMY, INCLUDING PATCH GRAFT, IF PERFORMED; ILIOFEMORAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35361	PX	THROMBOENDARTERECTOMY, INCLUDING PATCH GRAFT, IF PERFORMED; COMBINED AORTOILIAC	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35363	PX	THROMBOENDARTERECTOMY, INCLUDING PATCH GRAFT, IF PERFORMED; COMBINED AORTOILIOFEMORAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35371	PX	THROMBOENDARTERECTOMY, INCLUDING PATCH GRAFT, IF PERFORMED; COMMON FEMORAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35372	PX	THROMBOENDARTERECTOMY, INCLUDING PATCH GRAFT, IF PERFORMED; DEEP (PROFUNDA) FEMORAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35381	PX	THROMBOENDARTERECTOMY, WITH OR WITHOUT PATCH GRAFT; FEMORAL AND/OR POPLITEAL, AND/OR TIBIOPERONEAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35454	PX	TRANSLUMINAL BALLOON ANGIOPLASTY, OPEN; ILIAC	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35456	PX	TRANSLUMINAL BALLOON ANGIOPLASTY, OPEN; FEMORAL-POPLITEAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35459	PX	TRANSLUMINAL BALLOON ANGIOPLASTY, OPEN; TIBIOPERONEAL TRUNK AND BRANCHES	CPT/HCPCS

5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35470	PX	TRANSLUMINAL BALLOON ANGIOPLASTY, PERCUTANEOUS; TIBIOPERONEAL TRUNK OR BRANCHES, EACH VESSEL	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35473	PX	TRANSLUMINAL BALLOON ANGIOPLASTY, PERCUTANEOUS; ILIAC	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35474	PX	TRANSLUMINAL BALLOON ANGIOPLASTY, PERCUTANEOUS; FEMORAL-POPLITEAL	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35482	PX	TRANSLUMINAL PERIPHERAL ATHERECTOMY, OPEN; ILIAC	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35483	PX	TRANSLUMINAL PERIPHERAL ATHERECTOMY, OPEN; FEMORAL-POPLITEAL	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35485	PX	TRANSLUMINAL PERIPHERAL ATHERECTOMY, OPEN; TIBIOPERONEAL TRUNK AND BRANCHES	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35492	PX	TRANSLUMINAL PERIPHERAL ATHERECTOMY, PERCUTANEOUS; ILIAC	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35493	PX	TRANSLUMINAL PERIPHERAL ATHERECTOMY, PERCUTANEOUS; FEMORAL-POPLITEAL	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35495	PX	TRANSLUMINAL PERIPHERAL ATHERECTOMY, PERCUTANEOUS; TIBIOPERONEAL TRUNK AND BRANCHES	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35521	PX	BYPASS GRAFT, WITH VEIN; AXILLARY-FEMORAL	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35533	PX	BYPASS GRAFT, WITH VEIN; AXILLARY-FEMORAL-FEMORAL	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35541	PX	BYPASS GRAFT, WITH VEIN; AORTOILIAC OR BI-ILIAC	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35546	PX	BYPASS GRAFT, WITH VEIN; AORTOFEMORAL OR BIFEMORAL	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35548	PX	BYPASS GRAFT, WITH VEIN; AORTOILIOFEMORAL, UNILATERAL	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35549	PX	BYPASS GRAFT, WITH VEIN; AORTOILIOFEMORAL, BILATERAL	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35551	PX	BYPASS GRAFT, WITH VEIN; AORTOFEMORAL-POPLITEAL	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35556	PX	BYPASS GRAFT, WITH VEIN; FEMORAL-POPLITEAL	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35558	PX	BYPASS GRAFT, WITH VEIN; FEMORAL-FEMORAL	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35563	PX	BYPASS GRAFT, WITH VEIN; ILIOILIAC	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35565	PX	BYPASS GRAFT, WITH VEIN; ILIOFEMORAL	CPT/HCP
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35566	PX	BYPASS GRAFT, WITH VEIN; FEMORAL-ANTERIOR TIBIAL, POSTERIOR TIBIAL, PERONEAL ARTERY OR OTHER DISTAL VESSELS	CPT/HCP

5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35570	PX	BYPASS GRAFT, WITH VEIN; TIBIAL-TIBIAL, PERONEAL-TIBIAL, OR TIBIAL/PERONEAL TRUNK-TIBIAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35571	PX	BYPASS GRAFT, WITH VEIN; POPLITEAL-TIBIAL, -PERONEAL ARTERY OR OTHER DISTAL VESSELS	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35582	PX	IN-SITU VEIN BYPASS; AORTOFEMORAL-POPLITEAL (ONLY FEMORAL-POPLITEAL PORTION IN-SITU)	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35583	PX	IN-SITU VEIN BYPASS; FEMORAL-POPLITEAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35585	PX	IN-SITU VEIN BYPASS; FEMORAL-ANTERIOR TIBIAL, POSTERIOR TIBIAL, OR PERONEAL ARTERY	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35587	PX	IN-SITU VEIN BYPASS; POPLITEAL-TIBIAL, PERONEAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35621	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; AXILLARY-FEMORAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35623	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; AXILLARY-POPLITEAL OR -TIBIAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35637	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; AORTOILIAC	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35638	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; AORTOBI-ILIAC	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35641	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; AORTOILIAC OR BI-ILIAC	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35646	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; AORTOIFEMORAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35647	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; AORTOFEMORAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35650	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; AXILLARY-AXILLARY	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35651	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; AORTOFEMORAL-POPLITEAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35654	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; AXILLARY-FEMORAL-FEMORAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35656	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; FEMORAL-POPLITEAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35661	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; FEMORAL-FEMORAL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35663	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; ILIOILIAC	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35666	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; FEMORAL-ANTERIOR TIBIAL, POSTERIOR TIBIAL, OR PERONEAL ARTERY	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35671	PX	BYPASS GRAFT, WITH OTHER THAN VEIN; POPLITEAL-TIBIAL OR -PERONEAL ARTERY	CPT/HCPCS

5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35681	PX	BYPASS GRAFT; COMPOSITE, PROSTHETIC AND VEIN (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35682	PX	BYPASS GRAFT; AUTOGENOUS COMPOSITE, 2 SEGMENTS OF VEINS FROM 2 LOCATIONS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35683	PX	BYPASS GRAFT; AUTOGENOUS COMPOSITE, 3 OR MORE SEGMENTS OF VEIN FROM 2 OR MORE LOCATIONS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	35879	PX	REVISION, LOWER EXTREMITY ARTERIAL BYPASS, WITHOUT THROMBECTOMY, OPEN; WITH VEIN PATCH ANGIOPLASTY	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37207	PX	TRANSCATHETER PLACEMENT OF AN INTRAVASCULAR STENT(S) (EXCEPT CORONARY, CAROTID, VERTEBRAL, ILIAC AND LOWER EXTREMITY ARTERIES), OPEN; INITIAL VESSEL / TRANSCATHETER PLACEMENT OF AN INTRAVASCULAR STENT(S) (NON-CORONARY VESSEL), OPEN; INITIAL VESSEL / TRANSCATHETER PLACEMENT OF AN INTRAVASCULAR STENT(S), (NON-CORONARY VESSEL), OPEN; INITIAL VESSEL	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37208	PX	TRANSCATHETER PLACEMENT OF AN INTRAVASCULAR STENT(S) (EXCEPT CORONARY, CAROTID, VERTEBRAL, ILIAC AND LOWER EXTREMITY ARTERIES), OPEN; EACH ADDITIONAL VESSEL (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE) / TRANSCATHETER PLACEMENT OF AN INTRAVASCULAR STENT(S) (NON-CORONARY VESSEL), OPEN; EACH ADDITIONAL VESSEL (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE) / TRANSCATHETER PLACEMENT OF AN INTRAVASCULAR STENT(S), (NON-CORONARY VESSEL), OPEN; EACH ADDITIONAL VESSEL (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37220	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, ILIAC ARTERY, UNILATERAL, INITIAL VESSEL; WITH TRANSLUMINAL ANGIOPLASTY	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37221	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, ILIAC ARTERY, UNILATERAL, INITIAL VESSEL; WITH TRANSLUMINAL STENT PLACEMENT(S), INCLUDES ANGIOPLASTY WITHIN THE SAME VESSEL, WHEN PERFORMED	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37222	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, ILIAC ARTERY, EACH ADDITIONAL IPSILATERAL ILIAC VESSEL; WITH TRANSLUMINAL ANGIOPLASTY (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37223	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, ILIAC ARTERY, EACH ADDITIONAL IPSILATERAL ILIAC VESSEL; WITH TRANSLUMINAL STENT PLACEMENT(S), INCLUDES ANGIOPLASTY WITHIN THE SAME VESSEL, WHEN PERFORMED (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37224	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, FEMORAL, POPLITEAL ARTERY(S), UNILATERAL; WITH TRANSLUMINAL ANGIOPLASTY	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37225	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, FEMORAL, POPLITEAL ARTERY(S), UNILATERAL; WITH ATHERECTOMY, INCLUDES ANGIOPLASTY WITHIN THE SAME VESSEL, WHEN PERFORMED	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37226	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, FEMORAL, POPLITEAL ARTERY(S), UNILATERAL; WITH TRANSLUMINAL STENT PLACEMENT(S), INCLUDES ANGIOPLASTY WITHIN THE SAME VESSEL, WHEN PERFORMED	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37227	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, FEMORAL, POPLITEAL ARTERY(S), UNILATERAL; WITH TRANSLUMINAL STENT PLACEMENT(S) AND ATHERECTOMY, INCLUDES ANGIOPLASTY WITHIN THE SAME VESSEL, WHEN PERFORMED	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37228	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, TIBIAL, PERONEAL ARTERY, UNILATERAL, INITIAL VESSEL; WITH TRANSLUMINAL ANGIOPLASTY	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37229	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, TIBIAL, PERONEAL ARTERY, UNILATERAL, INITIAL VESSEL; WITH ATHERECTOMY, INCLUDES ANGIOPLASTY WITHIN THE SAME VESSEL, WHEN PERFORMED	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37230	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, TIBIAL, PERONEAL ARTERY, UNILATERAL, INITIAL VESSEL; WITH TRANSLUMINAL STENT PLACEMENT(S), INCLUDES ANGIOPLASTY WITHIN THE SAME VESSEL, WHEN PERFORMED	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37231	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, TIBIAL, PERONEAL ARTERY, UNILATERAL, INITIAL VESSEL; WITH TRANSLUMINAL STENT PLACEMENT(S) AND ATHERECTOMY, INCLUDES ANGIOPLASTY WITHIN THE SAME VESSEL, WHEN PERFORMED	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37232	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, TIBIAL/PERONEAL ARTERY, UNILATERAL, EACH ADDITIONAL VESSEL; WITH TRANSLUMINAL ANGIOPLASTY (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37233	PX	REVASCLARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, TIBIAL/PERONEAL ARTERY, UNILATERAL, EACH ADDITIONAL VESSEL; WITH ATHERECTOMY, INCLUDES ANGIOPLASTY WITHIN THE SAME VESSEL, WHEN PERFORMED (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS



5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37234	PX	REVASCULARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, TIBIAL/PERONEAL ARTERY, UNILATERAL, EACH ADDITIONAL VESSEL; WITH TRANSLUMINAL STENT PLACEMENT(S), INCLUDES ANGIOPLASTY WITHIN THE SAME VESSEL, WHEN PERFORMED (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	37235	PX	REVASCULARIZATION, ENDOVASCULAR, OPEN OR PERCUTANEOUS, TIBIAL/PERONEAL ARTERY, UNILATERAL, EACH ADDITIONAL VESSEL; WITH TRANSLUMINAL STENT PLACEMENT(S) AND ATHERECTOMY, INCLUDES ANGIOPLASTY WITHIN THE SAME VESSEL, WHEN PERFORMED (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.43	DX	Acquired absence of foot	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.431	DX	Acquired absence of right foot	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.432	DX	Acquired absence of left foot	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.439	DX	Acquired absence of unspecified foot	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.44	DX	Acquired absence of ankle	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.441	DX	Acquired absence of right ankle	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.442	DX	Acquired absence of left ankle	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.449	DX	Acquired absence of unspecified ankle	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.5	DX	Acquired absence of leg below knee	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.51	DX	Acquired absence of leg below knee	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.511	DX	Acquired absence of right leg below knee	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.512	DX	Acquired absence of left leg below knee	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.519	DX	Acquired absence of unspecified leg below knee	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.52	DX	Acquired absence of knee	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.521	DX	Acquired absence of right knee	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.522	DX	Acquired absence of left knee	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.529	DX	Acquired absence of unspecified knee	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.6	DX	Acquired absence of leg above knee	ICD-10-CM
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	Z89.61	DX	Acquired absence of leg above knee	ICD-10-CM





5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	0Y6N0ZB	PX	Detachment at Left Foot, Partial 2nd Ray, Open Approach	ICD-10-PCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	0Y6N0ZC	PX	Detachment at Left Foot, Partial 3rd Ray, Open Approach	ICD-10-PCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	0Y6N0ZD	PX	Detachment at Left Foot, Partial 4th Ray, Open Approach	ICD-10-PCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	0Y6N0ZF	PX	Detachment at Left Foot, Partial 5th Ray, Open Approach	ICD-10-PCS
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	27598	PX	Amputate lower leg at knee	CPT
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	27880	PX	Amputation of lower leg	CPT
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	27881	PX	Amputation of lower leg	CPT
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	27882	PX	Amputation of lower leg	CPT
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	27888	PX	Amputation of foot at ankle	CPT
5.3.2	Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia	27889	PX	Amputation of foot at ankle	CPT

Category	Variable Name	Variable Subtype	Code	Code category	Description	Code_type	Notes
	6 HbA1c >10.5%		17855-8	LOINC			
	6 HbA1c >10.5%		17856-6	LOINC			
	6 HbA1c >10.5%		41995-2	LOINC			
	6 HbA1c >10.5%		43150-2	LOINC			
	6 HbA1c >10.5%		4548-4	LOINC			
	6 HbA1c >10.5%		71875-9	LOINC			
	6 HbA1c >10.5%		74246-0	LOINC			
	6 HbA1c >10.5%		62388-4	LOINC			
	6 HbA1c >10.5%		59261-8	LOINC			
	6 HbA1c >10.5%		55454-3	LOINC			
	6 HbA1c >10.5%		4549-2	LOINC			
	7 Planning treatment for diabetic retinopathy and/or macular edema		67028	PX	Anti-VEGFi (component 2)		CPT/HCPCS
	7 Planning treatment for diabetic retinopathy and/or macular edema		67028	PX	Photocoagulation (component 3)		CPT/HCPCS
	7 Planning treatment for diabetic retinopathy and/or macular edema		67220	PX	Photocoagulation (component 3)		CPT/HCPCS
	7 Planning treatment for diabetic retinopathy and/or macular edema		67228	PX	Photocoagulation (component 3)		CPT/HCPCS
	8 Hospitalized for chronic heart failure within 2 months prior to screening		109.81	DX	RHEUMATIC HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		111.0	DX	HYPERTENSIVE HEART DISEASE WITH HEART FAILURE		ICD-10-CM
					HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE WITH HEART FAILURE AND STAGE 1 THROUGH STAGE 4 CHRONIC KIDNEY DISEASE, OR UNSPECIFIED CHRONIC KIDNEY DISEASE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		113.0	DX	HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE WITH HEART FAILURE AND WITH STAGE 5 CHRONIC KIDNEY DISEASE, OR END STAGE RENAL DISEASE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		113.2	DX	HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150	DX	LEFT VENTRICULAR FAILURE, UNSPECIFIED		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.1	DX	SYSTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.2	DX	UNSPECIFIED SYSTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.20	DX	ACUTE SYSTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.21	DX	CHRONIC SYSTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.22	DX	ACUTE ON CHRONIC SYSTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.23	DX	DIASTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.3	DX	UNSPECIFIED DIASTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.30	DX	ACUTE DIASTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.31	DX	CHRONIC DIASTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.32	DX	ACUTE ON CHRONIC DIASTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.33	DX	COMBINED SYSTOLIC (CONGESTIVE) AND DIASTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.4	DX	UNSPECIFIED COMBINED SYSTOLIC (CONGESTIVE) AND DIASTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.40	DX	ACUTE COMBINED SYSTOLIC (CONGESTIVE) AND DIASTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.41	DX	CHRONIC COMBINED SYSTOLIC (CONGESTIVE) AND DIASTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.42	DX	ACUTE ON CHRONIC COMBINED SYSTOLIC (CONGESTIVE) AND DIASTOLIC (CONGESTIVE) HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.43	DX	HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.8	DX	OTHER HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.810	DX	RIGHT HEART FAILURE, UNSPECIFIED		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.811	DX	ACUTE RIGHT HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.812	DX	CHRONIC RIGHT HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.813	DX	ACUTE ON CHRONIC RIGHT HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.814	DX	RIGHT HEART FAILURE DUE TO LEFT HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.82	DX	BIVENTRICULAR HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.83	DX	HIGH OUTPUT HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.84	DX	END STAGE HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.89	DX	OTHER HEART FAILURE		ICD-10-CM
	8 Hospitalized for chronic heart failure within 2 months prior to screening		150.9	DX	HEART FAILURE, UNSPECIFIED		ICD-10-CM
	11 History of chronic or acute pancreatitis		B25.2	DX	CYTOMEGALOVIRAL PANCREATITIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.0	DX	IDIOPATHIC ACUTE PANCREATITIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.00	DX	IDIOPATHIC ACUTE PANCREATITIS WITHOUT NECROSIS OR INFECTION		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.01	DX	IDIOPATHIC ACUTE PANCREATITIS WITH UNINFECTED NECROSIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.02	DX	IDIOPATHIC ACUTE PANCREATITIS WITH INFECTED NECROSIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.1	DX	BILIARY ACUTE PANCREATITIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.10	DX	BILIARY ACUTE PANCREATITIS WITHOUT NECROSIS OR INFECTION		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.11	DX	BILIARY ACUTE PANCREATITIS WITH UNINFECTED NECROSIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.12	DX	BILIARY ACUTE PANCREATITIS WITH INFECTED NECROSIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.2	DX	ALCOHOL INDUCED ACUTE PANCREATITIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.20	DX	ALCOHOL INDUCED ACUTE PANCREATITIS WITHOUT NECROSIS OR INFECTION		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.21	DX	ALCOHOL INDUCED ACUTE PANCREATITIS WITH UNINFECTED NECROSIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.22	DX	ALCOHOL INDUCED ACUTE PANCREATITIS WITH INFECTED NECROSIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.3	DX	DRUG INDUCED ACUTE PANCREATITIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.30	DX	DRUG INDUCED ACUTE PANCREATITIS WITHOUT NECROSIS OR INFECTION		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.31	DX	DRUG INDUCED ACUTE PANCREATITIS WITH UNINFECTED NECROSIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.32	DX	DRUG INDUCED ACUTE PANCREATITIS WITH INFECTED NECROSIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.8	DX	OTHER ACUTE PANCREATITIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.80	DX	OTHER ACUTE PANCREATITIS WITHOUT NECROSIS OR INFECTION		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.81	DX	OTHER ACUTE PANCREATITIS WITH UNINFECTED NECROSIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.82	DX	OTHER ACUTE PANCREATITIS WITH INFECTED NECROSIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.9	DX	ACUTE PANCREATITIS, UNSPECIFIED		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.90	DX	ACUTE PANCREATITIS WITHOUT NECROSIS OR INFECTION, UNSPECIFIED		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.91	DX	ACUTE PANCREATITIS WITH UNINFECTED NECROSIS, UNSPECIFIED		ICD-10-CM
	11 History of chronic or acute pancreatitis		K85.92	DX	ACUTE PANCREATITIS WITH INFECTED NECROSIS, UNSPECIFIED		ICD-10-CM
	11 History of chronic or acute pancreatitis		K86.0	DX	ALCOHOL-INDUCED CHRONIC PANCREATITIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K86.1	DX	OTHER CHRONIC PANCREATITIS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K86.2	DX	CYST OF PANCREAS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K86.3	DX	PSEUDOCYST OF PANCREAS		ICD-10-CM
	11 History of chronic or acute pancreatitis		K86.8	DX	OTHER SPECIFIED DISEASES OF PANCREAS		ICD-10-CM

11 History of chronic or acute pancreatitis	K86.81	DX	EXOCRINE PANCREATIC INSUFFICIENCY	ICD-10-CM
11 History of chronic or acute pancreatitis	K86.89	DX	OTHER SPECIFIED DISEASES OF PANCREAS	ICD-10-CM
11 History of chronic or acute pancreatitis Known clinically significant gastric emptying abnormality or bariatric surgery	K86.9	DX	DISEASE OF PANCREAS, UNSPECIFIED	ICD-10-CM
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	K31.84	DX	GASTROPARESIS	ICD-10-CM
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	K31.1	DX	Adult hypertrophic pyloric stenosis	ICD-10-CM
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	K31.2	DX	Hourglass stricture and stenosis of stomach	ICD-10-CM
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	K31.5	DX	Obstruction of duodenum	ICD-10-CM
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	BUTORPHANOL	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	DIHYDROCODEIN	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	FENTANYL	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	FENTANYL CITR	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	FENTANYL CITR	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	FENTANYL HCL	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	HYDROMORPHC	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	LEVORPHANOL	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	MEPERIDINE HC	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	MEPERIDINE HC	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	MEPERIDINE HC	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	METHADONE HC	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	MORPHINE SULF	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	OPIUM TINCTUR	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	OXYMORPHONE	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	PENTAZOCINE H	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	PENTAZOCINE L	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	TAPENTADOL H	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	ACETAMINOPHE	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	BUTALBITAL/AC	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	CODEINE PHOSF	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	CODEINE PHOSF	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	CODEINE SULFA	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	CODEINE/ASPIR	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	HYDROCODONE	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	OXYCODONE HC	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	OXYCODONE HC	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	OXYCODONE HC	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	OXYCODONE HC	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	OXYCODONE MY	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	OXYCODONE/AS	RX		Generic
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	Z98.84	DX	BARIATRIC SURGERY STATUS	ICD-10-CM
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	K95.01	DX	INFECTION DUE TO GASTRIC BAND PROCEDURE	ICD-10-CM
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	K95.09	DX	OTHER COMPLICATIONS OF GASTRIC BAND PROCEDURE	ICD-10-CM
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	K95.81	DX	INFECTION DUE TO OTHER BARIATRIC PROCEDURE	ICD-10-CM
12 surgery Known clinically significant gastric emptying abnormality or bariatric surgery	K95.89	DX	OTHER COMPLICATIONS OF OTHER BARIATRIC PROCEDURE	ICD-10-CM
12 surgery	0DB60ZZ	PX	EXCISION OF STOMACH, OPEN APPROACH	ICD-10-PCS



Known clinically significant gastric emptying abnormality or bariatric surgery	12	0D16079	PX	BYPASS STOMACH TO DUODENUM WITH AUTOLOGOUS TISSUE SUBSTITUTE, OPEN APPROACH	ICD-10-PCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	0D160J9	PX	BYPASS STOMACH TO DUODENUM WITH SYNTHETIC SUBSTITUTE, OPEN APPROACH	ICD-10-PCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	0D160K9	PX	BYPASS STOMACH TO DUODENUM WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, OPEN APPROACH	ICD-10-PCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	0D160Z9	PX	BYPASS STOMACH TO DUODENUM, OPEN APPROACH	ICD-10-PCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	0D16879	PX	BYPASS STOMACH TO DUODENUM WITH AUTOLOGOUS TISSUE SUBSTITUTE, VIA NATURAL OR ARTIFICIAL OPENING ENDOSCOPIC	ICD-10-PCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	0D168J9	PX	BYPASS STOMACH TO DUODENUM WITH SYNTHETIC SUBSTITUTE, VIA NATURAL OR ARTIFICIAL OPENING ENDOSCOPIC	ICD-10-PCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	0D168K9	PX	BYPASS STOMACH TO DUODENUM WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, VIA NATURAL OR ARTIFICIAL OPENING ENDOSCOPIC	ICD-10-PCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	0D168Z9	PX	BYPASS STOMACH TO DUODENUM, VIA NATURAL OR ARTIFICIAL OPENING ENDOSCOPIC	ICD-10-PCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	0DQ64ZZ	PX	REPAIR STOMACH, PERCUTANEOUS ENDOSCOPIC APPROACH	ICD-10-PCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	43770	PX	LAPAROSCOPY, SURGICAL, GASTRIC RESTRICTIVE PROCEDURE: PLACEMENT OF ADJUSTABLE GASTRIC BAND	CPT/HCPCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	43644	PX	LAPAROSCOPY, SURGICAL, GASTRIC RESTRICTIVE PROCEDURE WITH GASTRIC BYPASS AND ROUX-EN-Y GASTROENTEROSTOMY (ROUX LIMB 150 CM OR LESS)	CPT/HCPCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	43645	PX	LAPAROSCOPY, SURGICAL, GASTRIC RESTRICTIVE WITH GASTRIC BYPASS AND SMALL INTESTINE RECONSTRUCTION TO LIMIT ABSORPTION	CPT/HCPCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	43842	PX	GASTRIC RESTRICTIVE PROCEDURE, WITHOUT GASTRIC BYPASS, FOR MORBID OBESITY, VERTICAL BANDED GASTROPLASTY	CPT/HCPCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	43843	PX	OTHER GASTRIC RESTRICTIVE PROCEDURES, WITHOUT GASTRIC BYPASS, AND OTHER THAN VERTICAL BANDED GASTROPLASTY	CPT/HCPCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	43844	PX	LAPAROSCOPIC GASTRIC RESTRICTIVE PROCEDURE WITH GASTRIC BYPASS AND ROUX EN Y GASTROENTEROSTOMY	CPT/HCPCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	43845	PX	GASTRIC RESTRICTIVE PROCEDURE WITH PARTIAL GASTRECTOMY, PYLORUS-PRESERVING DUODENILEOSTOMY AND ILEOILEOSTOMY TO LIMIT ABSORPTION (BPD)	CPT/HCPCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	43846	PX	GASTRIC RESTRICTIVE PROCEDURE, WITH GASTRIC BYPASS, FOR MORBID OBESITY; WITH SHORT LIMB (LESS THAN 100 CM) ROUX-EN-Y GASTROENTEROSTOMY	CPT/HCPCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	43847	PX	GASTRIC RESTRICTIVE PROCEDURE, WITH SMALL INTESTINE RECONSTRUCTION TO LIMIT ABSORPTION; WITH LONG LIMB (>150 CM) ROUX-EN-Y	CPT/HCPCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	43659	PX	GASTRECTOMY, TOTAL; WITH ROUX-EN-Y RECONSTRUCTION; MINI-GASTRIC BYPASS	CPT/HCPCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	S2082	PX	LAPAROSCOPY, SURGICAL; GASTRIC RESTRICTIVE PROCEDURE, ADJUSTABLE GASTRIC BAND INCLUDES PLACEMENT OF SUBCUTANEOUS PORT	CPT/HCPCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	S2085	PX	LAPAROSCOPIC GASTRIC BYPASS	CPT/HCPCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	43775	PX	LAPAROSCOPY, SURGICAL, GASTRIC RESTRICTIVE PROCEDURE, LONGITUDINAL GASTRECTOMY (E.G., SLEEVE GASTRECTOMY)	CPT/HCPCS
Known clinically significant gastric emptying abnormality or bariatric surgery	12	43848	PX	REVISION RYGB	CPT/HCPCS
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	C22	DX	MALIGNANT NEOPLASM OF LIVER AND INTRAHEPATIC BILE DUCTS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	C22.0	DX	LIVER CELL CARCINOMA (HEPATOCELLULAR CARCINOMA, HEPATOMA)	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	C22.1	DX	INTRAHEPATIC BILE DUCT CARCINOMA (CHOLANGIOCARCINOMA)	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	C22.2	DX	HEPATOBLASTOMA	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	C22.3	DX	ANGIOSARCOMA OF LIVER (KUPFFER CELL SARCOMA)	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	C22.4	DX	OTHER SARCOMAS OF LIVER	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	C22.7	DX	OTHER SPECIFIED CARCINOMAS OF LIVER	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	C22.8	DX	MALIGNANT NEOPLASM OF LIVER, PRIMARY, UNSPECIFIED AS TO TYPE	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	C22.9	DX	MALIGNANT NEOPLASM OF LIVER, NOT SPECIFIED AS PRIMARY OR SECONDARY	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	K76.7	DX	HEPATORENAL SYNDROME	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	Z94.4	DX	LIVER TRANSPLANT STATUS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	Z48.23	DX	ENCOUNTER FOR AFTERCARE FOLLOWING LIVER TRANSPLANT	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	T86.40	DX	UNSPECIFIED COMPLICATION OF LIVER TRANSPLANT	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	T86.41	DX	LIVER TRANSPLANT REJECTION	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	T86.42	DX	LIVER TRANSPLANT FAILURE	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	T86.43	DX	LIVER TRANSPLANT INFECTION	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	T86.49	DX	OTHER COMPLICATIONS OF LIVER TRANSPLANT	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	0FY00Z0	PX	TRANSPLANTATION OF LIVER, ALLOGENEIC, OPEN APPROACH	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or ALT level $\geq$ 3X the ULN	13	0FY00Z1	PX	TRANSPLANTATION OF LIVER, SYNGENEIC, OPEN APPROACH	ICD-10-CM



Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	0FY00Z2	PX	TRANSPLANTATION OF LIVER, ZOOPLASTIC, OPEN APPROACH	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	47135	PX	LIVER TRANSPLANTATION PROCEDURES	CPT/HCPCS
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	E83.00	DX	DISORDER OF COPPER METABOLISM, UNSPECIFIED	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	E83.01	DX	WILSON'S DISEASE	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	E83.09	DX	OTHER DISORDERS OF COPPER METABOLISM	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	I82.0	DX	BUDD-CHIARI SYNDROME	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	R18.0	DX	MALIGNANT ASCITES	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K70.2	DX	ALCOHOLIC FIBROSIS AND SCLEROSIS OF LIVER	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K70.3	DX	ALCOHOLIC CIRRHOSIS OF LIVER	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K70.30	DX	ALCOHOLIC CIRRHOSIS OF LIVER WITHOUT ASCITES	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K70.31	DX	ALCOHOLIC CIRRHOSIS OF LIVER WITH ASCITES	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K70.4	DX	ALCOHOLIC HEPATIC FAILURE	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K70.40	DX	ALCOHOLIC HEPATIC FAILURE WITHOUT COMA	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K70.41	DX	ALCOHOLIC HEPATIC FAILURE WITH COMA	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71	DX	TOXIC LIVER DISEASE INCLUDES DRUG-INDUCED IDIOSYNCRATIC OR TOXIC LIVER DISEASE	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.0	DX	TOXIC LIVER DISEASE WITH CHOLESTASIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.1	DX	TOXIC LIVER DISEASE WITH HEPATIC NECROSIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.10	DX	TOXIC LIVER DISEASE WITH HEPATIC NECROSIS, WITHOUT COMA	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.11	DX	TOXIC LIVER DISEASE WITH HEPATIC NECROSIS, WITH COMA	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.2	DX	TOXIC LIVER DISEASE WITH ACUTE HEPATITIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.3	DX	TOXIC LIVER DISEASE WITH CHRONIC PERSISTENT HEPATITIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.4	DX	TOXIC LIVER DISEASE WITH CHRONIC LOBULAR HEPATITIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.5	DX	TOXIC LIVER DISEASE WITH CHRONIC ACTIVE HEPATITIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.50	DX	TOXIC LIVER DISEASE WITH CHRONIC ACTIVE HEPATITIS WITHOUT ASCITES	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.51	DX	TOXIC LIVER DISEASE WITH CHRONIC ACTIVE HEPATITIS WITH ASCITES	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.6	DX	TOXIC LIVER DISEASE WITH HEPATITIS, NOT ELSEWHERE CLASSIFIED	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.7	DX	TOXIC LIVER DISEASE WITH FIBROSIS AND CIRRHOSIS OF LIVER	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.8	DX	TOXIC LIVER DISEASE WITH OTHER DISORDERS OF LIVER	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K71.9	DX	TOXIC LIVER DISEASE, UNSPECIFIED	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K72	DX	HEPATIC FAILURE, NOT ELSEWHERE CLASSIFIED	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K72.0	DX	ACUTE AND SUBACUTE HEPATIC FAILURE	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K72.00	DX	ACUTE AND SUBACUTE HEPATIC FAILURE WITHOUT COMA	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K72.01	DX	ACUTE AND SUBACUTE HEPATIC FAILURE WITH COMA	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K72.1	DX	CHRONIC HEPATIC FAILURE	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K72.10	DX	CHRONIC HEPATIC FAILURE WITHOUT COMA	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K72.11	DX	CHRONIC HEPATIC FAILURE WITH COMA	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K72.9	DX	HEPATIC FAILURE, UNSPECIFIED	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K72.90	DX	HEPATIC FAILURE, UNSPECIFIED WITHOUT COMA	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K72.91	DX	HEPATIC FAILURE, UNSPECIFIED WITH COMA	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K73	DX	CHRONIC HEPATITIS, NOT ELSEWHERE CLASSIFIED	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K73.0	DX	CHRONIC PERSISTENT HEPATITIS, NOT ELSEWHERE CLASSIFIED	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K73.1	DX	CHRONIC LOBULAR HEPATITIS, NOT ELSEWHERE CLASSIFIED	ICD-10-CM

Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K73.2	DX	CHRONIC ACTIVE HEPATITIS, NOT ELSEWHERE CLASSIFIED	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K73.8	DX	OTHER CHRONIC HEPATITIS, NOT ELSEWHERE CLASSIFIED	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K73.9	DX	CHRONIC HEPATITIS, UNSPECIFIED	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K74	DX	FIBROSIS AND CIRRHOSIS OF LIVER	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K74.0	DX	HEPATIC FIBROSIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K74.02	DX	HEPATIC FIBROSIS, ADVANCED FIBROSIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K74.1	DX	HEPATIC SCLEROSIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K74.2	DX	HEPATIC FIBROSIS WITH HEPATIC SCLEROSIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K74.3	DX	PRIMARY BILIARY CIRRHOSIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K74.4	DX	SECONDARY BILIARY CIRRHOSIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K74.5	DX	BILIARY CIRRHOSIS, UNSPECIFIED	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K74.6	DX	OTHER AND UNSPECIFIED CIRRHOSIS OF LIVER	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K74.60	DX	UNSPECIFIED CIRRHOSIS OF LIVER	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K74.69	DX	OTHER CIRRHOSIS OF LIVER	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K75.2	DX	NONSPECIFIC REACTIVE HEPATITIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K75.3	DX	GRANULOMATOUS HEPATITIS, NOT ELSEWHERE CLASSIFIED	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K75.4	DX	AUTOIMMUNE HEPATITIS	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K76.1	DX	CHRONIC PASSIVE CONGESTION OF LIVER (CARDIAC CIRRHOSIS OR SCLEROSIS)	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K76.2	DX	CENTRAL HEMORRHAGIC NECROSIS OF LIVER	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K76.3	DX	INFARCTION OF LIVER	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K76.4	DX	PELIOSIS HEPATIS (HEPATIC ANGIOMATOSIS)	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K76.5	DX	HEPATIC VENO-OCCLUSIVE DISEASE	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K76.7	DX	HEPATORENAL SYNDROME	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K76.81	DX	HEPATOPULMONARY SYNDROME	ICD-10-CM
Liver disease (not including non-alcoholic fatty liver disease [NAFLD]) or 13 ALT level $\geq$ 3X the ULN	K76.82	DX	HEPATIC ENCEPHALOPATHY	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	N18.5	DX	CHRONIC KIDNEY DISEASE, STAGE 5	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	N18.6	DX	END STAGE RENAL DISEASE	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	I12.0	DX	HYPERTENSIVE CHRONIC KIDNEY DISEASE WITH STAGE 5 CHRONIC KIDNEY DISEASE OR END STAGE RENAL DISEASE	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	I13.2	DX	HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE WITH HEART FAILURE AND WITH STAGE 5 CHRONIC KIDNEY DISEASE, OR END STAGE RENAL DISEASE	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	Z49	DX	ENCOUNTER FOR CARE INVOLVING RENAL DIALYSIS	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	Z49.0	DX	PREPARATORY CARE FOR RENAL DIALYSIS	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	Z49.3	DX	ENCOUNTER FOR ADEQUACY TESTING FOR DIALYSIS	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	Z49.31	DX	ENCOUNTER FOR ADEQUACY TESTING FOR HEMODIALYSIS	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	Z49.32	DX	ENCOUNTER FOR ADEQUACY TESTING FOR PERITONEAL DIALYSIS	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	Z49.01	DX	ENCOUNTER FOR FITTING AND ADJUSTMENT OF EXTRACORPOREAL DIALYSIS CATHETER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	Z49.02	DX	ENCOUNTER FOR FITTING AND ADJUSTMENT OF PERITONEAL DIALYSIS CATHETER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	Z91.15	DX	PATIENT'S NONCOMPLIANCE WITH RENAL DIALYSIS	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	Z99.2	DX	DEPENDENCE ON RENAL DIALYSIS	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	R88.0	DX	CLOUDY (HEMODIALYSIS) (PERITONEAL) DIALYSIS EFFLUENT	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.41	DX	BREAKDOWN (MECHANICAL) OF VASCULAR DIALYSIS CATHETER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.41XA	DX	BREAKDOWN (MECHANICAL) OF VASCULAR DIALYSIS CATHETER, INITIAL ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.41XD	DX	BREAKDOWN (MECHANICAL) OF VASCULAR DIALYSIS CATHETER, SUBSEQUENT ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.41XS	DX	BREAKDOWN (MECHANICAL) OF VASCULAR DIALYSIS CATHETER, SEQUELA	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.42	DX	DISPLACEMENT OF VASCULAR DIALYSIS CATHETER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.42XA	DX	DISPLACEMENT OF VASCULAR DIALYSIS CATHETER, INITIAL ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.42XD	DX	DISPLACEMENT OF VASCULAR DIALYSIS CATHETER, SUBSEQUENT ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.42XS	DX	DISPLACEMENT OF VASCULAR DIALYSIS CATHETER, SEQUELA	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.43	DX	LEAKAGE OF VASCULAR DIALYSIS CATHETER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.43XA	DX	LEAKAGE OF VASCULAR DIALYSIS CATHETER, INITIAL ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.43XD	DX	LEAKAGE OF VASCULAR DIALYSIS CATHETER, SUBSEQUENT ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.43XS	DX	LEAKAGE OF VASCULAR DIALYSIS CATHETER, SEQUELA	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.49	DX	OTHER COMPLICATION OF VASCULAR DIALYSIS CATHETER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.49XA	DX	OTHER COMPLICATION OF VASCULAR DIALYSIS CATHETER, INITIAL ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.49XD	DX	OTHER COMPLICATION OF VASCULAR DIALYSIS CATHETER, SUBSEQUENT ENCOUNTER	ICD-10-CM

14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T82.49XS	DX	OTHER COMPLICATION OF VASCULAR DIALYSIS CATHETER, SEQUELA	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.611	DX	BREAKDOWN (MECHANICAL) OF INTRAPERITONEAL DIALYSIS CATHETER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.611A	DX	BREAKDOWN (MECHANICAL) OF INTRAPERITONEAL DIALYSIS CATHETER, INITIAL ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.611D	DX	BREAKDOWN (MECHANICAL) OF INTRAPERITONEAL DIALYSIS CATHETER, SUBSEQUENT ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.611S	DX	BREAKDOWN (MECHANICAL) OF INTRAPERITONEAL DIALYSIS CATHETER, SEQUELA	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.621	DX	DISPLACEMENT OF INTRAPERITONEAL DIALYSIS CATHETER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.621A	DX	DISPLACEMENT OF INTRAPERITONEAL DIALYSIS CATHETER, INITIAL ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.621D	DX	DISPLACEMENT OF INTRAPERITONEAL DIALYSIS CATHETER, SUBSEQUENT ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.621S	DX	DISPLACEMENT OF INTRAPERITONEAL DIALYSIS CATHETER, SEQUELA	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.631	DX	LEAKAGE OF INTRAPERITONEAL DIALYSIS CATHETER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.631A	DX	LEAKAGE OF INTRAPERITONEAL DIALYSIS CATHETER, INITIAL ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.631D	DX	LEAKAGE OF INTRAPERITONEAL DIALYSIS CATHETER, SUBSEQUENT ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.631S	DX	LEAKAGE OF INTRAPERITONEAL DIALYSIS CATHETER, SEQUELA	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.691	DX	OTHER MECHANICAL COMPLICATION OF INTRAPERITONEAL DIALYSIS CATHETER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.691A	DX	OTHER MECHANICAL COMPLICATION OF INTRAPERITONEAL DIALYSIS CATHETER, INITIAL ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.691D	DX	OTHER MECHANICAL COMPLICATION OF INTRAPERITONEAL DIALYSIS CATHETER, SUBSEQUENT ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.691S	DX	OTHER MECHANICAL COMPLICATION OF INTRAPERITONEAL DIALYSIS CATHETER, SEQUELA	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.71	DX	INFECTION AND INFLAMMATORY REACTION DUE TO PERITONEAL DIALYSIS CATHETER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.71XA	DX	INFECTION AND INFLAMMATORY REACTION DUE TO PERITONEAL DIALYSIS CATHETER, INITIAL ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.71XD	DX	INFECTION AND INFLAMMATORY REACTION DUE TO PERITONEAL DIALYSIS CATHETER, SUBSEQUENT ENCOUNTER	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T85.71XS	DX	INFECTION AND INFLAMMATORY REACTION DUE TO PERITONEAL DIALYSIS CATHETER, SEQUELA	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	Y841	DX	KIDNEY DIALYSIS AS THE CAUSE OF ABNORMAL REACTION OF THE PATIENT, OR OF LATER COMPLICATION, WITHOUT MENTION OF MISADVENTURE AT THE TIME OF THE PROCEDURE	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	Z94.0	DX	KIDNEY TRANSPLANT STATUS	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T861	DX	COMPLICATIONS OF KIDNEY TRANSPLANT	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T8610	DX	UNSPECIFIED COMPLICATION OF KIDNEY TRANSPLANT	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T8611	DX	KIDNEY TRANSPLANT REJECTION	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T8612	DX	KIDNEY TRANSPLANT FAILURE	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T8613	DX	KIDNEY TRANSPLANT INFECTION	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	T8619	DX	OTHER COMPLICATION OF KIDNEY TRANSPLANT	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	Z48.22	DX	ENCOUNTER FOR AFTERCARE FOLLOWING KIDNEY TRANSPLANT	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	5A1D70Z	PX	PERFORMANCE OF URINARY FILTRATION, INTERMITTENT, LESS THAN 6 HOURS PER DAY	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	5A1D80Z	PX	PERFORMANCE OF URINARY FILTRATION, PROLONGED INTERMITTENT, 6-18 HOURS PER DAY	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	5A1D90Z	PX	PERFORMANCE OF URINARY FILTRATION, CONTINUOUS, GREATER THAN 18 HOURS PER DAY	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	5A1D00Z	PX	PERFORMANCE OF URINARY FILTRATION, SINGLE	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	5A1D60Z	PX	PERFORMANCE OF URINARY FILTRATION, MULTIPLE	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	3E1M39Z	PX	IRRIGATION OF PERITONEAL CAVITY USING DIALYSATE, PERCUTANEOUS APPROACH	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	0TY0020	PX	TRANSPLANTATION OF RIGHT KIDNEY, ALLOGENEIC, OPEN APPROACH	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	0TY0021	PX	TRANSPLANTATION OF RIGHT KIDNEY, SYNGENEIC, OPEN APPROACH	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	0TY0022	PX	TRANSPLANTATION OF RIGHT KIDNEY, ZOOPLASTIC, OPEN APPROACH	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	0TY1020	PX	TRANSPLANTATION OF LEFT KIDNEY, ALLOGENEIC, OPEN APPROACH	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	0TY1021	PX	TRANSPLANTATION OF LEFT KIDNEY, SYNGENEIC, OPEN APPROACH	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	0TY1022	PX	TRANSPLANTATION OF LEFT KIDNEY, ZOOPLASTIC, OPEN APPROACH	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	0TS00ZZ	PX	REPOSITION RIGHT KIDNEY, OPEN APPROACH	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	0TS10ZZ	PX	REPOSITION LEFT KIDNEY, OPEN APPROACH	ICD-10-CM
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90989	PX	DIALYSIS TRAINING, PATIENT, INCLUDING HELPER WHERE APPLICABLE, ANY MODE, COMPLETED COURSE	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90993	PX	DIALYSIS TRAINING, PATIENT, INCLUDING HELPER WHERE APPLICABLE, ANY MODE, COURSE NOT COMPLETED, PER TRAINING SESSION	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90999	PX	UNLISTED DIALYSIS PROCEDURE, INPATIENT OR OUTPATIENT	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	99512	PX	HOME VISIT FOR HEMODIALYSIS	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	99559	PX	HOME INFUSION OF PERITONEAL DIALYSIS, PER DIEM / HOME INFUSION OF PERITONEAL DIALYSIS, PER VISIT	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90925	PX	END STAGE RENAL DISEASE (ESRD) RELATED SERVICES (LESS THAN FULL MONTH), PER DAY; FOR PATIENTS TWENTY YEARS OF AGE AND OVER / END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES (LESS THAN FULL MONTH), PER DAY; FOR PATIENTS TWENTY YEARS OF AGE AND OLDER / END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES (LESS THAN FULL MONTH), PER DAY; FOR PATIENTS TWENTY YEARS OF AGE AND OVER RENAL ALLOTRANSPLANTATION, IMPLANTATION OF GRAFT; WITHOUT RECIPIENT	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	50360	PX	NEPHRECTOMY	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	50365	PX	RENAL ALLOTRANSPLANTATION, IMPLANTATION OF GRAFT; WITH RECIPIENT	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	50370	PX	NEPHRECTOMY	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	50370	PX	REMOVAL OF TRANSPLANTED RENAL ALLOGRAFT	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	50380	PX	RENAL AUTOTRANSPLANTATION, REIMPLANTATION OF KIDNEY	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	G0257	PX	UNSCHEMULATED OR EMERGENCY DIALYSIS TREATMENT FOR AN ESRD PATIENT IN A HOSPITAL OUTPATIENT DEPARTMENT THAT IS NOT CERTIFIED AS AN ESRD FACILITY	CPT/HCPCS

14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	G0319	PX	END STAGE RENAL DISEASE (ESRD) RELATED SERVICES DURING THE COURSE OF TREATMENT, FOR PATIENTS 20 YEARS OF AGE AND OVER; WITH 1 FACE-TO-FACE PHYSICIAN VISIT PER MONTH / END STAGE RENAL DISEASE (ESRD) RELATED SERVICES DURING THE COURSE OF TREATMENT, FOR PATIENTS 20 YEARS OF AGE AND OVER; WITH 1 FACE-TO-FACE PHYSICIAN VISIT PER MONTH	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	G0326	PX	END STAGE RENAL DISEASE (ESRD) RELATED SERVICES FOR HOME DIALYSIS (LESS THAN FULL MONTH), PER DAY; FOR PATIENTS BETWEEN TWELVE AND NINETEEN YEARS OF AGE / END STAGE RENAL DISEASE (ESRD) RELATED SERVICES LESS THAN FULL MONTH, PER DAY; FOR PATIENTS BETWEEN TWELVE AND NINETEEN YEARS OF AGE HOME THERAPY, HEMODIALYSIS; ADMINISTRATIVE SERVICES, PROFESSIONAL PHARMACY SERVICES, CARE COORDINATION, AND ALL NECESSARY SUPPLIES AND EQUIPMENT (DRUGS AND NURSING SERVICES CODED SEPARATELY), PER DIEM	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	S9335	PX	END STAGE RENAL DISEASE (ESRD) RELATED SERVICES PER FULL MONTH; FOR PATIENTS BETWEEN TWELVE AND NINETEEN YEARS OF AGE TO INCLUDE MONITORING FOR THE ADEQUACY OF NUTRITION, ASSESSMENT OF GROWTH AND DEVELOPMENT, AND COUNSELING OF PARENTS / END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES PER FULL MONTH; FOR PATIENTS BETWEEN TWELVE AND NINETEEN YEARS OF AGE TO INCLUDE MONITORING FOR THE ADEQUACY OF NUTRITION, ASSESSMENT OF GROWTH AND DEVELOPMENT, AND COUNSELING OF PARENTS	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90920	PX	END STAGE RENAL DISEASE (ESRD) RELATED SERVICES PER FULL MONTH; FOR PATIENTS TWENTY YEARS OF AGE AND OVER / END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES PER FULL MONTH; FOR PATIENTS TWENTY YEARS OF AGE AND OLDER / END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES PER FULL MONTH; FOR PATIENTS TWENTY YEARS OF AGE AND OVER	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90921	PX	END STAGE RENAL DISEASE (ESRD) RELATED SERVICES (LESS THAN FULL MONTH), PER DAY; FOR PATIENTS BETWEEN TWELVE AND NINETEEN YEARS OF AGE / END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES (LESS THAN FULL MONTH), PER DAY; FOR PATIENTS BETWEEN TWELVE AND NINETEEN YEARS OF AGE	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90924	PX	END STAGE RENAL DISEASE (ESRD) RELATED SERVICES (LESS THAN FULL MONTH), PER DAY; FOR PATIENTS TWENTY YEARS OF AGE AND OVER / END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES (LESS THAN FULL MONTH), PER DAY; FOR PATIENTS TWENTY YEARS OF AGE AND OLDER / END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES (LESS THAN FULL MONTH), PER DAY; FOR PATIENTS TWENTY YEARS OF AGE AND OVER	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90925	PX	HEMODIALYSIS PROCEDURE WITH SINGLE EVALUATION BY A PHYSICIAN OR OTHER QUALIFIED HEALTH CARE PROFESSIONAL	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90935	PX	HEMODIALYSIS PROCEDURE REQUIRING REPEATED EVALUATION(S) WITH OR WITHOUT SUBSTANTIAL REVISION OF DIALYSIS PRESCRIPTION	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90937	PX	HEMODIALYSIS ACCESS FLOW STUDY TO DETERMINE BLOOD FLOW IN GRAFTS AND ARTERIOVENOUS FISTULAE BY AN INDICATOR DILUTION METHOD, HOOK-UP; TRANSCUTANEOUS MEASUREMENT AND DISCONNECTION	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90939	PX	HEMODIALYSIS ACCESS FLOW STUDY TO DETERMINE BLOOD FLOW IN GRAFTS AND ARTERIOVENOUS FISTULAE BY AN INDICATOR METHOD	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90940	PX	DIALYSIS PROCEDURE OTHER THAN HEMODIALYSIS (EG, PERITONEAL DIALYSIS, HEMOFILTRATION, OR OTHER CONTINUOUS RENAL REPLACEMENT THERAPIES), WITH SINGLE EVALUATION BY A PHYSICIAN OR OTHER QUALIFIED HEALTH CARE PROFESSIONAL	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90945	PX	DIALYSIS PROCEDURE OTHER THAN HEMODIALYSIS (EG, PERITONEAL DIALYSIS, HEMOFILTRATION, OR OTHER CONTINUOUS RENAL REPLACEMENT THERAPIES) REQUIRING REPEATED EVALUATIONS BY A PHYSICIAN OR OTHER QUALIFIED HEALTH CARE PROFESSIONAL, WITH OR WITHOUT SUBSTANTIAL REVISION OF DIALYSIS PRESCRIPTION	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90947	PX	END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES MONTHLY, FOR PATIENTS 12-19 YEARS OF AGE TO INCLUDE MONITORING FOR THE ADEQUACY OF NUTRITION, ASSESSMENT OF GROWTH AND DEVELOPMENT, AND COUNSELING OF PARENTS; WITH 4 OR MORE FACE-TO-FACE VISITS BY A PHYSICIAN OR OTHER QUALIFIED HEALTH CARE PROFESSIONAL PER MONTH	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90957	PX	END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES MONTHLY, FOR PATIENTS 12-19 YEARS OF AGE TO INCLUDE MONITORING FOR THE ADEQUACY OF NUTRITION, ASSESSMENT OF GROWTH AND DEVELOPMENT, AND COUNSELING OF PARENTS; WITH 2-3 FACE-TO-FACE VISITS BY A PHYSICIAN OR OTHER QUALIFIED HEALTH CARE PROFESSIONAL PER MONTH	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90958	PX	END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES MONTHLY, FOR PATIENTS 12-19 YEARS OF AGE TO INCLUDE MONITORING FOR THE ADEQUACY OF NUTRITION, ASSESSMENT OF GROWTH AND DEVELOPMENT, AND COUNSELING OF PARENTS; WITH 1 FACE-TO-FACE VISIT BY A PHYSICIAN OR OTHER QUALIFIED HEALTH CARE PROFESSIONAL PER MONTH	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90959	PX	END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES MONTHLY, FOR PATIENTS 20 YEARS OF AGE AND OLDER; WITH 4 OR MORE FACE-TO-FACE VISITS BY A PHYSICIAN OR OTHER QUALIFIED HEALTH CARE PROFESSIONAL PER MONTH	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90960	PX	END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES MONTHLY, FOR PATIENTS 20 YEARS OF AGE AND OLDER; WITH 2-3 FACE-TO-FACE VISITS BY A PHYSICIAN OR OTHER QUALIFIED HEALTH CARE PROFESSIONAL PER MONTH	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90961	PX	END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES MONTHLY, FOR PATIENTS 20 YEARS OF AGE AND OLDER; WITH 1 FACE-TO-FACE VISIT BY A PHYSICIAN OR OTHER QUALIFIED HEALTH CARE PROFESSIONAL PER MONTH	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90962	PX	END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES FOR HOME DIALYSIS PER FULL MONTH, FOR PATIENTS 12-19 YEARS OF AGE TO INCLUDE MONITORING FOR THE ADEQUACY OF NUTRITION, ASSESSMENT OF GROWTH AND DEVELOPMENT, AND COUNSELING OF PARENTS	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90965	PX	END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES FOR HOME DIALYSIS PER FULL MONTH, FOR PATIENTS 20 YEARS OF AGE AND OLDER	CPT/HCPCS
14 eGFR <15 mL/Min/1.73 m2 or on chronic dialysis	90966	PX	END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES FOR HOME DIALYSIS PER FULL MONTH, FOR PATIENTS 20 YEARS OF AGE AND OLDER	CPT/HCPCS

14	eGFR <15 mL/Min/1.73 m <sup>2</sup> or on chronic dialysis	90969	PX	END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES FOR DIALYSIS LESS THAN A FULL MONTH OF SERVICE, PER DAY; FOR PATIENTS 12-19 YEARS OF AGE	CPT/HCPCS
14	eGFR <15 mL/Min/1.73 m <sup>2</sup> or on chronic dialysis	90970	PX	END-STAGE RENAL DISEASE (ESRD) RELATED SERVICES FOR DIALYSIS LESS THAN A FULL MONTH OF SERVICE, PER DAY; FOR PATIENTS 20 YEARS OF AGE AND OLDER	CPT/HCPCS
15	thyroid carcinoma Family or personal history of multiple endocrine neoplasia or medullary	E3122	DX	MULTIPLE ENDOCRINE NEOPLASIA [MEN] TYPE IIA	ICD-10-CM
15	thyroid carcinoma Family or personal history of multiple endocrine neoplasia or medullary	E3123	DX	MULTIPLE ENDOCRINE NEOPLASIA [MEN] TYPE IIB	ICD-10-CM
15	thyroid carcinoma	C73	DX	MALIGNANT NEOPLASM OF THYROID GLAND	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	G43.609	DX	PERSISTENT MIGRAINE AURA WITH CEREBRAL INFARCTION, NOT INTRACTABLE, WITHOUT STATUS MIGRAINOSUS	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	G43.619	DX	PERSISTENT MIGRAINE AURA WITH CEREBRAL INFARCTION, INTRACTABLE, WITHOUT STATUS MIGRAINOSUS	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	G45.0	DX	VERTEBRO-BASILAR ARTERY SYNDROME	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	G45.1	DX	CAROTID ARTERY SYNDROME (HEMISPHERIC)	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	G45.2	DX	MULTIPLE AND BILATERAL PRECEREBRAL ARTERY SYNDROMES	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	G45.8	DX	OTHER TRANSIENT CEREBRAL ISCHEMIC ATTACKS AND RELATED SYNDROMES	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	G45.9	DX	TRANSIENT CEREBRAL ISCHEMIC ATTACK, UNSPECIFIED	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	G46.0	DX	MIDDLE CEREBRAL ARTERY SYNDROME	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	G46.1	DX	ANTERIOR CEREBRAL ARTERY SYNDROME	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	G46.2	DX	POSTERIOR CEREBRAL ARTERY SYNDROME	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	G46.3	DX	BRAIN STEM STROKE SYNDROME	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	G46.4	DX	CEREBELLAR STROKE SYNDROME	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21	DX	ACUTE MYOCARDIAL INFARCTION	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21.0	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF ANTERIOR WALL	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21.01	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING LEFT MAIN CORONARY ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21.02	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING LEFT ANTERIOR DESCENDING CORONARY ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21.09	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING OTHER CORONARY ARTERY OF ANTERIOR WALL	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21.1	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF INFERIOR WALL	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21.11	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING RIGHT CORONARY ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21.19	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING OTHER CORONARY ARTERY OF INFERIOR WALL	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21.2	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF OTHER SITES	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21.21	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING LEFT CIRCUMFLEX CORONARY ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21.29	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING OTHER SITES	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21.3	DX	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF UNSPECIFIED SITE	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21.4	DX	NON-ST ELEVATION (NSTEMI) MYOCARDIAL INFARCTION	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21.9	DX	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21A	DX	OTHER TYPE OF MYOCARDIAL INFARCTION	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21A1	DX	MYOCARDIAL INFARCTION TYPE 2	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I21A9	DX	OTHER MYOCARDIAL INFARCTION TYPE	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I22	DX	SUBSEQUENT ST ELEVATION (STEMI) AND NON-ST ELEVATION (NSTEMI) MYOCARDIAL INFARCTION	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I22.0	DX	SUBSEQUENT ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF ANTERIOR WALL	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I22.1	DX	SUBSEQUENT ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF INFERIOR WALL	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I22.2	DX	SUBSEQUENT NON-ST ELEVATION (NSTEMI) MYOCARDIAL INFARCTION	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I22.8	DX	SUBSEQUENT ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF OTHER SITES	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I22.9	DX	SUBSEQUENT ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF UNSPECIFIED SITE	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.0	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM CAROTID SIPHON AND BIFURCATION	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.00	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM UNSPECIFIED CAROTID SIPHON AND BIFURCATION	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.01	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM RIGHT CAROTID SIPHON AND BIFURCATION	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.02	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM LEFT CAROTID SIPHON AND BIFURCATION	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.1	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM MIDDLE CEREBRAL ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.10	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM UNSPECIFIED MIDDLE CEREBRAL ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.11	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM RIGHT MIDDLE CEREBRAL ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.12	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM LEFT MIDDLE CEREBRAL ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.2	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM ANTERIOR COMMUNICATING ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.3	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM POSTERIOR COMMUNICATING ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.30	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM UNSPECIFIED POSTERIOR COMMUNICATING ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.31	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM RIGHT POSTERIOR COMMUNICATING ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.32	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM LEFT POSTERIOR COMMUNICATING ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.4	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM BASILAR ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.5	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM VERTEBRAL ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.50	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM UNSPECIFIED VERTEBRAL ARTERY	ICD-10-CM
17	Cardiovascular event or intervention <60 days prior to screening	I60.51	DX	NONTRAUMATIC SUBARACHNOID HEMORRHAGE FROM RIGHT VERTEBRAL ARTERY	ICD-10-CM



































































































































































17 Cardiovascular event or intervention <60 days prior to screening	0259T	PX	TRANSTHORACIC CARDIAC EXPOSURE (EG, STERNOTOMY, THORACOTOMY, SUBXIPHOID) FOR CATHETER-DELIVERED AORTIC VALVE REPLACEMENT; WITH CARDIOPULMONARY BYPASS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	0262T	PX	IMPLANTATION OF CATHETER-DELIVERED PROSTHETIC PULMONARY VALVE, ENDOVASCULAR APPROACH	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	0343T	PX	TRANSCATHETER MITRAL VALVE REPAIR PERCUTANEOUS APPROACH INCLUDING TRANSSEPTAL PUNCTURE WHEN PERFORMED; INITIAL PROSTHESIS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	0344T	PX	TRANSCATHETER MITRAL VALVE REPAIR PERCUTANEOUS APPROACH INCLUDING TRANSSEPTAL PUNCTURE WHEN PERFORMED; ADDITIONAL PROSTHESIS(ES) DURING SAME SESSION (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	32851	PX	LUNG TRANSPLANT, SINGLE; WITHOUT CARDIOPULMONARY BYPASS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	32852	PX	LUNG TRANSPLANT, SINGLE; WITH CARDIOPULMONARY BYPASS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	32853	PX	LUNG TRANSPLANT, DOUBLE (BILATERAL SEQUENTIAL OR EN BLOC); WITHOUT CARDIOPULMONARY BYPASS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	32854	PX	LUNG TRANSPLANT, DOUBLE (BILATERAL SEQUENTIAL OR EN BLOC); WITH CARDIOPULMONARY BYPASS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33361	PX	TRANSCATHETER AORTIC VALVE REPLACEMENT (TAVR/TAVI) WITH PROSTHETIC VALVE, PERCUTANEOUS FEMORAL ARTERY APPROACH	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33362	PX	TRANSCATHETER AORTIC VALVE REPLACEMENT (TAVR/TAVI) WITH PROSTHETIC VALVE, OPEN FEMORAL ARTERY APPROACH	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33363	PX	TRANSCATHETER AORTIC VALVE REPLACEMENT (TAVR/TAVI) WITH PROSTHETIC VALVE, OPEN AXILLARY ARTERY APPROACH	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33364	PX	TRANSCATHETER AORTIC VALVE REPLACEMENT (TAVR/TAVI) WITH PROSTHETIC VALVE, OPEN ILIAC ARTERY APPROACH	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33365	PX	TRANSCATHETER AORTIC VALVE REPLACEMENT (TAVR/TAVI) WITH PROSTHETIC VALVE, TRANSAORTIC APPROACH (EG, MEDIAN STERNOTOMY, MEDIASTINOTOMY)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33367	PX	TRANSCATHETER AORTIC VALVE REPLACEMENT (TAVR/TAVI) WITH PROSTHETIC VALVE; CARDIOPULMONARY BYPASS SUPPORT WITH PERCUTANEOUS PERIPHERAL ARTERIAL AND VENOUS CANNULATION (EG, FEMORAL VESSELS) (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33368	PX	TRANSCATHETER AORTIC VALVE REPLACEMENT (TAVR/TAVI) WITH PROSTHETIC VALVE; CARDIOPULMONARY BYPASS SUPPORT WITH OPEN PERIPHERAL ARTERIAL AND VENOUS CANNULATION (EG, FEMORAL, ILIAC, AXILLARY VESSELS) (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33369	PX	TRANSCATHETER AORTIC VALVE REPLACEMENT (TAVR/TAVI) WITH PROSTHETIC VALVE; CARDIOPULMONARY BYPASS SUPPORT WITH CENTRAL ARTERIAL AND VENOUS CANNULATION (EG, AORTA, RIGHT ATRIUM, PULMONARY ARTERY) (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33400	PX	VALVULOPLASTY, AORTIC VALVE; OPEN, WITH CARDIOPULMONARY BYPASS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33401	PX	VALVULOPLASTY, AORTIC VALVE; OPEN, WITH INFLOW OCCLUSION	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33403	PX	VALVULOPLASTY, AORTIC VALVE; USING TRANSENVENRICULAR DILATION, WITH CARDIOPULMONARY BYPASS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33405	PX	REPLACEMENT, AORTIC VALVE, OPEN, WITH CARDIOPULMONARY BYPASS; WITH PROSTHETIC VALVE OTHER THAN HOMOGRAFT OR STENTLESS VALVE	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33406	PX	REPLACEMENT, AORTIC VALVE, OPEN, WITH CARDIOPULMONARY BYPASS; WITH ALLOGRAFT VALVE (FREEHAND)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33410	PX	REPLACEMENT, AORTIC VALVE, OPEN, WITH CARDIOPULMONARY BYPASS; WITH STENTLESS TISSUE VALVE	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33418	PX	TRANSCATHETER MITRAL VALVE REPAIR, PERCUTANEOUS APPROACH, INCLUDING TRANSSEPTAL PUNCTURE WHEN PERFORMED; INITIAL PROSTHESIS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33419	PX	TRANSCATHETER MITRAL VALVE REPAIR, PERCUTANEOUS APPROACH, INCLUDING TRANSSEPTAL PUNCTURE WHEN PERFORMED; ADDITIONAL PROSTHESIS(ES) DURING SAME SESSION (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33420	PX	VALVOTOMY, MITRAL VALVE; CLOSED HEART	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33422	PX	VALVOTOMY, MITRAL VALVE; OPEN HEART, WITH CARDIOPULMONARY BYPASS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33425	PX	VALVULOPLASTY, MITRAL VALVE, WITH CARDIOPULMONARY BYPASS;	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33426	PX	VALVULOPLASTY, MITRAL VALVE, WITH CARDIOPULMONARY BYPASS; WITH PROSTHETIC RING	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33427	PX	VALVULOPLASTY, MITRAL VALVE, WITH CARDIOPULMONARY BYPASS; RADICAL RECONSTRUCTION, WITH OR WITHOUT RING	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33430	PX	REPLACEMENT, MITRAL VALVE, WITH CARDIOPULMONARY BYPASS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33460	PX	VALVECTOMY, TRICUSPID VALVE, WITH CARDIOPULMONARY BYPASS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33463	PX	VALVULOPLASTY, TRICUSPID VALVE; WITHOUT RING INSERTION	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33464	PX	VALVULOPLASTY, TRICUSPID VALVE; WITH RING INSERTION	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33465	PX	REPLACEMENT, TRICUSPID VALVE, WITH CARDIOPULMONARY BYPASS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33468	PX	TRICUSPID VALVE REPOSITIONING AND PPLICATION FOR EBSTEIN ANOMALY	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33475	PX	REPLACEMENT, PULMONARY VALVE	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33477	PX	TRANSCATHETER PULMONARY VALVE IMPLANTATION, PERCUTANEOUS APPROACH, INCLUDING PRE-STENTING OF THE VALVE DELIVERY SITE, WHEN PERFORMED	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33496	PX	REPAIR OF NON-STRUCTURAL PROSTHETIC VALVE DYSFUNCTION WITH CARDIOPULMONARY BYPASS (SEPARATE PROCEDURE)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33510	PX	CORONARY ARTERY BYPASS, VEIN ONLY; SINGLE CORONARY VENOUS GRAFT	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33511	PX	CORONARY ARTERY BYPASS, VEIN ONLY; 2 CORONARY VENOUS GRAFTS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33512	PX	CORONARY ARTERY BYPASS, VEIN ONLY; 3 CORONARY VENOUS GRAFTS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33513	PX	CORONARY ARTERY BYPASS, VEIN ONLY; 4 CORONARY VENOUS GRAFTS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33514	PX	CORONARY ARTERY BYPASS, VEIN ONLY; 5 CORONARY VENOUS GRAFTS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33516	PX	CORONARY ARTERY BYPASS, VEIN ONLY; 6 OR MORE CORONARY VENOUS GRAFTS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33517	PX	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); SINGLE VEIN GRAFT (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33518	PX	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 2 VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS

17 Cardiovascular event or intervention <60 days prior to screening	33519	PX	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 3 VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33521	PX	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 4 VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33522	PX	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 5 VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33523	PX	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 6 OR MORE VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33530	PX	REOPERATION, CORONARY ARTERY BYPASS PROCEDURE OR VALVE PROCEDURE, MORE THAN 1 MONTH AFTER ORIGINAL OPERATION (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33533	PX	CORONARY ARTERY BYPASS, USING ARTERIAL GRAFT(S); SINGLE ARTERIAL GRAFT	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33534	PX	CORONARY ARTERY BYPASS, USING ARTERIAL GRAFT(S); 2 CORONARY ARTERIAL GRAFTS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33535	PX	CORONARY ARTERY BYPASS, USING ARTERIAL GRAFT(S); 3 CORONARY ARTERIAL GRAFTS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33536	PX	CORONARY ARTERY BYPASS, USING ARTERIAL GRAFT(S); 4 OR MORE CORONARY ARTERIAL GRAFTS	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33542	PX	MYOCARDIAL RESECTION (EG, VENTRICULAR ANEURYSMECTOMY)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33545	PX	REPAIR OF POSTINFARCTION VENTRICULAR SEPTAL DEFECT, WITH OR WITHOUT MYOCARDIAL RESECTION	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33548	PX	SURGICAL VENTRICULAR RESTORATION PROCEDURE, INCLUDES PROSTHETIC PATCH, WHEN PERFORMED (EG, VENTRICULAR REMODELING, SVR, SAVER, DOR PROCEDURES)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33572	PX	CORONARY ENDARTERECTOMY, OPEN, ANY METHOD, OF LEFT ANTERIOR DESCENDING, CIRCUMFLEX, OR RIGHT CORONARY ARTERY PERFORMED IN CONJUNCTION WITH CORONARY ARTERY BYPASS GRAFT PROCEDURE, EACH VESSEL (LIST SEPARATELY IN ADDITION TO PRIMARY PROCEDURE)	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33665	PX	REPAIR OF INTERMEDIATE OR TRANSITIONAL ATRIOVENTRICULAR CANAL, WITH OR WITHOUT ATRIOVENTRICULAR VALVE REPAIR	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33935	PX	HEART-LUNG TRANSPLANT WITH RECIPIENT CARDIOTOMY-PNEUMONECTOMY	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	33999	PX	UNLISTED PROCEDURE, CARDIAC SURGERY	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	S2060	PX	LOBAR LUNG TRANSPLANTATION	CPT/HCPCS
17 Cardiovascular event or intervention <60 days prior to screening	I20.0	DX	UNSTABLE ANGINA	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I24.0	DX	ACUTE CORONARY THROMBOSIS NOT RESULTING IN MYOCARDIAL INFARCTION	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I24.1	DX	DRESSLER'S SYNDROME	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I24.8*	DX	OTHER FORMS OF ACUTE ISCHEMIC HEART DISEASE	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I24.81	DX	ACUTE CORONARY MICROVASCULAR DYSFUNCTION	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I24.89	DX	OTHER FORMS OF ACUTE ISCHEMIC HEART DISEASE	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I24.9	DX	ACUTE ISCHEMIC HEART DISEASE, UNSPECIFIED	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I25.110	DX	ATHEROSCLEROTIC HEART DISEASE OF NATIVE CORONARY ARTERY WITH UNSTABLE ANGINA PECTORIS	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I25.700	DX	ATHEROSCLEROSIS OF CORONARY ARTERY BYPASS GRAFT(S), UNSPECIFIED, WITH UNSTABLE ANGINA PECTORIS	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I25.710	DX	ATHEROSCLEROSIS OF AUTOLOGOUS VEIN CORONARY ARTERY BYPASS GRAFT(S) WITH UNSTABLE ANGINA PECTORIS	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I25.720	DX	ATHEROSCLEROSIS OF AUTOLOGOUS ARTERY CORONARY ARTERY BYPASS GRAFT(S) WITH UNSTABLE ANGINA PECTORIS	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I25.730	DX	ATHEROSCLEROSIS OF NONAUTOLOGOUS BIOLOGICAL CORONARY ARTERY BYPASS GRAFT(S) WITH UNSTABLE ANGINA PECTORIS	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I25.750	DX	ATHEROSCLEROSIS OF NATIVE CORONARY ARTERY OF TRANSPLANTED HEART WITH UNSTABLE ANGINA	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I25.760	DX	ATHEROSCLEROSIS OF BYPASS GRAFT OF CORONARY ARTERY OF TRANSPLANTED HEART WITH UNSTABLE ANGINA	ICD-10-CM
17 Cardiovascular event or intervention <60 days prior to screening	I25.790	DX	ATHEROSCLEROSIS OF OTHER CORONARY ARTERY BYPASS GRAFT(S) WITH UNSTABLE ANGINA PECTORIS	ICD-10-CM
18 GLP-1-RA or pramlintide treatment within 3 months prior to Visit 1	LIXISENATIDE	RX		Generic
18 GLP-1-RA or pramlintide treatment within 3 months prior to Visit 2	DULAGLUTIDE	RX		Generic
18 GLP-1-RA or pramlintide treatment within 3 months prior to Visit 1	LIRAGLUTIDE	RX		Generic
18 GLP-1-RA or pramlintide treatment within 3 months prior to Visit 1	ALBIGLUTIDE	RX		Generic
18 GLP-1-RA or pramlintide treatment within 3 months prior to Visit 1	EXENATIDE	RX		Generic
18 GLP-1-RA or pramlintide treatment within 3 months prior to Visit 1	EXENATIDE MIC	RX		Generic
18 GLP-1-RA or pramlintide treatment within 3 months prior to Visit 1	PRAMLINTIDE A	RX		Generic
18 GLP-1-RA or pramlintide treatment within 3 months prior to Visit 1	SEMGALUTIDE	RX		Generic
19 Women who is pregnant or breastfeeding	H35.1	DX	RETINOPATHY OF PREMATURITY	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.10	DX	RETINOPATHY OF PREMATURITY, UNSPECIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.101	DX	RETINOPATHY OF PREMATURITY, UNSPECIFIED, RIGHT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.102	DX	RETINOPATHY OF PREMATURITY, UNSPECIFIED, LEFT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.103	DX	RETINOPATHY OF PREMATURITY, UNSPECIFIED, BILATERAL	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.109	DX	RETINOPATHY OF PREMATURITY, UNSPECIFIED, UNSPECIFIED EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.11	DX	RETINOPATHY OF PREMATURITY, STAGE 0	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.111	DX	RETINOPATHY OF PREMATURITY, STAGE 0, RIGHT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.112	DX	RETINOPATHY OF PREMATURITY, STAGE 0, LEFT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.113	DX	RETINOPATHY OF PREMATURITY, STAGE 0, BILATERAL	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.119	DX	RETINOPATHY OF PREMATURITY, STAGE 0, UNSPECIFIED EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.12	DX	RETINOPATHY OF PREMATURITY, STAGE 1	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.121	DX	RETINOPATHY OF PREMATURITY, STAGE 1, RIGHT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.122	DX	RETINOPATHY OF PREMATURITY, STAGE 1, LEFT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.123	DX	RETINOPATHY OF PREMATURITY, STAGE 1, BILATERAL	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.129	DX	RETINOPATHY OF PREMATURITY, STAGE 1, UNSPECIFIED EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.13	DX	RETINOPATHY OF PREMATURITY, STAGE 2	ICD-10-CM

19 Women who is pregnant or breastfeeding	H35.131	DX	RETINOPATHY OF PREMATURITY, STAGE 2, RIGHT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.132	DX	RETINOPATHY OF PREMATURITY, STAGE 2, LEFT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.133	DX	RETINOPATHY OF PREMATURITY, STAGE 2, BILATERAL	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.139	DX	RETINOPATHY OF PREMATURITY, STAGE 2, UNSPECIFIED EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.14	DX	RETINOPATHY OF PREMATURITY, STAGE 3	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.141	DX	RETINOPATHY OF PREMATURITY, STAGE 3, RIGHT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.142	DX	RETINOPATHY OF PREMATURITY, STAGE 3, LEFT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.143	DX	RETINOPATHY OF PREMATURITY, STAGE 3, BILATERAL	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.149	DX	RETINOPATHY OF PREMATURITY, STAGE 3, UNSPECIFIED EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.15	DX	RETINOPATHY OF PREMATURITY, STAGE 4	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.151	DX	RETINOPATHY OF PREMATURITY, STAGE 4, RIGHT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.152	DX	RETINOPATHY OF PREMATURITY, STAGE 4, LEFT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.153	DX	RETINOPATHY OF PREMATURITY, STAGE 4, BILATERAL	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.159	DX	RETINOPATHY OF PREMATURITY, STAGE 4, UNSPECIFIED EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.16	DX	RETINOPATHY OF PREMATURITY, STAGE 5	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.161	DX	RETINOPATHY OF PREMATURITY, STAGE 5, RIGHT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.162	DX	RETINOPATHY OF PREMATURITY, STAGE 5, LEFT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.163	DX	RETINOPATHY OF PREMATURITY, STAGE 5, BILATERAL	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.169	DX	RETINOPATHY OF PREMATURITY, STAGE 5, UNSPECIFIED EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.17	DX	RETROLENTAL FIBROPLASIA	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.171	DX	RETROLENTAL FIBROPLASIA, RIGHT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.172	DX	RETROLENTAL FIBROPLASIA, LEFT EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.173	DX	RETROLENTAL FIBROPLASIA, BILATERAL	ICD-10-CM
19 Women who is pregnant or breastfeeding	H35.179	DX	RETROLENTAL FIBROPLASIA, UNSPECIFIED EYE	ICD-10-CM
19 Women who is pregnant or breastfeeding	000	DX	ECTOPIC PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.0	DX	ABDOMINAL PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.00	DX	ABDOMINAL PREGNANCY WITHOUT INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.01	DX	ABDOMINAL PREGNANCY WITH INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.1	DX	TUBAL PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.10	DX	TUBAL PREGNANCY WITHOUT INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.101	DX	RIGHT TUBAL PREGNANCY WITHOUT INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.102	DX	LEFT TUBAL PREGNANCY WITHOUT INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.109	DX	UNSPECIFIED TUBAL PREGNANCY WITHOUT INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.11	DX	TUBAL PREGNANCY WITH INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.111	DX	RIGHT TUBAL PREGNANCY WITH INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.112	DX	LEFT TUBAL PREGNANCY WITH INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.119	DX	UNSPECIFIED TUBAL PREGNANCY WITH INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.2	DX	OVARIAN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.20	DX	OVARIAN PREGNANCY WITHOUT INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.201	DX	RIGHT OVARIAN PREGNANCY WITHOUT INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.202	DX	LEFT OVARIAN PREGNANCY WITHOUT INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.209	DX	UNSPECIFIED OVARIAN PREGNANCY WITHOUT INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.21	DX	OVARIAN PREGNANCY WITH INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.211	DX	RIGHT OVARIAN PREGNANCY WITH INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.212	DX	LEFT OVARIAN PREGNANCY WITH INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.219	DX	UNSPECIFIED OVARIAN PREGNANCY WITH INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.8	DX	OTHER ECTOPIC PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.80	DX	OTHER ECTOPIC PREGNANCY WITHOUT INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.81	DX	OTHER ECTOPIC PREGNANCY WITH INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.9	DX	ECTOPIC PREGNANCY, UNSPECIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.90	DX	UNSPECIFIED ECTOPIC PREGNANCY WITHOUT INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	000.91	DX	UNSPECIFIED ECTOPIC PREGNANCY WITH INTRAUTERINE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	001	DX	HYDATIDIFORM MOLE	ICD-10-CM
19 Women who is pregnant or breastfeeding	001.0	DX	CLASSICAL HYDATIDIFORM MOLE	ICD-10-CM
19 Women who is pregnant or breastfeeding	001.1	DX	INCOMPLETE AND PARTIAL HYDATIDIFORM MOLE	ICD-10-CM
19 Women who is pregnant or breastfeeding	001.9	DX	HYDATIDIFORM MOLE, UNSPECIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	002	DX	OTHER ABNORMAL PRODUCTS OF CONCEPTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	002.0	DX	BLIGHTED OVUM AND NONHYDATIDIFORM MOLE	ICD-10-CM
19 Women who is pregnant or breastfeeding	002.1	DX	MISSED ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	002.8	DX	OTHER SPECIFIED ABNORMAL PRODUCTS OF CONCEPTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	002.81	DX	INAPPROPRIATE CHANGE IN QUANTITATIVE HUMAN CHORIONIC GONADOTROPIN (HCG)	ICD-10-CM
19 Women who is pregnant or breastfeeding	002.89	DX	IN EARLY PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	002.9	DX	OTHER ABNORMAL PRODUCTS OF CONCEPTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003	DX	ABNORMAL PRODUCT OF CONCEPTION, UNSPECIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	003	DX	SPONTANEOUS ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.0	DX	GENITAL TRACT AND PELVIC INFECTION FOLLOWING INCOMPLETE SPONTANEOUS	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.1	DX	ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.2	DX	DELAYED OR EXCESSIVE HEMORRHAGE FOLLOWING INCOMPLETE SPONTANEOUS	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.2	DX	ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.2	DX	EMBOLISM FOLLOWING INCOMPLETE SPONTANEOUS ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.2	DX	OTHER AND UNSPECIFIED COMPLICATIONS FOLLOWING INCOMPLETE SPONTANEOUS	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.3	DX	ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.30	DX	UNSPECIFIED COMPLICATION FOLLOWING INCOMPLETE SPONTANEOUS ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.31	DX	SHOCK FOLLOWING INCOMPLETE SPONTANEOUS ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.32	DX	RENAL FAILURE FOLLOWING INCOMPLETE SPONTANEOUS ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.33	DX	METABOLIC DISORDER FOLLOWING INCOMPLETE SPONTANEOUS ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.34	DX	DAMAGE TO PELVIC ORGANS FOLLOWING INCOMPLETE SPONTANEOUS ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.35	DX	OTHER VENOUS COMPLICATIONS FOLLOWING INCOMPLETE SPONTANEOUS ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.36	DX	CARDIAC ARREST FOLLOWING INCOMPLETE SPONTANEOUS ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.37	DX	SEPSIS FOLLOWING INCOMPLETE SPONTANEOUS ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.38	DX	URINARY TRACT INFECTION FOLLOWING INCOMPLETE SPONTANEOUS ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.39	DX	INCOMPLETE SPONTANEOUS ABORTION WITH OTHER COMPLICATIONS	ICD-10-CM
19 Women who is pregnant or breastfeeding	003.4	DX	INCOMPLETE SPONTANEOUS ABORTION WITHOUT COMPLICATION	ICD-10-CM











19 Women who is pregnant or breastfeeding	O14	DX	PRE-ECLAMPSIA-ECLAMPSIA	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.0	DX	MILD TO MODERATE PRE-ECLAMPSIA	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.00	DX	MILD TO MODERATE PRE-ECLAMPSIA, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.02	DX	MILD TO MODERATE PRE-ECLAMPSIA, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.03	DX	MILD TO MODERATE PRE-ECLAMPSIA, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.04	DX	MILD TO MODERATE PRE-ECLAMPSIA, COMPLICATING CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.05	DX	MILD TO MODERATE PRE-ECLAMPSIA, COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.1	DX	SEVERE PRE-ECLAMPSIA	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.10	DX	SEVERE PRE-ECLAMPSIA, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.12	DX	SEVERE PRE-ECLAMPSIA, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.13	DX	SEVERE PRE-ECLAMPSIA, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.14	DX	SEVERE PRE-ECLAMPSIA, COMPLICATING CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.15	DX	SEVERE PRE-ECLAMPSIA, COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.2	DX	HELLP SYNDROME	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.20	DX	HELLP SYNDROME (HELLP), UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.22	DX	HELLP SYNDROME (HELLP), SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.23	DX	HELLP SYNDROME (HELLP), THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.24	DX	HELLP SYNDROME, COMPLICATING CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.25	DX	HELLP SYNDROME, COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.9	DX	UNSPECIFIED PRE-ECLAMPSIA	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.90	DX	UNSPECIFIED PRE-ECLAMPSIA, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.92	DX	UNSPECIFIED PRE-ECLAMPSIA, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.93	DX	UNSPECIFIED PRE-ECLAMPSIA, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.94	DX	UNSPECIFIED PRE-ECLAMPSIA, COMPLICATING CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	O14.95	DX	UNSPECIFIED PRE-ECLAMPSIA, COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	O15	DX	ECLAMPSIA	ICD-10-CM
19 Women who is pregnant or breastfeeding	O15.0	DX	ECLAMPSIA COMPLICATING PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O15.00	DX	ECLAMPSIA COMPLICATING PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O15.02	DX	ECLAMPSIA COMPLICATING PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O15.03	DX	ECLAMPSIA COMPLICATING PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O15.1	DX	ECLAMPSIA COMPLICATING LABOR	ICD-10-CM
19 Women who is pregnant or breastfeeding	O15.2	DX	ECLAMPSIA COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	O15.9	DX	ECLAMPSIA, UNSPECIFIED AS TO TIME PERIOD	ICD-10-CM
19 Women who is pregnant or breastfeeding	O16	DX	UNSPECIFIED MATERNAL HYPERTENSION	ICD-10-CM
19 Women who is pregnant or breastfeeding	O16.1	DX	UNSPECIFIED MATERNAL HYPERTENSION, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O16.2	DX	UNSPECIFIED MATERNAL HYPERTENSION, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O16.3	DX	UNSPECIFIED MATERNAL HYPERTENSION, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O16.4	DX	UNSPECIFIED MATERNAL HYPERTENSION, COMPLICATING CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	O16.5	DX	UNSPECIFIED MATERNAL HYPERTENSION, COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	O16.9	DX	UNSPECIFIED MATERNAL HYPERTENSION, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O20	DX	HEMORRHAGE IN EARLY PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O20.0	DX	THREATENED ABORTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	O20.8	DX	OTHER HEMORRHAGE IN EARLY PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O20.9	DX	HEMORRHAGE IN EARLY PREGNANCY, UNSPECIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	O21	DX	EXCESSIVE VOMITING IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O21.0	DX	MILD HYPEREMESIS GRAVIDARUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	O21.1	DX	HYPEREMESIS GRAVIDARUM WITH METABOLIC DISTURBANCE	ICD-10-CM
19 Women who is pregnant or breastfeeding	O21.2	DX	LATE VOMITING OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O21.8	DX	OTHER VOMITING COMPLICATING PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O21.9	DX	VOMITING OF PREGNANCY, UNSPECIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22	DX	VENOUS COMPLICATIONS AND HEMORRHOIDS IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.0	DX	VARICOSE VEINS OF LOWER EXTREMITY IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.00	DX	VARICOSE VEINS OF LOWER EXTREMITY IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.01	DX	VARICOSE VEINS OF LOWER EXTREMITY IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.02	DX	VARICOSE VEINS OF LOWER EXTREMITY IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.03	DX	VARICOSE VEINS OF LOWER EXTREMITY IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.1	DX	GENITAL VARICES IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.10	DX	GENITAL VARICES IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.11	DX	GENITAL VARICES IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.12	DX	GENITAL VARICES IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.13	DX	GENITAL VARICES IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.2	DX	SUPERFICIAL THROMBOPHLEBITIS IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.20	DX	SUPERFICIAL THROMBOPHLEBITIS IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.21	DX	SUPERFICIAL THROMBOPHLEBITIS IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.22	DX	SUPERFICIAL THROMBOPHLEBITIS IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.23	DX	SUPERFICIAL THROMBOPHLEBITIS IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.3	DX	DEEP PHLEBOTHROMBOSIS IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.30	DX	DEEP PHLEBOTHROMBOSIS IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.31	DX	DEEP PHLEBOTHROMBOSIS IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.32	DX	DEEP PHLEBOTHROMBOSIS IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.33	DX	DEEP PHLEBOTHROMBOSIS IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.4	DX	HEMORRHOIDS IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.40	DX	HEMORRHOIDS IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.41	DX	HEMORRHOIDS IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.42	DX	HEMORRHOIDS IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.43	DX	HEMORRHOIDS IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.5	DX	CEREBRAL VENOUS THROMBOSIS IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.50	DX	CEREBRAL VENOUS THROMBOSIS IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.51	DX	CEREBRAL VENOUS THROMBOSIS IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.52	DX	CEREBRAL VENOUS THROMBOSIS IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.53	DX	CEREBRAL VENOUS THROMBOSIS IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.8	DX	OTHER VENOUS COMPLICATIONS IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.8X	DX	OTHER VENOUS COMPLICATIONS IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.8X1	DX	OTHER VENOUS COMPLICATIONS IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	O22.8X2	DX	OTHER VENOUS COMPLICATIONS IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM



19 Women who is pregnant or breastfeeding	024.313	DX	UNSPECIFIED PRE-EXISTING DIABETES MELLITUS IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.319	DX	UNSPECIFIED PRE-EXISTING DIABETES MELLITUS IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.32	DX	UNSPECIFIED PRE-EXISTING DIABETES MELLITUS IN CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.33	DX	UNSPECIFIED PRE-EXISTING DIABETES MELLITUS IN THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.4	DX	GESTATIONAL DIABETES MELLITUS	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.41	DX	GESTATIONAL DIABETES MELLITUS IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.410	DX	GESTATIONAL DIABETES MELLITUS IN PREGNANCY, DIET CONTROLLED	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.414	DX	GESTATIONAL DIABETES MELLITUS IN PREGNANCY, INSULIN CONTROLLED	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.415	DX	GESTATIONAL DIABETES MELLITUS IN PREGNANCY, CONTROLLED BY ORAL HYPOGLYCEMIC DRUGS	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.419	DX	GESTATIONAL DIABETES MELLITUS IN PREGNANCY, UNSPECIFIED CONTROL	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.42	DX	GESTATIONAL DIABETES MELLITUS IN CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.420	DX	GESTATIONAL DIABETES MELLITUS IN CHILDBIRTH, DIET CONTROLLED	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.424	DX	GESTATIONAL DIABETES MELLITUS IN CHILDBIRTH, INSULIN CONTROLLED	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.425	DX	GESTATIONAL DIABETES MELLITUS IN CHILDBIRTH, CONTROLLED BY ORAL HYPOGLYCEMIC DRUGS	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.429	DX	GESTATIONAL DIABETES MELLITUS IN CHILDBIRTH, UNSPECIFIED CONTROL	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.43	DX	GESTATIONAL DIABETES MELLITUS IN THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.430	DX	GESTATIONAL DIABETES MELLITUS IN THE PUERPERIUM, DIET CONTROLLED	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.434	DX	GESTATIONAL DIABETES MELLITUS IN THE PUERPERIUM, INSULIN CONTROLLED	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.435	DX	GESTATIONAL DIABETES MELLITUS IN THE PUERPERIUM, CONTROLLED BY ORAL HYPOGLYCEMIC DRUGS	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.439	DX	GESTATIONAL DIABETES MELLITUS IN THE PUERPERIUM, UNSPECIFIED CONTROL	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.8	DX	OTHER PRE-EXISTING DIABETES MELLITUS IN PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.81	DX	OTHER PRE-EXISTING DIABETES MELLITUS IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.811	DX	OTHER PRE-EXISTING DIABETES MELLITUS IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.812	DX	OTHER PRE-EXISTING DIABETES MELLITUS IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.813	DX	OTHER PRE-EXISTING DIABETES MELLITUS IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.819	DX	OTHER PRE-EXISTING DIABETES MELLITUS IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.82	DX	OTHER PRE-EXISTING DIABETES MELLITUS IN CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.83	DX	OTHER PRE-EXISTING DIABETES MELLITUS IN THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.9	DX	UNSPECIFIED DIABETES MELLITUS IN PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.91	DX	UNSPECIFIED DIABETES MELLITUS IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.911	DX	UNSPECIFIED DIABETES MELLITUS IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.912	DX	UNSPECIFIED DIABETES MELLITUS IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.913	DX	UNSPECIFIED DIABETES MELLITUS IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.919	DX	UNSPECIFIED DIABETES MELLITUS IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.92	DX	UNSPECIFIED DIABETES MELLITUS IN CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	024.93	DX	UNSPECIFIED DIABETES MELLITUS IN THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	025	DX	MALNUTRITION IN PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	025.1	DX	MALNUTRITION IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	025.10	DX	MALNUTRITION IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	025.11	DX	MALNUTRITION IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	025.12	DX	MALNUTRITION IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	025.13	DX	MALNUTRITION IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	025.2	DX	MALNUTRITION IN CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	025.3	DX	MALNUTRITION IN THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	026	DX	MATERNAL CARE FOR OTHER CONDITIONS PREDOMINANTLY RELATED TO PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.0	DX	EXCESSIVE WEIGHT GAIN IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.00	DX	EXCESSIVE WEIGHT GAIN IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.01	DX	EXCESSIVE WEIGHT GAIN IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.02	DX	EXCESSIVE WEIGHT GAIN IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.03	DX	EXCESSIVE WEIGHT GAIN IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.1	DX	LOW WEIGHT GAIN IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.10	DX	LOW WEIGHT GAIN IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.11	DX	LOW WEIGHT GAIN IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.12	DX	LOW WEIGHT GAIN IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.13	DX	LOW WEIGHT GAIN IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.2	DX	PREGNANCY CARE FOR PATIENT WITH RECURRENT PREGNANCY LOSS	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.20	DX	PREGNANCY CARE FOR PATIENT WITH RECURRENT PREGNANCY LOSS, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.21	DX	PREGNANCY CARE FOR PATIENT WITH RECURRENT PREGNANCY LOSS, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.22	DX	PREGNANCY CARE FOR PATIENT WITH RECURRENT PREGNANCY LOSS, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.23	DX	PREGNANCY CARE FOR PATIENT WITH RECURRENT PREGNANCY LOSS, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.3	DX	RETAINED INTRAUTERINE CONTRACEPTIVE DEVICE IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.30	DX	RETAINED INTRAUTERINE CONTRACEPTIVE DEVICE IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.31	DX	RETAINED INTRAUTERINE CONTRACEPTIVE DEVICE IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.32	DX	RETAINED INTRAUTERINE CONTRACEPTIVE DEVICE IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.33	DX	RETAINED INTRAUTERINE CONTRACEPTIVE DEVICE IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.4	DX	HERPES GESTATIONIS	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.40	DX	HERPES GESTATIONIS, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.41	DX	HERPES GESTATIONIS, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.42	DX	HERPES GESTATIONIS, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.43	DX	HERPES GESTATIONIS, THIRD TRIMESTER	ICD-10-CM

19 Women who is pregnant or breastfeeding	026.5	DX	MATERNAL HYPOTENSION SYNDROME	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.50	DX	MATERNAL HYPOTENSION SYNDROME, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.51	DX	MATERNAL HYPOTENSION SYNDROME, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.52	DX	MATERNAL HYPOTENSION SYNDROME, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.53	DX	MATERNAL HYPOTENSION SYNDROME, THIRD TRIMESTER	ICD-10-CM
			LIVER AND BILIARY TRACT DISORDERS IN PREGNANCY, CHILDBIRTH AND THE	
19 Women who is pregnant or breastfeeding	026.6	DX	PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.61	DX	LIVER AND BILIARY TRACT DISORDERS IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.611	DX	LIVER AND BILIARY TRACT DISORDERS IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.612	DX	LIVER AND BILIARY TRACT DISORDERS IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.613	DX	LIVER AND BILIARY TRACT DISORDERS IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.619	DX	LIVER AND BILIARY TRACT DISORDERS IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.62	DX	LIVER AND BILIARY TRACT DISORDERS IN CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.63	DX	LIVER AND BILIARY TRACT DISORDERS IN THE PUERPERIUM	ICD-10-CM
			SUBLUXATION OF SYMPHYSIS (PUBIS) IN PREGNANCY, CHILDBIRTH AND THE	
19 Women who is pregnant or breastfeeding	026.7	DX	PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.71	DX	SUBLUXATION OF SYMPHYSIS (PUBIS) IN PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.711	DX	SUBLUXATION OF SYMPHYSIS (PUBIS) IN PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.712	DX	SUBLUXATION OF SYMPHYSIS (PUBIS) IN PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.713	DX	SUBLUXATION OF SYMPHYSIS (PUBIS) IN PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.719	DX	SUBLUXATION OF SYMPHYSIS (PUBIS) IN PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.72	DX	SUBLUXATION OF SYMPHYSIS (PUBIS) IN CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.73	DX	SUBLUXATION OF SYMPHYSIS (PUBIS) IN THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.8	DX	OTHER SPECIFIED PREGNANCY RELATED CONDITIONS	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.81	DX	PREGNANCY RELATED EXHAUSTION AND FATIGUE	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.811	DX	PREGNANCY RELATED EXHAUSTION AND FATIGUE, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.812	DX	PREGNANCY RELATED EXHAUSTION AND FATIGUE, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.813	DX	PREGNANCY RELATED EXHAUSTION AND FATIGUE, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.819	DX	PREGNANCY RELATED EXHAUSTION AND FATIGUE, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.82	DX	PREGNANCY RELATED PERIPHERAL NEURITIS	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.821	DX	PREGNANCY RELATED PERIPHERAL NEURITIS, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.822	DX	PREGNANCY RELATED PERIPHERAL NEURITIS, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.823	DX	PREGNANCY RELATED PERIPHERAL NEURITIS, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.829	DX	PREGNANCY RELATED PERIPHERAL NEURITIS, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.83	DX	PREGNANCY RELATED RENAL DISEASE	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.831	DX	PREGNANCY RELATED RENAL DISEASE, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.832	DX	PREGNANCY RELATED RENAL DISEASE, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.833	DX	PREGNANCY RELATED RENAL DISEASE, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.839	DX	PREGNANCY RELATED RENAL DISEASE, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.84	DX	UTERINE SIZE-DATE DISCREPANCY COMPLICATING PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.841	DX	UTERINE SIZE-DATE DISCREPANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.842	DX	UTERINE SIZE-DATE DISCREPANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.843	DX	UTERINE SIZE-DATE DISCREPANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.849	DX	UTERINE SIZE-DATE DISCREPANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.85	DX	SPOTTING COMPLICATING PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.851	DX	SPOTTING COMPLICATING PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.852	DX	SPOTTING COMPLICATING PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.853	DX	SPOTTING COMPLICATING PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.859	DX	SPOTTING COMPLICATING PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.86	DX	PRURITIC URTICARIAL PAPULES AND PLAQUES OF PREGNANCY (PUPPPP)	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.87	DX	CERVICAL SHORTENING	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.872	DX	CERVICAL SHORTENING, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.873	DX	CERVICAL SHORTENING, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.879	DX	CERVICAL SHORTENING, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.89	DX	OTHER SPECIFIED PREGNANCY RELATED CONDITIONS	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.891	DX	OTHER SPECIFIED PREGNANCY RELATED CONDITIONS, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.892	DX	OTHER SPECIFIED PREGNANCY RELATED CONDITIONS, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.893	DX	OTHER SPECIFIED PREGNANCY RELATED CONDITIONS, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.899	DX	OTHER SPECIFIED PREGNANCY RELATED CONDITIONS, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.9	DX	PREGNANCY RELATED CONDITIONS, UNSPECIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.90	DX	PREGNANCY RELATED CONDITIONS, UNSPECIFIED, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.91	DX	PREGNANCY RELATED CONDITIONS, UNSPECIFIED, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.92	DX	PREGNANCY RELATED CONDITIONS, UNSPECIFIED, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	026.93	DX	PREGNANCY RELATED CONDITIONS, UNSPECIFIED, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	028	DX	ABNORMAL FINDINGS ON ANTENATAL SCREENING OF MOTHER	ICD-10-CM
19 Women who is pregnant or breastfeeding	028.0	DX	ABNORMAL HEMATOLOGICAL FINDING ON ANTENATAL SCREENING OF MOTHER	ICD-10-CM
19 Women who is pregnant or breastfeeding	028.1	DX	ABNORMAL BIOCHEMICAL FINDING ON ANTENATAL SCREENING OF MOTHER	ICD-10-CM
19 Women who is pregnant or breastfeeding	028.2	DX	ABNORMAL CYTOLOGICAL FINDING ON ANTENATAL SCREENING OF MOTHER	ICD-10-CM
19 Women who is pregnant or breastfeeding	028.3	DX	ABNORMAL ULTRASONIC FINDING ON ANTENATAL SCREENING OF MOTHER	ICD-10-CM
19 Women who is pregnant or breastfeeding	028.4	DX	ABNORMAL RADIOLOGICAL FINDING ON ANTENATAL SCREENING OF MOTHER	ICD-10-CM
			ABNORMAL CHROMOSOMAL AND GENETIC FINDING ON ANTENATAL SCREENING OF	
19 Women who is pregnant or breastfeeding	028.5	DX	MOTHER	ICD-10-CM
19 Women who is pregnant or breastfeeding	028.8	DX	OTHER ABNORMAL FINDINGS ON ANTENATAL SCREENING OF MOTHER	ICD-10-CM
19 Women who is pregnant or breastfeeding	028.9	DX	UNSPECIFIED ABNORMAL FINDINGS ON ANTENATAL SCREENING OF MOTHER	ICD-10-CM
19 Women who is pregnant or breastfeeding	029	DX	COMPLICATIONS OF ANESTHESIA DURING PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	029.0	DX	PULMONARY COMPLICATIONS OF ANESTHESIA DURING PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	029.01	DX	ASPIRATION PNEUMONITIS DUE TO ANESTHESIA DURING PREGNANCY	ICD-10-CM
			ASPIRATION PNEUMONITIS DUE TO ANESTHESIA DURING PREGNANCY, FIRST TRIMESTER	
19 Women who is pregnant or breastfeeding	029.011	DX	ASPIRATION PNEUMONITIS DUE TO ANESTHESIA DURING PREGNANCY, FIRST TRIMESTER	ICD-10-CM
			ASPIRATION PNEUMONITIS DUE TO ANESTHESIA DURING PREGNANCY, SECOND	
19 Women who is pregnant or breastfeeding	029.012	DX	TRIMESTER	ICD-10-CM
			ASPIRATION PNEUMONITIS DUE TO ANESTHESIA DURING PREGNANCY, THIRD	
19 Women who is pregnant or breastfeeding	029.013	DX	TRIMESTER	ICD-10-CM
			ASPIRATION PNEUMONITIS DUE TO ANESTHESIA DURING PREGNANCY, UNSPECIFIED	
19 Women who is pregnant or breastfeeding	029.019	DX	TRIMESTER	ICD-10-CM































































19 Women who is pregnant or breastfeeding	060.13X9	DX	PRETERM LABOR SECOND TRIMESTER WITH PRETERM DELIVERY THIRD TRIMESTER, OTHER FETUS	ICD-10-CM
19 Women who is pregnant or breastfeeding	060.14	DX	PRETERM LABOR THIRD TRIMESTER WITH PRETERM DELIVERY THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	060.14X	DX		ICD-10-CM
19 Women who is pregnant or breastfeeding	060.14X0	DX	PRETERM LABOR THIRD TRIMESTER WITH PRETERM DELIVERY THIRD TRIMESTER, NOT APPLICABLE OR UNSPECIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	060.14X1	DX	PRETERM LABOR THIRD TRIMESTER WITH PRETERM DELIVERY THIRD TRIMESTER, FETUS 1	ICD-10-CM
19 Women who is pregnant or breastfeeding	060.14X2	DX	PRETERM LABOR THIRD TRIMESTER WITH PRETERM DELIVERY THIRD TRIMESTER, FETUS 2	ICD-10-CM
19 Women who is pregnant or breastfeeding	060.14X3	DX	PRETERM LABOR THIRD TRIMESTER WITH PRETERM DELIVERY THIRD TRIMESTER, FETUS 3	ICD-10-CM
19 Women who is pregnant or breastfeeding	060.14X4	DX	PRETERM LABOR THIRD TRIMESTER WITH PRETERM DELIVERY THIRD TRIMESTER, FETUS 4	ICD-10-CM
19 Women who is pregnant or breastfeeding	060.14X5	DX	PRETERM LABOR THIRD TRIMESTER WITH PRETERM DELIVERY THIRD TRIMESTER, FETUS 5	ICD-10-CM
19 Women who is pregnant or breastfeeding	060.14X9	DX	PRETERM LABOR THIRD TRIMESTER WITH PRETERM DELIVERY THIRD TRIMESTER, OTHER FETUS	ICD-10-CM
19 Women who is pregnant or breastfeeding	061	DX	FAILED INDUCTION OF LABOR	ICD-10-CM
19 Women who is pregnant or breastfeeding	061.0	DX	FAILED MEDICAL INDUCTION OF LABOR	ICD-10-CM
19 Women who is pregnant or breastfeeding	061.1	DX	FAILED INSTRUMENTAL INDUCTION OF LABOR	ICD-10-CM
19 Women who is pregnant or breastfeeding	061.8	DX	OTHER FAILED INDUCTION OF LABOR	ICD-10-CM
19 Women who is pregnant or breastfeeding	061.9	DX	FAILED INDUCTION OF LABOR, UNSPECIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	063.2	DX	DELAYED DELIVERY OF SECOND TWIN, TRIPLET, ETC.	ICD-10-CM
19 Women who is pregnant or breastfeeding	071.0	DX	RUPTURE OF UTERUS (SPONTANEOUS) BEFORE ONSET OF LABOR	ICD-10-CM
19 Women who is pregnant or breastfeeding	071.00	DX	RUPTURE OF UTERUS BEFORE ONSET OF LABOR, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	071.02	DX	RUPTURE OF UTERUS BEFORE ONSET OF LABOR, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	071.03	DX	RUPTURE OF UTERUS BEFORE ONSET OF LABOR, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	072	DX	POSTPARTUM HEMORRHAGE	ICD-10-CM
19 Women who is pregnant or breastfeeding	072.0	DX	THIRD-STAGE HEMORRHAGE	ICD-10-CM
19 Women who is pregnant or breastfeeding	072.1	DX	OTHER IMMEDIATE POSTPARTUM HEMORRHAGE	ICD-10-CM
19 Women who is pregnant or breastfeeding	072.2	DX	DELAYED AND SECONDARY POSTPARTUM HEMORRHAGE	ICD-10-CM
19 Women who is pregnant or breastfeeding	072.3	DX	POSTPARTUM COAGULATION DEFECTS	ICD-10-CM
19 Women who is pregnant or breastfeeding	073	DX	RETAINED PLACENTA AND MEMBRANES, WITHOUT HEMORRHAGE	ICD-10-CM
19 Women who is pregnant or breastfeeding	073.0	DX	RETAINED PLACENTA WITHOUT HEMORRHAGE	ICD-10-CM
19 Women who is pregnant or breastfeeding	073.1	DX	RETAINED PORTIONS OF PLACENTA AND MEMBRANES, WITHOUT HEMORRHAGE	ICD-10-CM
19 Women who is pregnant or breastfeeding	075	DX	OTHER COMPLICATIONS OF LABOR AND DELIVERY, NOT ELSEWHERE CLASSIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	075.0	DX	MATERNAL DISTRESS DURING LABOR AND DELIVERY	ICD-10-CM
19 Women who is pregnant or breastfeeding	075.1	DX	SHOCK DURING OR FOLLOWING LABOR AND DELIVERY	ICD-10-CM
19 Women who is pregnant or breastfeeding	075.2	DX	PYREXIA DURING LABOR, NOT ELSEWHERE CLASSIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	075.3	DX	OTHER INFECTION DURING LABOR	ICD-10-CM
19 Women who is pregnant or breastfeeding	075.4	DX	OTHER COMPLICATIONS OF OBSTETRIC SURGERY AND PROCEDURES	ICD-10-CM
19 Women who is pregnant or breastfeeding	075.5	DX	DELAYED DELIVERY AFTER ARTIFICIAL RUPTURE OF MEMBRANES	ICD-10-CM
19 Women who is pregnant or breastfeeding	075.8	DX	OTHER SPECIFIED COMPLICATIONS OF LABOR AND DELIVERY	ICD-10-CM
19 Women who is pregnant or breastfeeding	075.81	DX	MATERNAL EXHAUSTION COMPLICATING LABOR AND DELIVERY ONSET (SPONTANEOUS) OF LABOR AFTER 37 COMPLETED WEEKS OF GESTATION BUT BEFORE 39 COMPLETED WEEKS GESTATION, WITH DELIVERY BY (PLANNED) CESAREAN SECTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	075.82	DX	SECTION	ICD-10-CM
19 Women who is pregnant or breastfeeding	075.89	DX	OTHER SPECIFIED COMPLICATIONS OF LABOR AND DELIVERY	ICD-10-CM
19 Women who is pregnant or breastfeeding	075.9	DX	COMPLICATION OF LABOR AND DELIVERY, UNSPECIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	094	DX	SEQUELAE OF COMPLICATION OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	098	DX	MATERNAL INFECTIOUS AND PARASITIC DISEASES CLASSIFIABLE ELSEWHERE BUT COMPLICATING PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.0	DX	TUBERCULOSIS COMPLICATING PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.01	DX	TUBERCULOSIS COMPLICATING PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.011	DX	TUBERCULOSIS COMPLICATING PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.012	DX	TUBERCULOSIS COMPLICATING PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.013	DX	TUBERCULOSIS COMPLICATING PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.019	DX	TUBERCULOSIS COMPLICATING PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.02	DX	TUBERCULOSIS COMPLICATING CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.03	DX	TUBERCULOSIS COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.1	DX	SYPHILIS COMPLICATING PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.11	DX	SYPHILIS COMPLICATING PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.111	DX	SYPHILIS COMPLICATING PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.112	DX	SYPHILIS COMPLICATING PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.113	DX	SYPHILIS COMPLICATING PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.119	DX	SYPHILIS COMPLICATING PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.12	DX	SYPHILIS COMPLICATING CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.13	DX	SYPHILIS COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.2	DX	GONORRHEA COMPLICATING PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.21	DX	GONORRHEA COMPLICATING PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.211	DX	GONORRHEA COMPLICATING PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.212	DX	GONORRHEA COMPLICATING PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.213	DX	GONORRHEA COMPLICATING PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.219	DX	GONORRHEA COMPLICATING PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.22	DX	GONORRHEA COMPLICATING CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.23	DX	GONORRHEA COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.3	DX	OTHER INFECTIONS WITH A PREDOMINANTLY SEXUAL MODE OF TRANSMISSION COMPLICATING PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.31	DX	OTHER INFECTIONS WITH A PREDOMINANTLY SEXUAL MODE OF TRANSMISSION COMPLICATING PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.311	DX	OTHER INFECTIONS WITH A PREDOMINANTLY SEXUAL MODE OF TRANSMISSION COMPLICATING PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	098.312	DX	OTHER INFECTIONS WITH A PREDOMINANTLY SEXUAL MODE OF TRANSMISSION COMPLICATING PREGNANCY, SECOND TRIMESTER	ICD-10-CM







19 Women who is pregnant or breastfeeding	09A	DX	MATERNAL MALIGNANT NEOPLASMS, TRAUMATIC INJURIES AND ABUSE CLASSIFIABLE ELSEWHERE BUT COMPLICATING PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.1	DX	MALIGNANT NEOPLASM COMPLICATING PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.11	DX	MALIGNANT NEOPLASM COMPLICATING PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.112	DX	MALIGNANT NEOPLASM COMPLICATING PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.113	DX	MALIGNANT NEOPLASM COMPLICATING PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.119	DX	MALIGNANT NEOPLASM COMPLICATING CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.12	DX	MALIGNANT NEOPLASM COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.13	DX	INJURY, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES COMPLICATING PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.2	DX	INJURY, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES COMPLICATING PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.21	DX	INJURY, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES COMPLICATING PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.212	DX	INJURY, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES COMPLICATING PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.213	DX	INJURY, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES COMPLICATING PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.219	DX	INJURY, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES COMPLICATING PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.22	DX	INJURY, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES COMPLICATING CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.23	DX	INJURY, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.3	DX	PHYSICAL ABUSE COMPLICATING PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.31	DX	PHYSICAL ABUSE COMPLICATING PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.311	DX	PHYSICAL ABUSE COMPLICATING PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.312	DX	PHYSICAL ABUSE COMPLICATING PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.313	DX	PHYSICAL ABUSE COMPLICATING PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.319	DX	PHYSICAL ABUSE COMPLICATING CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.32	DX	PHYSICAL ABUSE COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.33	DX	SEXUAL ABUSE COMPLICATING PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.4	DX	SEXUAL ABUSE COMPLICATING PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.41	DX	SEXUAL ABUSE COMPLICATING PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.412	DX	SEXUAL ABUSE COMPLICATING PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.413	DX	SEXUAL ABUSE COMPLICATING PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.419	DX	SEXUAL ABUSE COMPLICATING PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.42	DX	SEXUAL ABUSE COMPLICATING CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.43	DX	SEXUAL ABUSE COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.5	DX	PSYCHOLOGICAL ABUSE COMPLICATING PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.51	DX	PSYCHOLOGICAL ABUSE COMPLICATING PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.511	DX	PSYCHOLOGICAL ABUSE COMPLICATING PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.512	DX	PSYCHOLOGICAL ABUSE COMPLICATING PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.513	DX	PSYCHOLOGICAL ABUSE COMPLICATING PREGNANCY, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.519	DX	PSYCHOLOGICAL ABUSE COMPLICATING CHILDBIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.52	DX	PSYCHOLOGICAL ABUSE COMPLICATING THE PUERPERIUM	ICD-10-CM
19 Women who is pregnant or breastfeeding	09A.53	DX	NEWBORN AFFECTED BY MULTIPLE PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	P01.5	DX	NEWBORN LIGHT FOR GESTATIONAL AGE, LESS THAN 500 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P05.01	DX	NEWBORN LIGHT FOR GESTATIONAL AGE, 500-749 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P05.02	DX	NEWBORN LIGHT FOR GESTATIONAL AGE, 750-999 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P05.03	DX	NEWBORN LIGHT FOR GESTATIONAL AGE, 1000-1249 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P05.04	DX	NEWBORN LIGHT FOR GESTATIONAL AGE, 1250-1499 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P05.05	DX	NEWBORN LIGHT FOR GESTATIONAL AGE, 1500-1749 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P05.06	DX	NEWBORN SMALL FOR GESTATIONAL AGE, LESS THAN 500 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P05.11	DX	NEWBORN SMALL FOR GESTATIONAL AGE, 500-749 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P05.12	DX	NEWBORN SMALL FOR GESTATIONAL AGE, 750-999 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P05.13	DX	NEWBORN SMALL FOR GESTATIONAL AGE, 1000-1249 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P05.14	DX	NEWBORN SMALL FOR GESTATIONAL AGE, 1250-1499 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P05.15	DX	NEWBORN SMALL FOR GESTATIONAL AGE, 1500-1749 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P05.16	DX	EXTREMELY LOW BIRTH WEIGHT NEWBORN, LESS THAN 500 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.01	DX	EXTREMELY LOW BIRTH WEIGHT NEWBORN, 500-749 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.02	DX	EXTREMELY LOW BIRTH WEIGHT NEWBORN, 750-999 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.03	DX	OTHER LOW BIRTH WEIGHT NEWBORN, 1000-1249 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.14	DX	OTHER LOW BIRTH WEIGHT NEWBORN, 1250-1499 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.15	DX	OTHER LOW BIRTH WEIGHT NEWBORN, 1500-1749 GRAMS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.16	DX	EXTREME IMMATURETY OF NEWBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.2	DX	EXTREME IMMATURETY OF NEWBORN, UNSPECIFIED WEEKS OF GESTATION	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.20	DX	EXTREME IMMATURETY OF NEWBORN, GESTATIONAL AGE LESS THAN 23 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.21	DX	EXTREME IMMATURETY OF NEWBORN, GESTATIONAL AGE 23 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.22	DX	EXTREME IMMATURETY OF NEWBORN, GESTATIONAL AGE 24 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.23	DX	EXTREME IMMATURETY OF NEWBORN, GESTATIONAL AGE 25 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.24	DX	EXTREME IMMATURETY OF NEWBORN, GESTATIONAL AGE 26 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.25	DX	EXTREME IMMATURETY OF NEWBORN, GESTATIONAL AGE 27 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.26	DX	PRETERM (PREMATURE) NEWBORN (OTHER)	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.3	DX	PRETERM NEWBORN, UNSPECIFIED WEEKS OF GESTATION	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.30	DX	PRETERM NEWBORN, GESTATIONAL AGE 28 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.31	DX	PRETERM NEWBORN, GESTATIONAL AGE 29 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.32	DX	PRETERM NEWBORN, GESTATIONAL AGE 29 COMPLETED WEEKS	ICD-10-CM



19 Women who is pregnant or breastfeeding	P07.33	DX	PRETERM NEWBORN, GESTATIONAL AGE 30 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.34	DX	PRETERM NEWBORN, GESTATIONAL AGE 31 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.35	DX	PRETERM NEWBORN, GESTATIONAL AGE 32 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.36	DX	PRETERM NEWBORN, GESTATIONAL AGE 33 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.37	DX	PRETERM NEWBORN, GESTATIONAL AGE 34 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.38	DX	PRETERM NEWBORN, GESTATIONAL AGE 35 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P07.39	DX	PRETERM NEWBORN, GESTATIONAL AGE 36 COMPLETED WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	P08.2	DX	LATE NEWBORN, NOT HEAVY FOR GESTATIONAL AGE	ICD-10-CM
19 Women who is pregnant or breastfeeding	P08.21	DX	POST-TERM NEWBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	P08.22	DX	PROLONGED GESTATION OF NEWBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	P61.2	DX	ANEMIA OF PREMATURITY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z32.01	DX	ENCOUNTER FOR PREGNANCY TEST, RESULT POSITIVE	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z33	DX	PREGNANT STATE	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z33.1	DX	PREGNANT STATE, INCIDENTAL	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z33.2	DX	ENCOUNTER FOR ELECTIVE TERMINATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z33.3	DX	PREGNANT STATE, GESTATIONAL CARRIER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34	DX	ENCOUNTER FOR SUPERVISION OF NORMAL PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34.0	DX	ENCOUNTER FOR SUPERVISION OF NORMAL FIRST PREGNANCY	ICD-10-CM
			ENCOUNTER FOR SUPERVISION OF NORMAL FIRST PREGNANCY, UNSPECIFIED	
19 Women who is pregnant or breastfeeding	Z34.00	DX	TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34.01	DX	ENCOUNTER FOR SUPERVISION OF NORMAL FIRST PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34.02	DX	ENCOUNTER FOR SUPERVISION OF NORMAL FIRST PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34.03	DX	ENCOUNTER FOR SUPERVISION OF NORMAL FIRST PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34.8	DX	ENCOUNTER FOR SUPERVISION OF OTHER NORMAL PREGNANCY	ICD-10-CM
			ENCOUNTER FOR SUPERVISION OF OTHER NORMAL PREGNANCY, UNSPECIFIED	
19 Women who is pregnant or breastfeeding	Z34.80	DX	TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34.81	DX	ENCOUNTER FOR SUPERVISION OF OTHER NORMAL PREGNANCY, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34.82	DX	ENCOUNTER FOR SUPERVISION OF OTHER NORMAL PREGNANCY, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34.83	DX	ENCOUNTER FOR SUPERVISION OF OTHER NORMAL PREGNANCY, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34.9	DX	ENCOUNTER FOR SUPERVISION OF NORMAL PREGNANCY, UNSPECIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.1	DX	ENCOUNTER FOR ANTENATAL SCREENING FOR RAISED ALPHAFETOPROTEIN LEVEL	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.3	DX	ENCOUNTER FOR ANTENATAL SCREENING FOR MALFORMATIONS	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.4	DX	ENCOUNTER FOR ANTENATAL SCREENING FOR FETAL GROWTH RETARDATION	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.84	DX	ENCOUNTER FOR ANTENATAL SCREENING FOR FETAL LUNG MATURITY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.85	DX	ENCOUNTER FOR ANTENATAL SCREENING FOR STREPTOCOCCUS B	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.87	DX	ENCOUNTER FOR ANTENATAL SCREENING FOR UNCERTAIN DATES	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.89	DX	ENCOUNTER FOR OTHER SPECIFIED ANTENATAL SCREENING	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.9	DX	ENCOUNTER FOR ANTENATAL SCREENING, UNSPECIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.5	DX	OTHER MULTIPLE BIRTHS, ALL LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.50	DX	MULTIPLE BIRTHS, UNSPECIFIED, ALL LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.51	DX	TRIPLETS, ALL LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.52	DX	QUADRUPLETS, ALL LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.54	DX	SEXUPLETS, ALL LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.59	DX	OTHER MULTIPLE BIRTHS, ALL LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.6	DX	OTHER MULTIPLE BIRTHS, SOME LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.60	DX	MULTIPLE BIRTHS, UNSPECIFIED, SOME LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.61	DX	TRIPLETS, SOME LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.62	DX	QUADRUPLETS, SOME LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.69	DX	OTHER MULTIPLE BIRTHS, SOME LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.3	DX	TWIN LIVEBORN INFANT, BORN IN HOSPITAL	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.31	DX	TWIN LIVEBORN INFANT, DELIVERED BY CESAREAN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.4	DX	TWIN LIVEBORN INFANT, BORN OUTSIDE HOSPITAL	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.5	DX	TWIN LIVEBORN INFANT, UNSPECIFIED AS TO PLACE OF BIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.6	DX	OTHER MULTIPLE LIVEBORN INFANT, BORN IN HOSPITAL	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.62	DX	TRIPLT LIVEBORN INFANT, DELIVERED BY CESAREAN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.64	DX	QUADRUPLE LIVEBORN INFANT, DELIVERED BY CESAREAN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.66	DX	QUINTUPLE LIVEBORN INFANT, DELIVERED BY CESAREAN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.69	DX	OTHER MULTIPLE LIVEBORN INFANT, DELIVERED BY CESAREAN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.7	DX	OTHER MULTIPLE LIVEBORN INFANT, BORN OUTSIDE HOSPITAL	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.8	DX	OTHER MULTIPLE LIVEBORN INFANT, UNSPECIFIED AS TO PLACE OF BIRTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z39	DX	ENCOUNTER FOR MATERNAL POSTPARTUM CARE AND EXAMINATION	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z39.0	DX	ENCOUNTER FOR CARE AND EXAMINATION OF MOTHER IMMEDIATELY AFTER DELIVERY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z39.2	DX	ENCOUNTER FOR ROUTINE POSTPARTUM FOLLOW-UP	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A	DX	WEEKS OF GESTATION	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.0	DX	WEEKS OF GESTATION OF PREGNANCY, UNSPECIFIED OR LESS THAN 10 WEEKS	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.01	DX	LESS THAN 8 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.09	DX	9 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.1	DX	WEEKS OF GESTATION OF PREGNANCY, WEEKS 10-19	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.12	DX	12 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.13	DX	13 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.14	DX	14 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.16	DX	16 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.17	DX	17 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.18	DX	18 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.19	DX	19 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.24	DX	24 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.25	DX	25 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.26	DX	26 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.27	DX	27 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.28	DX	28 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.29	DX	29 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.3	DX	WEEKS OF GESTATION OF PREGNANCY, WEEKS 30-29	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.32	DX	32 WEEKS GESTATION OF PREGNANCY	ICD-10-CM

19 Women who is pregnant or breastfeeding	Z3A.33	DX	33 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.34	DX	34 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.39	DX	39 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.40	DX	40 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.41	DX	41 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.49	DX	GREATER THAN 42 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34.90	DX	ENCOUNTER FOR SUPERVISION OF NORMAL PREGNANCY, UNSPECIFIED, UNSPECIFIED TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34.91	DX	ENCOUNTER FOR SUPERVISION OF NORMAL PREGNANCY, UNSPECIFIED, FIRST TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34.92	DX	ENCOUNTER FOR SUPERVISION OF NORMAL PREGNANCY, UNSPECIFIED, SECOND TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z34.93	DX	ENCOUNTER FOR SUPERVISION OF NORMAL PREGNANCY, UNSPECIFIED, THIRD TRIMESTER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36	DX	ENCOUNTER FOR ANTENATAL SCREENING OF MOTHER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.0	DX	ENCOUNTER FOR ANTENATAL SCREENING FOR CHROMOSOMAL ANOMALIES	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.2	DX	ENCOUNTER FOR OTHER ANTENATAL SCREENING FOLLOW-UP	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.5	DX	ENCOUNTER FOR ANTENATAL SCREENING FOR ISOIMMUNIZATION	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.8	DX	ENCOUNTER FOR OTHER ANTENATAL SCREENING	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.81	DX	ENCOUNTER FOR ANTENATAL SCREENING FOR HYDROPS FETALIS	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.82	DX	ENCOUNTER FOR ANTENATAL SCREENING FOR NIUCHAL TRANSLUCENCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.83	DX	ENCOUNTER FOR FETAL SCREENING FOR CONGENITAL CARDIAC ABNORMALITIES	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.86	DX	ENCOUNTER FOR ANTENATAL SCREENING FOR CERVICAL LENGTH	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.88	DX	ENCOUNTER FOR ANTENATAL SCREENING FOR FETAL MACROSOMIA	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z36.8A	DX	ENCOUNTER FOR ANTENATAL SCREENING FOR OTHER GENETIC DEFECTS	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.2	DX	TWINS, BOTH LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.3	DX	TWINS, ONE LIVEBORN AND ONE STILLBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.53	DX	QUINTUPLETS, ALL LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.63	DX	QUINTUPLETS, SOME LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z37.64	DX	SEXTUPLETS, SOME LIVEBORN	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.30	DX	TWIN LIVEBORN INFANT, DELIVERED VAGINALLY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.61	DX	TRIPLT LIVEBORN INFANT, DELIVERED VAGINALLY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.63	DX	QUADRUPLET LIVEBORN INFANT, DELIVERED VAGINALLY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.65	DX	QUINTUPLET LIVEBORN INFANT, DELIVERED VAGINALLY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z38.68	DX	OTHER MULTIPLE LIVEBORN INFANT, DELIVERED VAGINALLY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z39.1	DX	ENCOUNTER FOR CARE AND EXAMINATION OF LACTATING MOTHER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.00	DX	WEEKS OF GESTATION OF PREGNANCY NOT SPECIFIED	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.08	DX	8 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.10	DX	10 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.11	DX	11 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.15	DX	15 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.2	DX	WEEKS OF GESTATION OF PREGNANCY, WEEKS 20-29	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.20	DX	20 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.21	DX	21 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.22	DX	22 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.23	DX	23 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.30	DX	30 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.31	DX	31 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.35	DX	35 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.36	DX	36 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.37	DX	37 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.38	DX	38 WEEKS GESTATION OF PREGNANCY	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.4	DX	WEEKS OF GESTATION OF PREGNANCY, WEEKS 40 OR GREATER	ICD-10-CM
19 Women who is pregnant or breastfeeding	Z3A.42	DX	42 WEEKS GESTATION OF PREGNANCY	ICD-10-CM

Category	Variable Name	Code	Code Category	Code Type	Description	Details
1	Acute MI	I21	DX	ICD-10-CM	ACUTE MYOCARDIAL INFARCTION	Inpatient setting, primary position
1	Acute MI	I21.0	DX	ICD-10-CM	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF ANTERIOR WALL	Inpatient setting, primary position
1	Acute MI	I21.01	DX	ICD-10-CM	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING LEFT MAIN CORONARY ARTERY	Inpatient setting, primary position
1	Acute MI	I21.02	DX	ICD-10-CM	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING LEFT ANTERIOR DESCENDING CORONARY ARTERY	Inpatient setting, primary position
1	Acute MI	I21.09	DX	ICD-10-CM	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING OTHER CORONARY ARTERY OF ANTERIOR WALL	Inpatient setting, primary position
1	Acute MI	I21.1	DX	ICD-10-CM	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF INFERIOR WALL	Inpatient setting, primary position
1	Acute MI	I21.11	DX	ICD-10-CM	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING RIGHT CORONARY ARTERY	Inpatient setting, primary position
1	Acute MI	I21.19	DX	ICD-10-CM	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING OTHER CORONARY ARTERY OF INFERIOR WALL	Inpatient setting, primary position
1	Acute MI	I21.2	DX	ICD-10-CM	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF OTHER SITES	Inpatient setting, primary position
1	Acute MI	I21.21	DX	ICD-10-CM	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING LEFT CIRCUMFLEX CORONARY ARTERY	Inpatient setting, primary position
1	Acute MI	I21.29	DX	ICD-10-CM	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION INVOLVING OTHER SITES	Inpatient setting, primary position
1	Acute MI	I21.3	DX	ICD-10-CM	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF UNSPECIFIED SITE	Inpatient setting, primary position
1	Acute MI	I21.4	DX	ICD-10-CM	NON-ST ELEVATION (NSTEMI) MYOCARDIAL INFARCTION	Inpatient setting, primary position
1	Acute MI	I21.9	DX	ICD-10-CM	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED	Inpatient setting, primary position
1	Acute MI	I21.A	DX	ICD-10-CM	OTHER TYPE OF MYOCARDIAL INFARCTION	Inpatient setting, primary position
1	Acute MI	I21.A1	DX	ICD-10-CM	MYOCARDIAL INFARCTION TYPE 2	Inpatient setting, primary position
1	Acute MI	I21.A9	DX	ICD-10-CM	OTHER MYOCARDIAL INFARCTION TYPE	Inpatient setting, primary position
2	Nonfatal Stroke	G43.609	DX	ICD-10-CM	PERSISTENT MIGRAINE AURA WITH CEREBRAL INFARCTION, NOT INTRACTABLE, WITHOUT STATUS MIGRAINOSUS	Inpatient setting, primary position
2	Nonfatal Stroke	G43.619	DX	ICD-10-CM	PERSISTENT MIGRAINE AURA WITH CEREBRAL INFARCTION, INTRACTABLE, WITHOUT STATUS MIGRAINOSUS	Inpatient setting, primary position
2	Nonfatal Stroke	G46.3	DX	ICD-10-CM	BRAIN STEM STROKE SYNDROME	Inpatient setting, primary position
2	Nonfatal Stroke	G46.4	DX	ICD-10-CM	CEREBELLAR STROKE SYNDROME	Inpatient setting, primary position
2	Nonfatal Stroke	I63.0	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF PRECEREBRAL ARTERIES	Inpatient setting, primary position
2	Nonfatal Stroke	I63.00	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF UNSPECIFIED PRECEREBRAL ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.01	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF VERTEBRAL ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.011	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF RIGHT VERTEBRAL ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.012	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF LEFT VERTEBRAL ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.013	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF BILATERAL VERTEBRAL ARTERIES	Inpatient setting, primary position
2	Nonfatal Stroke	I63.019	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF UNSPECIFIED VERTEBRAL ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.02	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF BASILAR ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.03	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF CAROTID ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.031	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF RIGHT CAROTID ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.032	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF LEFT CAROTID ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.033	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF BILATERAL CAROTID ARTERIES	Inpatient setting, primary position
2	Nonfatal Stroke	I63.039	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF UNSPECIFIED CAROTID ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.09	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO THROMBOSIS OF OTHER PRECEREBRAL ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.1	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO EMBOLISM OF PRECEREBRAL ARTERIES	Inpatient setting, primary position
2	Nonfatal Stroke	I63.10	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO EMBOLISM OF UNSPECIFIED PRECEREBRAL ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.11	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO EMBOLISM OF VERTEBRAL ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.111	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO EMBOLISM OF RIGHT VERTEBRAL ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.112	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO EMBOLISM OF LEFT VERTEBRAL ARTERY	Inpatient setting, primary position
2	Nonfatal Stroke	I63.113	DX	ICD-10-CM	CEREBRAL INFARCTION DUE TO EMBOLISM OF BILATERAL VERTEBRAL ARTERIES	Inpatient setting, primary position







2 Nonfatal Stroke	166.09	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF UNSPECIFIED MIDDLE CEREBRAL ARTERY	Inpatient setting, primary position
2 Nonfatal Stroke	166.1	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF ANTERIOR CEREBRAL ARTERY	Inpatient setting, primary position
2 Nonfatal Stroke	166.11	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF RIGHT ANTERIOR CEREBRAL ARTERY	Inpatient setting, primary position
2 Nonfatal Stroke	166.12	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF LEFT ANTERIOR CEREBRAL ARTERY	Inpatient setting, primary position
2 Nonfatal Stroke	166.13	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF BILATERAL ANTERIOR CEREBRAL ARTERIES	Inpatient setting, primary position
2 Nonfatal Stroke	166.19	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF UNSPECIFIED ANTERIOR CEREBRAL ARTERY	Inpatient setting, primary position
2 Nonfatal Stroke	166.2	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF POSTERIOR CEREBRAL ARTERY	Inpatient setting, primary position
2 Nonfatal Stroke	166.21	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF RIGHT POSTERIOR CEREBRAL ARTERY	Inpatient setting, primary position
2 Nonfatal Stroke	166.22	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF LEFT POSTERIOR CEREBRAL ARTERY	Inpatient setting, primary position
2 Nonfatal Stroke	166.23	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF BILATERAL POSTERIOR CEREBRAL ARTERIES	Inpatient setting, primary position
2 Nonfatal Stroke	166.29	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF UNSPECIFIED POSTERIOR CEREBRAL ARTERY	Inpatient setting, primary position
2 Nonfatal Stroke	166.3	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF CEREBELLAR ARTERIES	Inpatient setting, primary position
2 Nonfatal Stroke	166.8	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF OTHER CEREBRAL ARTERIES	Inpatient setting, primary position
2 Nonfatal Stroke	166.9	DX	ICD-10-CM	OCCLUSION AND STENOSIS OF UNSPECIFIED CEREBRAL ARTERY	Inpatient setting, primary position
3 Death	20		IP: Discharge status		All database
3 Death	41		IP: Discharge status		All database
3 Death	42		IP: Discharge status		All database
3 Death	21		IP: Discharge status		Marketscan/Optum database
3 Death	22		IP: Discharge status		Marketscan/Optum database
3 Death	23		IP: Discharge status		Marketscan/Optum database
3 Death	24		IP: Discharge status		Marketscan/Optum database
3 Death	25		IP: Discharge status		Marketscan/Optum database
3 Death	26		IP: Discharge status		Marketscan/Optum database
3 Death	27		IP: Discharge status		Marketscan/Optum database
3 Death	28		IP: Discharge status		Marketscan/Optum database
3 Death	29		IP: Discharge status		Marketscan/Optum database
3 Death	40		IP: Discharge status		Marketscan/Optum database
3 Death	BENE_DEA		file:mbsf_abdc_summary		Medicare database
3 Death	BENE_DEA		file:vital_status_file		Medicare database
3 Death	YMDOD in		file:member enrollment		Optum database
3 Death	DEATHYRM		file:mortality file		Marketscan database
4 Coronary revascularization	T82.211A	DX	ICD-10-PCS	BREAKDOWN (MECHANICAL) OF CORONARY ARTERY BYPASS GRAFT, INITIAL ENCOUNTER	Any setting
4 Coronary revascularization	T82.212A	DX	ICD-10-PCS	DISPLACEMENT OF CORONARY ARTERY BYPASS GRAFT, INITIAL ENCOUNTER	Any setting
4 Coronary revascularization	T82.213A	DX	ICD-10-PCS	LEAKAGE OF CORONARY ARTERY BYPASS GRAFT, INITIAL ENCOUNTER	Any setting
4 Coronary revascularization	T82.218A	DX	ICD-10-PCS	OTHER MECHANICAL COMPLICATION OF CORONARY ARTERY BYPASS GRAFT, INITIAL ENCOUNTER	Any setting
4 Coronary revascularization	0210083	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM CORONARY ARTERY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	Any setting
4 Coronary revascularization	0210088	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM RIGHT INTERNAL MAMMARY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	Any setting
4 Coronary revascularization	0210089	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM LEFT INTERNAL MAMMARY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	Any setting
4 Coronary revascularization	021008C	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM THORACIC ARTERY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	Any setting
4 Coronary revascularization	021008F	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM ABDOMINAL ARTERY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	Any setting
4 Coronary revascularization	021008W	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM AORTA WITH ZOOPLASTIC TISSUE, OPEN APPROACH	Any setting
4 Coronary revascularization	0210093	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM CORONARY ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	Any setting
4 Coronary revascularization	0210098	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM RIGHT INTERNAL MAMMARY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	Any setting
4 Coronary revascularization	0210099	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM LEFT INTERNAL MAMMARY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	Any setting
4 Coronary revascularization	021009C	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM THORACIC ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	Any setting
4 Coronary revascularization	021009F	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM ABDOMINAL ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	Any setting
4 Coronary revascularization	021009W	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM AORTA WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	Any setting





4	Coronary revascularization	021048W	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM AORTA WITH ZOOPLASTIC TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	210493	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM CORONARY ARTERY WITH AUTOLOGOUS VENOUS TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	0210498	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM RIGHT INTERNAL MAMMARY WITH AUTOLOGOUS VENOUS TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	0210499	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM LEFT INTERNAL MAMMARY WITH AUTOLOGOUS VENOUS TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	021049C	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM THORACIC ARTERY WITH AUTOLOGOUS VENOUS TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	021049F	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM ABDOMINAL ARTERY WITH AUTOLOGOUS VENOUS TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	021049W	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM AORTA WITH AUTOLOGOUS VENOUS TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104A3	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM CORONARY ARTERY WITH AUTOLOGOUS ARTERIAL TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104A8	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM RIGHT INTERNAL MAMMARY WITH AUTOLOGOUS ARTERIAL TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104A9	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM LEFT INTERNAL MAMMARY WITH AUTOLOGOUS ARTERIAL TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104AC	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM THORACIC ARTERY WITH AUTOLOGOUS ARTERIAL TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104AF	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM ABDOMINAL ARTERY WITH AUTOLOGOUS ARTERIAL TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104AW	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM AORTA WITH AUTOLOGOUS ARTERIAL TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104D4	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM CORONARY VEIN WITH INTRALUMINAL DEVICE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104J3	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM CORONARY ARTERY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104J8	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM RIGHT INTERNAL MAMMARY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104J9	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM LEFT INTERNAL MAMMARY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104JC	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM THORACIC ARTERY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104JF	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM ABDOMINAL ARTERY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104JW	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM AORTA WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104K3	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM CORONARY ARTERY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104K8	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM RIGHT INTERNAL MAMMARY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02104K9	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, ONE ARTERY FROM LEFT INTERNAL MAMMARY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting



4	Coronary revascularization	02110K3	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM CORONARY ARTERY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, OPEN APPROACH	Any setting
4	Coronary revascularization	02110K8	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM RIGHT INTERNAL MAMMARY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, OPEN APPROACH	Any setting
4	Coronary revascularization	02110K9	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM LEFT INTERNAL MAMMARY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, OPEN APPROACH	Any setting
4	Coronary revascularization	02110KC	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM THORACIC ARTERY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, OPEN APPROACH	Any setting
4	Coronary revascularization	02110KF	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM ABDOMINAL ARTERY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, OPEN APPROACH	Any setting
4	Coronary revascularization	02110KW	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM AORTA WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, OPEN APPROACH	Any setting
4	Coronary revascularization	02110Z3	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM CORONARY ARTERY, OPEN APPROACH	Any setting
4	Coronary revascularization	02110Z8	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM RIGHT INTERNAL MAMMARY, OPEN APPROACH	Any setting
4	Coronary revascularization	02110Z9	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM LEFT INTERNAL MAMMARY, OPEN APPROACH	Any setting
4	Coronary revascularization	02110ZC	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM THORACIC ARTERY, OPEN APPROACH	Any setting
4	Coronary revascularization	02110ZF	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM ABDOMINAL ARTERY, OPEN APPROACH	Any setting
4	Coronary revascularization	0211344	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM CORONARY VEIN WITH DRUG-ELUTING INTRALUMINAL DEVICE, PERCUTANEOUS APPROACH	Any setting
4	Coronary revascularization	02113D4	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM CORONARY VEIN WITH INTRALUMINAL DEVICE, PERCUTANEOUS APPROACH	Any setting
4	Coronary revascularization	0211444	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM CORONARY VEIN WITH DRUG-ELUTING INTRALUMINAL DEVICE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	0211483	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM CORONARY ARTERY WITH ZOOPLASTIC TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	0211488	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM RIGHT INTERNAL MAMMARY WITH ZOOPLASTIC TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	0211489	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM LEFT INTERNAL MAMMARY WITH ZOOPLASTIC TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	021148C	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM THORACIC ARTERY WITH ZOOPLASTIC TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	021148F	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM ABDOMINAL ARTERY WITH ZOOPLASTIC TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	021148W	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM AORTA WITH ZOOPLASTIC TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	0211493	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM CORONARY ARTERY WITH AUTOLOGOUS VENOUS TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	0211498	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM RIGHT INTERNAL MAMMARY WITH AUTOLOGOUS VENOUS TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	0211499	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM LEFT INTERNAL MAMMARY WITH AUTOLOGOUS VENOUS TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	021149C	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM THORACIC ARTERY WITH AUTOLOGOUS VENOUS TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	021149F	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, TWO ARTERIES FROM ABDOMINAL ARTERY WITH AUTOLOGOUS VENOUS TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting







4	Coronary revascularization	02124AW	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM AORTA WITH AUTOLOGOUS ARTERIAL TISSUE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124D4	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM CORONARY VEIN WITH INTRALUMINAL DEVICE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124J3	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM CORONARY ARTERY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124J8	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM RIGHT INTERNAL MAMMARY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124J9	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM LEFT INTERNAL MAMMARY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124JC	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM THORACIC ARTERY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124JF	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM ABDOMINAL ARTERY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124JW	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM AORTA WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124K3	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM CORONARY ARTERY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124K8	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM RIGHT INTERNAL MAMMARY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124K9	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM LEFT INTERNAL MAMMARY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124KC	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM THORACIC ARTERY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124KF	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM ABDOMINAL ARTERY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124KW	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM AORTA WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124Z3	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM CORONARY ARTERY, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124Z8	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM RIGHT INTERNAL MAMMARY, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124Z9	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM LEFT INTERNAL MAMMARY, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124ZC	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM THORACIC ARTERY, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02124ZF	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, THREE ARTERIES FROM ABDOMINAL ARTERY, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	0213083	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM CORONARY ARTERY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	Any setting
4	Coronary revascularization	0213088	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM RIGHT INTERNAL MAMMARY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	Any setting
4	Coronary revascularization	0213089	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM LEFT INTERNAL MAMMARY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	Any setting
4	Coronary revascularization	021308C	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM THORACIC ARTERY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	Any setting
4	Coronary revascularization	021308F	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM ABDOMINAL ARTERY WITH ZOOPLASTIC TISSUE, OPEN APPROACH	Any setting
4	Coronary revascularization	021308W	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM AORTA WITH ZOOPLASTIC TISSUE, OPEN APPROACH	Any setting
4	Coronary revascularization	0213093	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM CORONARY ARTERY WITH AUTOLOGOUS VENOUS TISSUE, OPEN APPROACH	Any setting







4	Coronary revascularization	02134D4	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM CORONARY VEIN WITH INTRALUMINAL DEVICE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134J3	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM CORONARY ARTERY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134J8	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM RIGHT INTERNAL MAMMARY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134J9	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM LEFT INTERNAL MAMMARY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134JC	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM THORACIC ARTERY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134JF	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM ABDOMINAL ARTERY WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134JW	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM AORTA WITH SYNTHETIC SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134K3	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM CORONARY ARTERY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134K8	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM RIGHT INTERNAL MAMMARY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134K9	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM LEFT INTERNAL MAMMARY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134KC	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM THORACIC ARTERY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134KF	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM ABDOMINAL ARTERY WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134KW	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM AORTA WITH NONAUTOLOGOUS TISSUE SUBSTITUTE, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134Z3	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM CORONARY ARTERY, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134Z8	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM RIGHT INTERNAL MAMMARY, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134Z9	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM LEFT INTERNAL MAMMARY, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134ZC	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM THORACIC ARTERY, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02134ZF	PX	ICD-10-PCS	BYPASS CORONARY ARTERY, FOUR OR MORE ARTERIES FROM ABDOMINAL ARTERY, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	021K0Z5	PX	ICD-10-PCS	BYPASS RIGHT VENTRICLE TO CORONARY CIRCULATION, OPEN APPROACH	Any setting
4	Coronary revascularization	021K4Z5	PX	ICD-10-PCS	BYPASS RIGHT VENTRICLE TO CORONARY CIRCULATION, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	021L0Z5	PX	ICD-10-PCS	BYPASS LEFT VENTRICLE TO CORONARY CIRCULATION, OPEN APPROACH	Any setting
4	Coronary revascularization	021L4Z5	PX	ICD-10-PCS	BYPASS LEFT VENTRICLE TO CORONARY CIRCULATION, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	0270046	PX	ICD-10-PCS	DILATION OF CORONARY ARTERY, ONE ARTERY, BIFURCATION, WITH DRUG-ELUTING INTRALUMINAL DEVICE, OPEN APPROACH	Any setting
4	Coronary revascularization	027004Z	PX	ICD-10-PCS	DILATION OF CORONARY ARTERY, ONE ARTERY WITH DRUG-ELUTING INTRALUMINAL DEVICE, OPEN APPROACH	Any setting
4	Coronary revascularization	0270056	PX	ICD-10-PCS	DILATION OF CORONARY ARTERY, ONE ARTERY, BIFURCATION, WITH TWO DRUGELUTING INTRALUMINAL DEVICES, OPEN APPROACH	Any setting
4	Coronary revascularization	027005Z	PX	ICD-10-PCS	DILATION OF CORONARY ARTERY, ONE ARTERY WITH TWO DRUG-ELUTING INTRALUMINAL DEVICES, OPEN APPROACH	Any setting
4	Coronary revascularization	0270066	PX	ICD-10-PCS	DILATION OF CORONARY ARTERY, ONE ARTERY, BIFURCATION, WITH THREE DRUG-ELUTING INTRALUMINAL DEVICES, OPEN APPROACH	Any setting





















4	Coronary revascularization	02QA3ZZ	PX	ICD-10-PCS	REPAIR HEART, PERCUTANEOUS APPROACH	Any setting
4	Coronary revascularization	02QA4ZZ	PX	ICD-10-PCS	REPAIR HEART, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02QB0ZZ	PX	ICD-10-PCS	REPAIR RIGHT HEART, OPEN APPROACH	Any setting
4	Coronary revascularization	02QB3ZZ	PX	ICD-10-PCS	REPAIR RIGHT HEART, PERCUTANEOUS APPROACH	Any setting
4	Coronary revascularization	02QB4ZZ	PX	ICD-10-PCS	REPAIR RIGHT HEART, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	02QC0ZZ	PX	ICD-10-PCS	REPAIR LEFT HEART, OPEN APPROACH	Any setting
4	Coronary revascularization	02QC3ZZ	PX	ICD-10-PCS	REPAIR LEFT HEART, PERCUTANEOUS APPROACH	Any setting
4	Coronary revascularization	02QC4ZZ	PX	ICD-10-PCS	REPAIR LEFT HEART, PERCUTANEOUS ENDOSCOPIC APPROACH	Any setting
4	Coronary revascularization	33140	PX	CPT/HCPCS	TRANSMYOCARDIAL LASER REVASCULARIZATION, BY THORACOTOMY; (SEPARATE PROCEDURE)	Any setting
4	Coronary revascularization	33141	PX	CPT/HCPCS	TRANSMYOCARDIAL LASER REVASCULARIZATION, BY THORACOTOMY; PERFORMED AT THE TIME OF OTHER OPEN CARDIAC PROCEDURE(S) (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	33510	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, VEIN ONLY; SINGLE CORONARY VENOUS GRAFT	Any setting
4	Coronary revascularization	33511	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, VEIN ONLY; 2 CORONARY VENOUS GRAFTS	Any setting
4	Coronary revascularization	33512	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, VEIN ONLY; 3 CORONARY VENOUS GRAFTS	Any setting
4	Coronary revascularization	33513	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, VEIN ONLY; 4 CORONARY VENOUS GRAFTS	Any setting
4	Coronary revascularization	33514	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, VEIN ONLY; 5 CORONARY VENOUS GRAFTS	Any setting
4	Coronary revascularization	33516	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, VEIN ONLY; 6 OR MORE CORONARY VENOUS GRAFTS	Any setting
4	Coronary revascularization	33517	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); SINGLE VEIN GRAFT (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	33518	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 2 VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	33519	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 3 VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	33521	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 4 VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	33522	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 5 VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	33523	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, USING VENOUS GRAFT(S) AND ARTERIAL GRAFT(S); 6 OR MORE VENOUS GRAFTS (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	33530	PX	CPT/HCPCS	REOPERATION, CORONARY ARTERY BYPASS PROCEDURE OR VALVE PROCEDURE, MORE THAN 1 MONTH AFTER ORIGINAL OPERATION (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	33533	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, USING ARTERIAL GRAFT(S); SINGLE ARTERIAL GRAFT	Any setting
4	Coronary revascularization	33534	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, USING ARTERIAL GRAFT(S); 2 CORONARY ARTERIAL GRAFTS	Any setting
4	Coronary revascularization	33535	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, USING ARTERIAL GRAFT(S); 3 CORONARY ARTERIAL GRAFTS	Any setting
4	Coronary revascularization	33536	PX	CPT/HCPCS	CORONARY ARTERY BYPASS, USING ARTERIAL GRAFT(S); 4 OR MORE CORONARY ARTERIAL GRAFTS	Any setting
4	Coronary revascularization	33545	PX	CPT/HCPCS	REPAIR OF POSTINFARCTION VENTRICULAR SEPTAL DEFECT, WITH OR WITHOUT MYOCARDIAL RESECTION	Any setting
4	Coronary revascularization	33572	PX	CPT/HCPCS	CORONARY ENDARTERECTOMY, OPEN, ANY METHOD, OF LEFT ANTERIOR DESCENDING, CIRCUMFLEX, OR RIGHT CORONARY ARTERY PERFORMED IN CONJUNCTION WITH CORONARY ARTERY BYPASS GRAFT PROCEDURE, EACH VESSEL (LIST SEPARATELY IN ADDITION TO PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	92920	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY; SINGLE MAJOR CORONARY ARTERY OR BRANCH	Any setting
4	Coronary revascularization	92921	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY; EACH ADDITIONAL BRANCH OF A MAJOR CORONARY ARTERY (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting

4	Coronary revascularization	92924	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL CORONARY ATHERECTOMY, WITH CORONARY ANGIOPLASTY WHEN PERFORMED; SINGLE MAJOR CORONARY ARTERY OR BRANCH	Any setting
4	Coronary revascularization	92925	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL CORONARY ATHERECTOMY, WITH CORONARY ANGIOPLASTY WHEN PERFORMED; EACH ADDITIONAL BRANCH OF A MAJOR CORONARY ARTERY (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	92928	PX	CPT/HCPCS	PERCUTANEOUS TRANSCATHETER PLACEMENT OF INTRACORONARY STENT(S), WITH CORONARY ANGIOPLASTY WHEN PERFORMED; SINGLE MAJOR CORONARY ARTERY OR BRANCH	Any setting
4	Coronary revascularization	92929	PX	CPT/HCPCS	PERCUTANEOUS TRANSCATHETER PLACEMENT OF INTRACORONARY STENT(S), WITH CORONARY ANGIOPLASTY WHEN PERFORMED; EACH ADDITIONAL BRANCH OF A MAJOR CORONARY ARTERY (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	92933	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL CORONARY ATHERECTOMY, WITH INTRACORONARY STENT, WITH CORONARY ANGIOPLASTY WHEN PERFORMED; SINGLE MAJOR CORONARY ARTERY OR BRANCH	Any setting
4	Coronary revascularization	92934	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL CORONARY ATHERECTOMY, WITH INTRACORONARY STENT, WITH CORONARY ANGIOPLASTY WHEN PERFORMED; EACH ADDITIONAL BRANCH OF A MAJOR CORONARY ARTERY (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	92937	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL REVASCULARIZATION OF OR THROUGH CORONARY ARTERY BYPASS GRAFT (INTERNAL MAMMARY, FREE ARTERIAL, VENOUS), ANY COMBINATION OF INTRACORONARY STENT, ATHERECTOMY AND ANGIOPLASTY, INCLUDING DISTAL PROTECTION WHEN PERFORMED; SINGLE VESSEL	Any setting
4	Coronary revascularization	92938	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL REVASCULARIZATION OF OR THROUGH CORONARY ARTERY BYPASS GRAFT (INTERNAL MAMMARY, FREE ARTERIAL, VENOUS), ANY COMBINATION OF INTRACORONARY STENT, ATHERECTOMY AND ANGIOPLASTY, INCLUDING DISTAL PROTECTION WHEN PERFORMED; EACH ADDITIONAL BRANCH SUBTENDED BY THE BYPASS GRAFT (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	92941	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL REVASCULARIZATION OF ACUTE TOTAL/SUBTOTAL OCCLUSION DURING ACUTE MYOCARDIAL INFARCTION, CORONARY ARTERY OR CORONARY ARTERY BYPASS GRAFT, ANY COMBINATION OF INTRACORONARY STENT, ATHERECTOMY AND ANGIOPLASTY, INCLUDING ASPIRATION THROMBECTOMY WHEN PERFORMED, SINGLE VESSEL	Any setting
4	Coronary revascularization	92943	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL REVASCULARIZATION OF CHRONIC TOTAL OCCLUSION, CORONARY ARTERY, CORONARY ARTERY BRANCH, OR CORONARY ARTERY BYPASS GRAFT, ANY COMBINATION OF INTRACORONARY STENT, ATHERECTOMY AND ANGIOPLASTY; SINGLE VESSEL	Any setting
4	Coronary revascularization	92944	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL REVASCULARIZATION OF CHRONIC TOTAL OCCLUSION, CORONARY ARTERY, CORONARY ARTERY BRANCH, OR CORONARY ARTERY BYPASS GRAFT, ANY COMBINATION OF INTRACORONARY STENT, ATHERECTOMY AND ANGIOPLASTY; EACH ADDITIONAL CORONARY ARTERY, CORONARY ARTERY BRANCH, OR BYPASS GRAFT (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	92973	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL CORONARY THROMBECTOMY MECHANICAL (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	92980	PX	CPT/HCPCS	TRANSCATHETER PLACEMENT OF AN INTRACORONARY STENT(S), PERCUTANEOUS, WITH OR WITHOUT OTHER THERAPEUTIC INTERVENTION, ANY METHOD; SINGLE VESSEL	Any setting
4	Coronary revascularization	92981	PX	CPT/HCPCS	TRANSCATHETER PLACEMENT OF AN INTRACORONARY STENT(S), PERCUTANEOUS, WITH OR WITHOUT OTHER THERAPEUTIC INTERVENTION, ANY METHOD; EACH ADDITIONAL VESSEL (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	92982	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL CORONARY BALLOON ANGIOPLASTY; SINGLE VESSEL	Any setting
4	Coronary revascularization	92984	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL CORONARY BALLOON ANGIOPLASTY; EACH ADDITIONAL VESSEL (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting

4	Coronary revascularization	92995	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL CORONARY ATHERECTOMY, BY MECHANICAL OR OTHER METHOD, WITH OR WITHOUT BALLOON ANGIOPLASTY; SINGLE VESSEL	Any setting
4	Coronary revascularization	92996	PX	CPT/HCPCS	PERCUTANEOUS TRANSLUMINAL CORONARY ATHERECTOMY, BY MECHANICAL OR OTHER METHOD, WITH OR WITHOUT BALLOON ANGIOPLASTY; EACH ADDITIONAL VESSEL (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	Any setting
4	Coronary revascularization	Z95.1	DX	ICD-10-CM	PRESENCE OF AORTOCORONARY BYPASS GRAFT	Any setting
4	Coronary revascularization	Z95.5	DX	ICD-10-CM	PRESENCE OF CORONARY ANGIOPLASTY IMPLANT AND GRAFT	Any setting
4	Coronary revascularization	Z98.61	DX	ICD-10-CM	CORONARY ANGIOPLASTY STATUS	Any setting
5	Unstable angina	I20.0	DX	ICD-10-CM	UNSTABLE ANGINA	Inpatient setting, primary position
5	Unstable angina	I25.110	DX	ICD-10-CM	ATHEROSCLEROTIC HEART DISEASE OF NATIVE CORONARY ARTERY WITH UNSTABLE ANGINA PECTORIS	Inpatient setting, primary position
5	Unstable angina	I25.700	DX	ICD-10-CM	ATHEROSCLEROSIS OF CORONARY ARTERY BYPASS GRAFT(S), UNSPECIFIED, WITH UNSTABLE ANGINA PECTORIS	Inpatient setting, primary position
5	Unstable angina	I25.710	DX	ICD-10-CM	ATHEROSCLEROSIS OF AUTOLOGOUS VEIN CORONARY ARTERY BYPASS GRAFT(S) WITH UNSTABLE ANGINA PECTORIS	Inpatient setting, primary position
5	Unstable angina	I25.720	DX	ICD-10-CM	ATHEROSCLEROSIS OF AUTOLOGOUS ARTERY CORONARY ARTERY BYPASS GRAFT(S) WITH UNSTABLE ANGINA PECTORIS	Inpatient setting, primary position
5	Unstable angina	I25.730	DX	ICD-10-CM	ATHEROSCLEROSIS OF NONAUTOLOGOUS BIOLOGICAL CORONARY ARTERY BYPASS GRAFT(S) WITH UNSTABLE ANGINA PECTORIS	Inpatient setting, primary position
5	Unstable angina	I25.750	DX	ICD-10-CM	ATHEROSCLEROSIS OF NATIVE CORONARY ARTERY OF TRANSPLANTED HEART WITH UNSTABLE ANGINA	Inpatient setting, primary position
5	Unstable angina	I25.760	DX	ICD-10-CM	ATHEROSCLEROSIS OF BYPASS GRAFT OF CORONARY ARTERY OF TRANSPLANTED HEART WITH UNSTABLE ANGINA	Inpatient setting, primary position
5	Unstable angina	I25.790	DX	ICD-10-CM	ATHEROSCLEROSIS OF OTHER CORONARY ARTERY BYPASS GRAFT(S) WITH UNSTABLE ANGINA PECTORIS	Inpatient setting, primary position
6	Negative control: Hernia	K40	DX	ICD-10-CM	INGUINAL HERNIA	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41	DX	ICD-10-CM	FEMORAL HERNIA	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.0	DX	ICD-10-CM	BILATERAL FEMORAL HERNIA, WITH OBSTRUCTION, WITHOUT GANGRENE	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.00	DX	ICD-10-CM	BILATERAL FEMORAL HERNIA, WITH OBSTRUCTION, WITHOUT GANGRENE, NOT SPECIFIED AS RECURRENT	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.01	DX	ICD-10-CM	BILATERAL FEMORAL HERNIA, WITH OBSTRUCTION, WITHOUT GANGRENE, RECURRENT	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.1	DX	ICD-10-CM	BILATERAL FEMORAL HERNIA, WITH GANGRENE	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.10	DX	ICD-10-CM	BILATERAL FEMORAL HERNIA, WITH GANGRENE, NOT SPECIFIED AS RECURRENT	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.11	DX	ICD-10-CM	BILATERAL FEMORAL HERNIA, WITH GANGRENE, RECURRENT	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.2	DX	ICD-10-CM	BILATERAL FEMORAL HERNIA, WITHOUT OBSTRUCTION OR GANGRENE	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.20	DX	ICD-10-CM	BILATERAL FEMORAL HERNIA, WITHOUT OBSTRUCTION OR GANGRENE, NOT SPECIFIED AS RECURRENT	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.21	DX	ICD-10-CM	BILATERAL FEMORAL HERNIA, WITHOUT OBSTRUCTION OR GANGRENE, RECURRENT	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.3	DX	ICD-10-CM	UNILATERAL FEMORAL HERNIA, WITH OBSTRUCTION, WITHOUT GANGRENE	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.30	DX	ICD-10-CM	UNILATERAL FEMORAL HERNIA, WITH OBSTRUCTION, WITHOUT GANGRENE, NOT SPECIFIED AS RECURRENT	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.31	DX	ICD-10-CM	UNILATERAL FEMORAL HERNIA, WITH OBSTRUCTION, WITHOUT GANGRENE, RECURRENT	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.4	DX	ICD-10-CM	UNILATERAL FEMORAL HERNIA, WITH GANGRENE	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.40	DX	ICD-10-CM	UNILATERAL FEMORAL HERNIA, WITH GANGRENE, NOT SPECIFIED AS RECURRENT	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.41	DX	ICD-10-CM	UNILATERAL FEMORAL HERNIA, WITH GANGRENE, RECURRENT	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.9	DX	ICD-10-CM	UNILATERAL FEMORAL HERNIA, WITHOUT OBSTRUCTION OR GANGRENE	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.90	DX	ICD-10-CM	UNILATERAL FEMORAL HERNIA, WITHOUT OBSTRUCTION OR GANGRENE, NOT SPECIFIED AS RECURRENT	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K41.91	DX	ICD-10-CM	UNILATERAL FEMORAL HERNIA, WITHOUT OBSTRUCTION OR GANGRENE, RECURRENT	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K42	DX	ICD-10-CM	UMBILICAL HERNIA	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K42.0	DX	ICD-10-CM	UMBILICAL HERNIA WITH OBSTRUCTION, WITHOUT GANGRENE	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K42.1	DX	ICD-10-CM	UMBILICAL HERNIA WITH GANGRENE	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K42.9	DX	ICD-10-CM	UMBILICAL HERNIA WITHOUT OBSTRUCTION OR GANGRENE	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K43	DX	ICD-10-CM	VENTRAL HERNIA	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K43.0	DX	ICD-10-CM	INCISIONAL HERNIA WITH OBSTRUCTION, WITHOUT GANGRENE	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K43.1	DX	ICD-10-CM	INCISIONAL HERNIA WITH GANGRENE	Inpatient and outpatient setting, any position
6	Negative control: Hernia	K43.2	DX	ICD-10-CM	INCISIONAL HERNIA WITHOUT OBSTRUCTION OR GANGRENE	Inpatient and outpatient setting, any position

6 Negative control: Hernia	K43.3	DX	ICD-10-CM	PARASTOMAL HERNIA WITH OBSTRUCTION, WITHOUT GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K43.4	DX	ICD-10-CM	PARASTOMAL HERNIA WITH GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K43.5	DX	ICD-10-CM	PARASTOMAL HERNIA WITHOUT OBSTRUCTION OR GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K43.6	DX	ICD-10-CM	OTHER AND UNSPECIFIED VENTRAL HERNIA WITH OBSTRUCTION, WITHOUT GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K43.7	DX	ICD-10-CM	OTHER AND UNSPECIFIED VENTRAL HERNIA WITH GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K43.9	DX	ICD-10-CM	VENTRAL HERNIA WITHOUT OBSTRUCTION OR GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K44	DX	ICD-10-CM	DIAPHRAGMATIC HERNIA	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K44.0	DX	ICD-10-CM	DIAPHRAGMATIC HERNIA WITH OBSTRUCTION, WITHOUT GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K44.1	DX	ICD-10-CM	DIAPHRAGMATIC HERNIA WITH GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K44.9	DX	ICD-10-CM	DIAPHRAGMATIC HERNIA WITHOUT OBSTRUCTION OR GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K45	DX	ICD-10-CM	OTHER ABDOMINAL HERNIA	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K45.0	DX	ICD-10-CM	OTHER SPECIFIED ABDOMINAL HERNIA WITH OBSTRUCTION, WITHOUT GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K45.1	DX	ICD-10-CM	OTHER SPECIFIED ABDOMINAL HERNIA WITH GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K45.8	DX	ICD-10-CM	OTHER SPECIFIED ABDOMINAL HERNIA WITHOUT OBSTRUCTION OR GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K46	DX	ICD-10-CM	UNSPECIFIED ABDOMINAL HERNIA	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K46.0	DX	ICD-10-CM	UNSPECIFIED ABDOMINAL HERNIA WITH OBSTRUCTION, WITHOUT GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K46.1	DX	ICD-10-CM	UNSPECIFIED ABDOMINAL HERNIA WITH GANGRENE	Inpatient and outpatient setting, any position
6 Negative control: Hernia	K46.9	DX	ICD-10-CM	UNSPECIFIED ABDOMINAL HERNIA WITHOUT OBSTRUCTION OR GANGRENE	Inpatient and outpatient setting, any position
7 Negative control: Lumbar radiculopathy	M54.15	DX	ICD-10-CM	RADICULOPATHY, THORACOLUMBAR REGION	Inpatient and outpatient setting, any position
7 Negative control: Lumbar radiculopathy	M54.16	DX	ICD-10-CM	RADICULOPATHY, LUMBAR REGION	Inpatient and outpatient setting, any position
7 Negative control: Lumbar radiculopathy	M54.17	DX	ICD-10-CM	RADICULOPATHY, LUMBOSACRAL REGION	Inpatient and outpatient setting, any position
8 Safety outcome: Gastrointestinal adverse events	K31.84	DX	ICD-10-CM	GASTROPARESIS	Inpatient and outpatient setting, any position
8 Safety outcome: Gastrointestinal adverse events	K80.0	DX	ICD-10-CM	CALCULUS OF GALLBLADDER WITH ACUTE CHOLECYSTITIS	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.00	DX	ICD-10-CM	CALCULUS OF GALLBLADDER WITH ACUTE CHOLECYSTITIS WITHOUT OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.01	DX	ICD-10-CM	CALCULUS OF GALLBLADDER WITH ACUTE CHOLECYSTITIS WITH OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.1	DX	ICD-10-CM	CALCULUS OF GALLBLADDER WITH OTHER CHOLECYSTITIS	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.10	DX	ICD-10-CM	CALCULUS OF GALLBLADDER WITH CHRONIC CHOLECYSTITIS WITHOUT OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.11	DX	ICD-10-CM	CALCULUS OF GALLBLADDER WITH CHRONIC CHOLECYSTITIS WITH OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.12	DX	ICD-10-CM	CALCULUS OF GALLBLADDER WITH ACUTE AND CHRONIC CHOLECYSTITIS WITHOUT OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.13	DX	ICD-10-CM	CALCULUS OF GALLBLADDER WITH ACUTE AND CHRONIC CHOLECYSTITIS WITH OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.18	DX	ICD-10-CM	CALCULUS OF GALLBLADDER WITH OTHER CHOLECYSTITIS WITHOUT OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.19	DX	ICD-10-CM	CALCULUS OF GALLBLADDER WITH OTHER CHOLECYSTITIS WITH OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.2	DX	ICD-10-CM	CALCULUS OF GALLBLADDER WITHOUT CHOLECYSTITIS	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.20	DX	ICD-10-CM	CALCULUS OF GALLBLADDER WITHOUT CHOLECYSTITIS WITHOUT OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.21	DX	ICD-10-CM	CALCULUS OF GALLBLADDER WITHOUT CHOLECYSTITIS WITH OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.3	DX	ICD-10-CM	CALCULUS OF BILE DUCT WITH CHOLANGITIS	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.30	DX	ICD-10-CM	CALCULUS OF BILE DUCT WITH CHOLANGITIS, UNSPECIFIED, WITHOUT OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.31	DX	ICD-10-CM	CALCULUS OF BILE DUCT WITH CHOLANGITIS, UNSPECIFIED, WITH OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.32	DX	ICD-10-CM	CALCULUS OF BILE DUCT WITH ACUTE CHOLANGITIS WITHOUT OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.33	DX	ICD-10-CM	CALCULUS OF BILE DUCT WITH ACUTE CHOLANGITIS WITH OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.34	DX	ICD-10-CM	CALCULUS OF BILE DUCT WITH CHRONIC CHOLANGITIS WITHOUT OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.35	DX	ICD-10-CM	CALCULUS OF BILE DUCT WITH CHRONIC CHOLANGITIS WITH OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.36	DX	ICD-10-CM	CALCULUS OF BILE DUCT WITH ACUTE AND CHRONIC CHOLANGITIS WITHOUT OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.37	DX	ICD-10-CM	CALCULUS OF BILE DUCT WITH ACUTE AND CHRONIC CHOLANGITIS WITH OBSTRUCTION	Inpatient setting, primary position
8 Safety outcome: Gastrointestinal adverse events	K80.4	DX	ICD-10-CM	CALCULUS OF BILE DUCT WITH CHOLECYSTITIS	Inpatient setting, primary position





8	Safety outcome: Gastrointestinal adverse events	K85.31	DX	ICD-10-CM	DRUG INDUCED ACUTE PANCREATITIS WITH UNINFECTED NECROSIS	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K85.32	DX	ICD-10-CM	DRUG INDUCED ACUTE PANCREATITIS WITH INFECTED NECROSIS	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K85.8	DX	ICD-10-CM	OTHER ACUTE PANCREATITIS	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K85.80	DX	ICD-10-CM	OTHER ACUTE PANCREATITIS WITHOUT NECROSIS OR INFECTION	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K85.81	DX	ICD-10-CM	OTHER ACUTE PANCREATITIS WITH UNINFECTED NECROSIS	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K85.82	DX	ICD-10-CM	OTHER ACUTE PANCREATITIS WITH INFECTED NECROSIS	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K85.9	DX	ICD-10-CM	ACUTE PANCREATITIS, UNSPECIFIED	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K85.90	DX	ICD-10-CM	ACUTE PANCREATITIS WITHOUT NECROSIS OR INFECTION, UNSPECIFIED	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K85.91	DX	ICD-10-CM	ACUTE PANCREATITIS WITH UNINFECTED NECROSIS, UNSPECIFIED	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K85.92	DX	ICD-10-CM	ACUTE PANCREATITIS WITH INFECTED NECROSIS, UNSPECIFIED	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K31.5	DX	ICD-10-CM	OBSTRUCTION OF DUODENUM	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56	DX	ICD-10-CM	PARALYTIC ILEUS AND INTESTINAL OBSTRUCTION WITHOUT HERNIA	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.0	DX	ICD-10-CM	PARALYTIC ILEUS	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.5	DX	ICD-10-CM	INTESTINAL ADHESIONS [BANDS] WITH OBSTRUCTION (POSTINFECTION)	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.50	DX	ICD-10-CM	INTESTINAL ADHESIONS [BANDS] WITH OBSTRUCTION, UNSPECIFIED AS TO PARTIAL VS. COMPLETE	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.51	DX	ICD-10-CM	INTESTINAL ADHESIONS WITH PARTIAL OBSTRUCTION	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.52	DX	ICD-10-CM	INTESTINAL ADHESIONS WITH COMPLETE OBSTRUCTION	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.600	DX	ICD-10-CM	PARTIAL INTESTINAL OBSTRUCTION, UNSPECIFIED AS TO CAUSE	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.601	DX	ICD-10-CM	INCOMPLETE INTESTINAL OBSTRUCTION, NOS	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.609	DX	ICD-10-CM	COMPLETE INTESTINAL OBSTRUCTION, UNSPECIFIED AS TO CAUSE	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.69	DX	ICD-10-CM	UNSPECIFIED INTESTINAL OBSTRUCTION, UNSPECIFIED AS TO PARTIAL VS. COMPLETE	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.690	DX	ICD-10-CM	INTESTINAL OBSTRUCTION NOS	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.691	DX	ICD-10-CM	OTHER INTESTINAL OBSTRUCTION	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.699	DX	ICD-10-CM	OTHER PARTIAL INTESTINAL OBSTRUCTION	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.699	DX	ICD-10-CM	OTHER COMPLETE INTESTINAL OBSTRUCTION	Inpatient setting, primary position
8	Safety outcome: Gastrointestinal adverse events	K56.699	DX	ICD-10-CM	OTHER INTESTINAL OBSTRUCTION UNSPECIFIED AS TO PARTIAL VERSUS COMPLETE OBSTRUCTION	Inpatient setting, primary position
9	Safety outcome: Urinary tract infection	A02.25	DX	ICD-10-CM	SALMONELLA PYELONEPHRITIS	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9	Safety outcome: Urinary tract infection	N10	DX	ICD-10-CM	ACUTE PYELONEPHRITIS	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9	Safety outcome: Urinary tract infection	N11.0	DX	ICD-10-CM	NONOBSTRUCTIVE REFLUX-ASSOCIATED CHRONIC PYELONEPHRITIS	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9	Safety outcome: Urinary tract infection	N11.1	DX	ICD-10-CM	CHRONIC OBSTRUCTIVE PYELONEPHRITIS	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9	Safety outcome: Urinary tract infection	N13.6	DX	ICD-10-CM	PYONEPHROSIS	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9	Safety outcome: Urinary tract infection	N30	DX	ICD-10-CM	CYSTITIS	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9	Safety outcome: Urinary tract infection	N30.0	DX	ICD-10-CM	ACUTE CYSTITIS	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9	Safety outcome: Urinary tract infection	N30.00	DX	ICD-10-CM	ACUTE CYSTITIS WITHOUT HEMATURIA	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9	Safety outcome: Urinary tract infection	N30.01	DX	ICD-10-CM	ACUTE CYSTITIS WITH HEMATURIA	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9	Safety outcome: Urinary tract infection	N30.1	DX	ICD-10-CM	INTERSTITIAL CYSTITIS (CHRONIC)	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9	Safety outcome: Urinary tract infection	N30.10	DX	ICD-10-CM	INTERSTITIAL CYSTITIS (CHRONIC) WITHOUT HEMATURIA	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9	Safety outcome: Urinary tract infection	N30.11	DX	ICD-10-CM	INTERSTITIAL CYSTITIS (CHRONIC) WITH HEMATURIA	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days

9 Safety outcome: Urinary tract infection	N30.2	DX	ICD-10-CM	OTHER CHRONIC CYSTITIS	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N30.20	DX	ICD-10-CM	OTHER CHRONIC CYSTITIS WITHOUT HEMATURIA	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N30.21	DX	ICD-10-CM	OTHER CHRONIC CYSTITIS WITH HEMATURIA	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N30.3	DX	ICD-10-CM	TRIGONITIS	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N30.30	DX	ICD-10-CM	TRIGONITIS WITHOUT HEMATURIA	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N30.31	DX	ICD-10-CM	TRIGONITIS WITH HEMATURIA	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N30.40	DX	ICD-10-CM	IRRADIATION CYSTITIS WITHOUT HEMATURIA	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N30.8	DX	ICD-10-CM	OTHER CYSTITIS	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N30.80	DX	ICD-10-CM	OTHER CYSTITIS WITHOUT HEMATURIA	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N30.81	DX	ICD-10-CM	OTHER CYSTITIS WITH HEMATURIA	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N30.9	DX	ICD-10-CM	CYSTITIS, UNSPECIFIED	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N30.90	DX	ICD-10-CM	CYSTITIS, UNSPECIFIED WITHOUT HEMATURIA	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N30.91	DX	ICD-10-CM	CYSTITIS, UNSPECIFIED WITH HEMATURIA	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N39.0	DX	ICD-10-CM	URINARY TRACT INFECTION, SITE NOT SPECIFIED	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N41.3	DX	ICD-10-CM	PROSTATOCYSTITIS	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N99.521	DX	ICD-10-CM	INFECTION OF INCONTINENT EXTERNAL STOMA OF URINARY TRACT	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	N99.531	DX	ICD-10-CM	INFECTION OF CONTINENT STOMA OF URINARY TRACT	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	O03.38	DX	ICD-10-CM	URINARY TRACT INFECTION FOLLOWING INCOMPLETE SPONTANEOUS ABORTION	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	O03.88	DX	ICD-10-CM	URINARY TRACT INFECTION FOLLOWING COMPLETE OR UNSPECIFIED SPONTANEOUS ABORTION	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	O04.88	DX	ICD-10-CM	URINARY TRACT INFECTION FOLLOWING (INDUCED) TERMINATION OF PREGNANCY	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	O07.38	DX	ICD-10-CM	URINARY TRACT INFECTION FOLLOWING FAILED ATTEMPTED TERMINATION OF PREGNANCY	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days
9 Safety outcome: Urinary tract infection	O08.83	DX	ICD-10-CM	URINARY TRACT INFECTION FOLLOWING AN ECTOPIC AND MOLAR PREGNANCY	Any position, any setting AND urinary tract infection antibiotics prescription within 7 days







9	Safety outcome: Urinary tract infection	GENTAMICIN SULFATE/S	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	GENTAMICIN SULFATE/S	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	IMPENEM/CILASTATIN	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	SODIUM/RELEVOFLOX	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	ACIN/DEXTAMEROPENE	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	MEROPENEM IN 0.9%	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	M/VABORBNITROFURANTOIN	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	NITROFURANTOIN MONOHYDRATE	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	PIPERACILIN AND TAZOBACTAM	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	PIPERACILIN SODIUM	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	PIPERACILIN SODIUM/DE	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	SODIUM/TASULFAMET	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	SULFAMETHOXAZOLE/PHENAZOP	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	SULFAMETHOXAZOLE/	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	TOBRAMYCIN IN 0.225	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	TOBRAMYCIN SULFATE	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	TOBRAMYCIN SULFATE/D	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	TOBRAMYCIN SULFATE/S	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	TOBRAMYCIN SULFATE/V	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	IN/LOTEPR	RX	Generic		Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	TRIMETHOPRIMS0039	RX PX	Generic CPT / HCPCS	INJECTION, SULFAMETHOXAZOLE AND TRIMETHOPRIM AMOXICILLIN, WITH OR WITHOUT CLAVULANATE, NOT PRESCRIBED AS FIRST LINE ANTIBIOTIC AT THE TIME OF DIAGNOSIS FOR DOCUMENTED REASON.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	G9313	PX	CPT / HCPCS	AMOXICILLIN, WITH OR WITHOUT CLAVULANATE, NOT PRESCRIBED AS FIRST LINE ANTIBIOTIC AT THE TIME OF DIAGNOSIS, REASON NOT GIVEN AS MAINTAINED	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	G9314	PX	CPT / HCPCS		Urinary tract infection antibiotics

9	Safety outcome: Urinary tract infection	G9315	PX	CPT / HCPCS	AMOXICILLIN, WITH OR WITHOUT CLAVULANATE, NOT PRESCRIBED AS FIRST LINE ANTIBIOTIC AT THE TIME OF DIAGNOSIS, REASON NOT GIVEN AS MAINTAINED	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J0744	PX	CPT / HCPCS	INJECTION, CIPROFLOXACIN FOR INTRAVENOUS INFUSION, 200 MG AS MAINTAINED BY CMS FALLS UNDER DRUGS, ADMINISTERED BY INJECTION.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J7342	PX	CPT / HCPCS	INSTILLATION, CIPROFLOXACIN OTIC SUSPENSION, 6 MG AS MAINTAINED BY CMS FALLS UNDER MISCELLANEOUS DRUGS.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J1956	PX	CPT / HCPCS	INJECTION, LEVOFLOXACIN, 250 MG.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J0696	PX	CPT / HCPCS	INJECTION, CEFTRIAXONE SODIUM, PER 250 MG	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J0692	PX	CPT / HCPCS	INJECTION, CEFEPIME HYDROCHLORIDE, 500 MG AS MAINTAINED BY CMS FALLS UNDER DRUGS, ADMINISTERED BY INJECTION.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J0701	PX	CPT / HCPCS	INJECTION, CEFEPIME HYDROCHLORIDE (BAXTER), NOT THERAPEUTICALLY EQUIVALENT TO MAXIPIME, 500 MG	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J0703	PX	CPT / HCPCS	INJECTION, CEFEPIME HYDROCHLORIDE (B BRAUN), NOT THERAPEUTICALLY EQUIVALENT TO MAXIPIME, 500 MG AS MAINTAINED BY CMS FALLS UNDER DRUGS, ADMINISTERED BY INJECTION.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J2543	PX	CPT / HCPCS	INJECTION, PIPERACILLIN SODIUM/TAZOBACTAM SODIUM, 1 GRAM/0.125 GRAMS (1125 GRAMS)	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	S0081	PX	CPT / HCPCS	INJECTION, PIPERACILLIN SODIUM, 500 MG AS MAINTAINED BY CMS FALLS UNDER NON-MEDICARE DRUG CODES.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	80170	PX	CPT / HCPCS	GENTAMICIN	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J1580	PX	CPT / HCPCS	INJECTION, GARAMYCIN, GENTAMICIN, UP TO 80 MG AS MAINTAINED BY CMS FALLS UNDER DRUGS, ADMINISTERED BY INJECTION.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	80200	PX	CPT / HCPCS	TOBRAMYCIN	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J3260	PX	CPT / HCPCS	INJECTION, TOBRAMYCIN SULFATE, UP TO 80 MG	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J0713	PX	CPT / HCPCS	INJECTION, CEFTAZIDIME, PER 500 MG AS MAINTAINED BY CMS FALLS UNDER DRUGS, ADMINISTERED BY INJECTION.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J0714	PX	CPT / HCPCS	INJECTION, CEFTAZIDIME AND AVIBACTAM, 0.5 G/0.125 G AS MAINTAINED BY CMS FALLS UNDER DRUGS, ADMINISTERED BY INJECTION.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J2184	PX	CPT / HCPCS	INJECTION, MEROPENEM (B. BRAUN), NOT THERAPEUTICALLY EQUIVALENT TO J2185, 100 MG AS MAINTAINED BY CMS FALLS UNDER DRUGS, ADMINISTERED BY INJECTION.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J2185	PX	CPT / HCPCS	INJECTION, MEROPENEM, 100 MG.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J2186	PX	CPT / HCPCS	INJECTION, MEROPENEM AND VABORBACTAM, 10MG/10MG (20MG) AS MAINTAINED BY CMS FALLS UNDER DRUGS, ADMINISTERED BY INJECTION.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J1335	PX	CPT / HCPCS	INJECTION, ERTAPENEM SODIUM, 500 MG.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J1267	PX	CPT / HCPCS	INJECTION, DORIPENEM, 10 MG AS MAINTAINED BY CMS FALLS UNDER DRUGS, ADMINISTERED BY INJECTION.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J0742	PX	CPT / HCPCS	INJECTION, IMPENEM 4 MG, CILASTATIN 4 MG AND RELEBACTAM 2 MG AS MAINTAINED BY CMS FALLS UNDER DRUGS, ADMINISTERED BY INJECTION.	Urinary tract infection antibiotics
9	Safety outcome: Urinary tract infection	J0743	PX	CPT / HCPCS	INJECTION, CILASTATIN SODIUM; IMPENEM, PER 250 MG AS MAINTAINED BY CMS FALLS UNDER DRUGS, ADMINISTERED BY INJECTION	Urinary tract infection antibiotics
10	Safety outcome: Serious bacterial infection	A04.7	DX	ICD-10-CM	ENTEROCOLITIS DUE TO CLOSTRIDIUM DIFFICILE	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A04.71	DX	ICD-10-CM	ENTEROCOLITIS DUE TO CLOSTRIDIUM DIFFICILE, RECURRENT	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A04.72	DX	ICD-10-CM	ENTEROCOLITIS DUE TO CLOSTRIDIUM DIFFICILE, NOT SPECIFIED AS RECURRENT	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A01.01	DX	ICD-10-CM	TYPHOID MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A02.21	DX	ICD-10-CM	SALMONELLA MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A04.7	DX	ICD-10-CM	ENTEROCOLITIS DUE TO CLOSTRIDIUM DIFFICILE	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A17.0	DX	ICD-10-CM	TUBERCULOUS MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A17.82	DX	ICD-10-CM	TUBERCULOUS MENOENGOENCEPHALITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A27.81	DX	ICD-10-CM	ASEPTIC MENINGITIS IN LEPTOSPIROSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A32.11	DX	ICD-10-CM	LISTERIAL MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A39.0	DX	ICD-10-CM	MENINGOCOCCAL MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A39.81	DX	ICD-10-CM	MENINGOCOCCAL ENCEPHALITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A51.41	DX	ICD-10-CM	SECONDARY SYPHILITIC MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A52.13	DX	ICD-10-CM	LATE SYPHILITIC MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A54.81	DX	ICD-10-CM	GONOCOCCAL MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	B00.3	DX	ICD-10-CM	HERPESVIRAL MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	B02.1	DX	ICD-10-CM	ZOSTER MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	G00.0	DX	ICD-10-CM	HEMOPHILUS MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	G00.1	DX	ICD-10-CM	PNEUMOCOCCAL MENINGITIS	Inpatient setting, primary position

10	Safety outcome: Serious bacterial infection	G00.2	DX	ICD-10-CM	STREPTOCOCCAL MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	G00.3	DX	ICD-10-CM	STAPHYLOCOCCAL MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	G00.9	DX	ICD-10-CM	BACTERIAL MENINGITIS, UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	G01	DX	ICD-10-CM	MENINGITIS IN BACTERIAL DISEASES CLASSIFIED ELSEWHERE	Inpatient setting, primary position
		G02			MENINGITIS IN OTHER INFECTIOUS AND PARASITIC DISEASES CLASSIFIED ELSEWHERE	
10	Safety outcome: Serious bacterial infection	G04.2	DX	ICD-10-CM	BACTERIAL MENINGOENCEPHALITIS AND MENINGOMYELITIS, NOT ELSEWHERE CLASSIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	G00.8	DX	ICD-10-CM	OTHER BACTERIAL MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A32.82	DX	ICD-10-CM	LISTERIAL ENDOCARDITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A39.51	DX	ICD-10-CM	MENINGOCOCCAL ENDOCARDITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A52.03	DX	ICD-10-CM	SYPHILITIC ENDOCARDITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	I33.0	DX	ICD-10-CM	ACUTE AND SUBACUTE INFECTIVE ENDOCARDITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	I33.9	DX	ICD-10-CM	ACUTE AND SUBACUTE ENDOCARDITIS, UNSPECIFIED	Inpatient setting, primary position
		I39			ENDOCARDITIS AND HEART VALVE DISORDERS IN DISEASES CLASSIFIED ELSEWHERE	
10	Safety outcome: Serious bacterial infection	H70.001	DX	ICD-10-CM	ACUTE MASTOIDITIS WITHOUT COMPLICATIONS, RIGHT EAR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.002	DX	ICD-10-CM	ACUTE MASTOIDITIS WITHOUT COMPLICATIONS, LEFT EAR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.003	DX	ICD-10-CM	ACUTE MASTOIDITIS WITHOUT COMPLICATIONS, BILATERAL	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.009	DX	ICD-10-CM	ACUTE MASTOIDITIS WITHOUT COMPLICATIONS, UNSPECIFIED EAR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.011	DX	ICD-10-CM	SUBPERIOSTEAL ABSCESS OF MASTOID, RIGHT EAR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.012	DX	ICD-10-CM	SUBPERIOSTEAL ABSCESS OF MASTOID, LEFT EAR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.013	DX	ICD-10-CM	SUBPERIOSTEAL ABSCESS OF MASTOID, BILATERAL	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.019	DX	ICD-10-CM	SUBPERIOSTEAL ABSCESS OF MASTOID, UNSPECIFIED EAR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.091	DX	ICD-10-CM	ACUTE MASTOIDITIS WITH OTHER COMPLICATIONS, RIGHT EAR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.092	DX	ICD-10-CM	ACUTE MASTOIDITIS WITH OTHER COMPLICATIONS, LEFT EAR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.093	DX	ICD-10-CM	ACUTE MASTOIDITIS WITH OTHER COMPLICATIONS, BILATERAL	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.099	DX	ICD-10-CM	ACUTE MASTOIDITIS WITH OTHER COMPLICATIONS, UNSPECIFIED EAR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.90	DX	ICD-10-CM	UNSPECIFIED MASTOIDITIS, UNSPECIFIED EAR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.91	DX	ICD-10-CM	UNSPECIFIED MASTOIDITIS, RIGHT EAR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.92	DX	ICD-10-CM	UNSPECIFIED MASTOIDITIS, LEFT EAR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H70.93	DX	ICD-10-CM	UNSPECIFIED MASTOIDITIS, BILATERAL	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A01.05	DX	ICD-10-CM	TYPHOID OSTEOMYELITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A02.24	DX	ICD-10-CM	SALMONELLA OSTEOMYELITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A54.43	DX	ICD-10-CM	GONOCOCCAL OSTEOMYELITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H05.021	DX	ICD-10-CM	OSTEOMYELITIS OF RIGHT ORBIT	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H05.022	DX	ICD-10-CM	OSTEOMYELITIS OF LEFT ORBIT	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H05.023	DX	ICD-10-CM	OSTEOMYELITIS OF BILATERAL ORBITS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	H05.029	DX	ICD-10-CM	OSTEOMYELITIS OF UNSPECIFIED ORBIT	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M46.20	DX	ICD-10-CM	OSTEOMYELITIS OF VERTEBRA, SITE UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M46.21	DX	ICD-10-CM	OSTEOMYELITIS OF VERTEBRA, OCCIPITO-ATLANTO-AXIAL REGION	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M46.22	DX	ICD-10-CM	OSTEOMYELITIS OF VERTEBRA, CERVICAL REGION	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M46.23	DX	ICD-10-CM	OSTEOMYELITIS OF VERTEBRA, CERVICOTHORACIC REGION	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M46.24	DX	ICD-10-CM	OSTEOMYELITIS OF VERTEBRA, THORACIC REGION	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M46.25	DX	ICD-10-CM	OSTEOMYELITIS OF VERTEBRA, THORACOLUMBAR REGION	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M46.26	DX	ICD-10-CM	OSTEOMYELITIS OF VERTEBRA, LUMBAR REGION	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M46.27	DX	ICD-10-CM	OSTEOMYELITIS OF VERTEBRA, LUMBOSACRAL REGION	Inpatient setting, primary position
		M46.28			OSTEOMYELITIS OF VERTEBRA, SACRAL AND SACROCOCCYGEAL REGION	
10	Safety outcome: Serious bacterial infection	M86.00	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, UNSPECIFIED SITE	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.011	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, RIGHT SHOULDER	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.012	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, LEFT SHOULDER	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.019	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, UNSPECIFIED SHOULDER	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.021	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, RIGHT HUMERUS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.022	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, LEFT HUMERUS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.029	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, UNSPECIFIED HUMERUS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.031	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, RIGHT RADIUS AND ULNA	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.032	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, LEFT RADIUS AND ULNA	Inpatient setting, primary position
		M86.039			ACUTE HEMATOGENOUS OSTEOMYELITIS, UNSPECIFIED RADIUS AND ULNA	
10	Safety outcome: Serious bacterial infection	M86.041	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, RIGHT HAND	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.042	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, LEFT HAND	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.049	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, UNSPECIFIED HAND	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.051	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, RIGHT FEMUR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.052	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, LEFT FEMUR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.059	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, UNSPECIFIED FEMUR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.061	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, RIGHT TIBIA AND FIBULA	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M86.062	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, LEFT TIBIA AND FIBULA	Inpatient setting, primary position



	M86.069			ACUTE HEMATOGENOUS OSTEOMYELITIS, UNSPECIFIED TIBIA AND FIBULA	
10 Safety outcome: Serious bacterial infection		DX	ICD-10-CM		Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.071	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, RIGHT ANKLE AND FOOT	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.072	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, LEFT ANKLE AND FOOT	Inpatient setting, primary position
	M86.079			ACUTE HEMATOGENOUS OSTEOMYELITIS, UNSPECIFIED ANKLE AND FOOT	
10 Safety outcome: Serious bacterial infection		DX	ICD-10-CM		Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.08	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, OTHER SITES	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.09	DX	ICD-10-CM	ACUTE HEMATOGENOUS OSTEOMYELITIS, MULTIPLE SITES	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.10	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, UNSPECIFIED SITE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.111	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, RIGHT SHOULDER	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.112	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, LEFT SHOULDER	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.119	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, UNSPECIFIED SHOULDER	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.121	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, RIGHT HUMERUS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.122	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, LEFT HUMERUS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.129	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, UNSPECIFIED HUMERUS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.131	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, RIGHT RADIUS AND ULNA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.132	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, LEFT RADIUS AND ULNA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.139	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, UNSPECIFIED RADIUS AND ULNA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.141	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, RIGHT HAND	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.142	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, LEFT HAND	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.149	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, UNSPECIFIED HAND	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.151	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, RIGHT FEMUR	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.152	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, LEFT FEMUR	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.159	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, UNSPECIFIED FEMUR	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.161	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, RIGHT TIBIA AND FIBULA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.162	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, LEFT TIBIA AND FIBULA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.169	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, UNSPECIFIED TIBIA AND FIBULA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.171	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, RIGHT ANKLE AND FOOT	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.172	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, LEFT ANKLE AND FOOT	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.179	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, UNSPECIFIED ANKLE AND FOOT	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.18	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, OTHER SITE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.19	DX	ICD-10-CM	OTHER ACUTE OSTEOMYELITIS, MULTIPLE SITES	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.8X0	DX	ICD-10-CM	OTHER OSTEOMYELITIS, MULTIPLE SITES	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.8X1	DX	ICD-10-CM	OTHER OSTEOMYELITIS, SHOULDER	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.8X2	DX	ICD-10-CM	OTHER OSTEOMYELITIS, UPPER ARM	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.8X3	DX	ICD-10-CM	OTHER OSTEOMYELITIS, FOREARM	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.8X4	DX	ICD-10-CM	OTHER OSTEOMYELITIS, HAND	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.8X5	DX	ICD-10-CM	OTHER OSTEOMYELITIS, THIGH	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.8X6	DX	ICD-10-CM	OTHER OSTEOMYELITIS, LOWER LEG	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.8X7	DX	ICD-10-CM	OTHER OSTEOMYELITIS, ANKLE AND FOOT	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.8X8	DX	ICD-10-CM	OTHER OSTEOMYELITIS, OTHER SITE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.8X9	DX	ICD-10-CM	OTHER OSTEOMYELITIS, UNSPECIFIED SITES	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M86.9	DX	ICD-10-CM	OSTEOMYELITIS, UNSPECIFIED	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A01.03	DX	ICD-10-CM	TYPHOID PNEUMONIA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A02.22	DX	ICD-10-CM	SALMONELLA PNEUMONIA	Inpatient setting, primary position
	A37.01			WHOOPING COUGH DUE TO BORDETELLA PERTUSSIS WITH PNEUMONIA	
10 Safety outcome: Serious bacterial infection		DX	ICD-10-CM		Inpatient setting, primary position
	A37.11			WHOOPING COUGH DUE TO BORDETELLA PARAPERTUSSIS WITH PNEUMONIA	
10 Safety outcome: Serious bacterial infection		DX	ICD-10-CM		Inpatient setting, primary position
	A37.81			WHOOPING COUGH DUE TO OTHER BORDETELLA SPECIES WITH PNEUMONIA	
10 Safety outcome: Serious bacterial infection		DX	ICD-10-CM		Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A37.91	DX	ICD-10-CM	WHOOPING COUGH, UNSPECIFIED SPECIES WITH PNEUMONIA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A48.1	DX	ICD-10-CM	LEGIONNAIRES' DISEASE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A54.84	DX	ICD-10-CM	GONOCOCCAL PNEUMONIA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J13	DX	ICD-10-CM	PNEUMONIA DUE TO STREPTOCOCCUS PNEUMONIAE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J14	DX	ICD-10-CM	PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J15.0	DX	ICD-10-CM	PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J15.1	DX	ICD-10-CM	PNEUMONIA DUE TO PSEUDOMONAS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J15.20	DX	ICD-10-CM	PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED	Inpatient setting, primary position
	J15.211			PNEUMONIA DUE TO METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS	
10 Safety outcome: Serious bacterial infection		DX	ICD-10-CM		Inpatient setting, primary position
	J15.212			PNEUMONIA DUE TO METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS	
10 Safety outcome: Serious bacterial infection		DX	ICD-10-CM		Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J15.29	DX	ICD-10-CM	PNEUMONIA DUE TO OTHER STAPHYLOCOCCUS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J15.3	DX	ICD-10-CM	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J15.4	DX	ICD-10-CM	PNEUMONIA DUE TO OTHER STREPTOCOCCI	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J15.5	DX	ICD-10-CM	PNEUMONIA DUE TO ESCHERICHIA COLI	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J15.6	DX	ICD-10-CM	PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA	Inpatient setting, primary position

10 Safety outcome: Serious bacterial infection	J15.7	DX	ICD-10-CM	PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J15.8	DX	ICD-10-CM	PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J15.9	DX	ICD-10-CM	UNSPECIFIED BACTERIAL PNEUMONIA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J16.0	DX	ICD-10-CM	PNEUMONIA DUE TO GRAM-POSITIVE BACTERIA	Inpatient setting, primary position
	J16.8			PNEUMONIA DUE TO OTHER INFECTIOUS ORGANISMS, NOT ELSEWHERE CLASSIFIED	
10 Safety outcome: Serious bacterial infection		DX	ICD-10-CM		Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J17	DX	ICD-10-CM	PNEUMONIA IN DISEASES CLASSIFIED ELSEWHERE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J18.0	DX	ICD-10-CM	BRONCHOPNEUMONIA, UNSPECIFIED ORGANISM	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J18.1	DX	ICD-10-CM	LOBAR PNEUMONIA, UNSPECIFIED ORGANISM	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J18.8	DX	ICD-10-CM	OTHER PNEUMONIA, UNSPECIFIED ORGANISM	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J18.9	DX	ICD-10-CM	PNEUMONIA, UNSPECIFIED ORGANISM	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J86.0	DX	ICD-10-CM	PYOTHORAX WITH FISTULA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J86.9	DX	ICD-10-CM	PYOTHORAX WITHOUT FISTULA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A32.7	DX	ICD-10-CM	LISTERIAL SEPSIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A39.2	DX	ICD-10-CM	ACUTE MENINGOCOCCEMIA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A39.4	DX	ICD-10-CM	MENINGOCOCCEMIA, UNSPECIFIED	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A40.0	DX	ICD-10-CM	SEPSIS DUE TO STREPTOCOCCUS, GROUP A	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A40.1	DX	ICD-10-CM	SEPSIS DUE TO STREPTOCOCCUS, GROUP B	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A40.3	DX	ICD-10-CM	SEPSIS DUE TO STREPTOCOCCUS PNEUMONIAE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A40.8	DX	ICD-10-CM	OTHER STREPTOCOCCAL SEPSIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A40.9	DX	ICD-10-CM	STREPTOCOCCAL SEPSIS, UNSPECIFIED	Inpatient setting, primary position
	A41.01				
10 Safety outcome: Serious bacterial infection		DX	ICD-10-CM	SEPSIS DUE TO METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A41.02	DX	ICD-10-CM	SEPSIS DUE TO METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A41.1	DX	ICD-10-CM	SEPSIS DUE TO OTHER SPECIFIED STAPHYLOCOCCUS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A41.2	DX	ICD-10-CM	SEPSIS DUE TO UNSPECIFIED STAPHYLOCOCCUS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A41.3	DX	ICD-10-CM	SEPSIS DUE TO HEMOPHILUS INFLUENZAE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A41.4	DX	ICD-10-CM	SEPSIS DUE TO ANAEROBES	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A41.50	DX	ICD-10-CM	GRAM-NEGATIVE SEPSIS, UNSPECIFIED	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A41.51	DX	ICD-10-CM	SEPSIS DUE TO ESCHERICHIA COLI [E. COLI]	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A41.52	DX	ICD-10-CM	SEPSIS DUE TO PSEUDOMONAS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A41.53	DX	ICD-10-CM	SEPSIS DUE TO SERRATIA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A41.59	DX	ICD-10-CM	OTHER GRAM-NEGATIVE SEPSIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A41.81	DX	ICD-10-CM	SEPSIS DUE TO ENTEROCOCCUS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A41.89	DX	ICD-10-CM	OTHER SPECIFIED SEPSIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A41.9	DX	ICD-10-CM	SEPSIS, UNSPECIFIED ORGANISM	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A48.3	DX	ICD-10-CM	TOXIC SHOCK SYNDROME	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A54.86	DX	ICD-10-CM	GONOCOCCAL SEPSIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	R78.81	DX	ICD-10-CM	BACTEREMIA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A02.1	DX	ICD-10-CM	SALMONELLA SEPSIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A02.25	DX	ICD-10-CM	SALMONELLA PYELONEPHRITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	N10	DX	ICD-10-CM	SALMONELLA PYELONEPHRITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	N13.6	DX	ICD-10-CM	PYONEPHROSIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	N39.0	DX	ICD-10-CM	URINARY TRACT INFECTION, SITE NOT SPECIFIED	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M60.009	DX	ICD-10-CM	INFECTIVE MYOSITIS, UNSPECIFIED SITE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J36	DX	ICD-10-CM	PERITONSILLAR ABSCESS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J39.0	DX	ICD-10-CM	RETROPHARYNGEAL AND PARAPHARYNGEAL ABSCESS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	J39.1	DX	ICD-10-CM	OTHER ABSCESS OF PHARYNX	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.00	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, UNSPECIFIED JOINT	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.011	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, RIGHT SHOULDER	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.012	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, LEFT SHOULDER	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.019	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, UNSPECIFIED SHOULDER	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.021	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, RIGHT ELBOW	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.022	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, LEFT ELBOW	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.029	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, UNSPECIFIED ELBOW	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.031	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, RIGHT WRIST	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.032	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, LEFT WRIST	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.039	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, UNSPECIFIED WRIST	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.041	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, RIGHT HAND	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.042	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, LEFT HAND	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.049	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, UNSPECIFIED HAND	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.051	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, RIGHT HIP	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.052	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, LEFT HIP	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.059	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, UNSPECIFIED HIP	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.061	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, RIGHT KNEE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.062	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, LEFT KNEE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.069	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, UNSPECIFIED KNEE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	M00.071	DX	ICD-10-CM	STAPHYLOCOCCAL ARTHRITIS, RIGHT ANKLE AND FOOT	Inpatient setting, primary position







10	Safety outcome: Serious bacterial infection	L03.322	DX	ICD-10-CM	ACUTE LYMPHANGITIS OF BACK	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	L03.323	DX	ICD-10-CM	ACUTE LYMPHANGITIS OF CHEST WALL	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	L03.324	DX	ICD-10-CM	ACUTE LYMPHANGITIS OF GROIN	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	L03.325	DX	ICD-10-CM	ACUTE LYMPHANGITIS OF PERINEUM	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	L03.326	DX	ICD-10-CM	ACUTE LYMPHANGITIS OF UMBILICUS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	L03.327	DX	ICD-10-CM	ACUTE LYMPHANGITIS OF OTHER PARTS OF TRUNK	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	L03.329	DX	ICD-10-CM	ACUTE LYMPHANGITIS OF UNSPECIFIED PART OF TRUNK	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	L03.811	DX	ICD-10-CM	CELLULITIS OF HEAD (ANY PART, EXCEPT FACE)	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	L03.818	DX	ICD-10-CM	CELLULITIS OF OTHER SITES	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	L03.891	DX	ICD-10-CM	OTHER ACUTE LYMPHANGITIS	Inpatient setting, primary position
		L03.898			OTHER SPECIFIED LOCAL INFECTIONS OF SKIN AND SUBCUTANEOUS TISSUE	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	CELLULITIS, UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	L03.90	DX	ICD-10-CM	ACUTE LYMPHANGITIS, UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	L03.91	DX	ICD-10-CM	ERYTHRASMA	Inpatient setting, primary position
		L08.1	DX	ICD-10-CM	OTHER SPECIFIED LOCAL INFECTIONS OF THE SKIN AND SUBCUTANEOUS TISSUE	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	LOCAL INFECTION OF THE SKIN AND SUBCUTANEOUS TISSUE, UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	M72.6	DX	ICD-10-CM	NECROTIZING FASCIIITIS	Inpatient setting, primary position
		J09.X1			INFLUENZA DUE TO IDENTIFIED NOVEL INFLUENZA A VIRUS WITH PNEUMONIA	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO IDENTIFIED NOVEL INFLUENZA A VIRUS WITH OTHER RESPIRATORY MANIFESTATIONS	Inpatient setting, primary position
		J09.X2			INFLUENZA DUE TO IDENTIFIED NOVEL INFLUENZA A VIRUS WITH GASTROINTESTINAL MANIFESTATIONS	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO IDENTIFIED NOVEL INFLUENZA A VIRUS WITH OTHER MANIFESTATIONS	Inpatient setting, primary position
		J09.X3			INFLUENZA DUE TO OTHER IDENTIFIED INFLUENZA VIRUS WITH UNSPECIFIED TYPE OF PNEUMONIA	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO OTHER IDENTIFIED INFLUENZA VIRUS WITH THE SAME OTHER IDENTIFIED INFLUENZA VIRUS PNEUMONIA	Inpatient setting, primary position
		J09.X9			INFLUENZA DUE TO OTHER IDENTIFIED INFLUENZA VIRUS WITH OTHER SPECIFIED PNEUMONIA	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO OTHER IDENTIFIED INFLUENZA VIRUS WITH OTHER RESPIRATORY MANIFESTATIONS	Inpatient setting, primary position
		J10.0			INFLUENZA DUE TO OTHER IDENTIFIED INFLUENZA VIRUS WITH GASTROINTESTINAL MANIFESTATIONS	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO OTHER IDENTIFIED INFLUENZA VIRUS WITH ENCEPHALOPATHY	Inpatient setting, primary position
		J10.01			INFLUENZA DUE TO OTHER IDENTIFIED INFLUENZA VIRUS WITH MYOCARDITIS	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO OTHER IDENTIFIED INFLUENZA VIRUS WITH OTITIS MEDIA	Inpatient setting, primary position
		J10.08			INFLUENZA DUE TO OTHER IDENTIFIED INFLUENZA VIRUS WITH OTHER MANIFESTATIONS	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH UNSPECIFIED TYPE OF PNEUMONIA	Inpatient setting, primary position
		J10.1			INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH SPECIFIED PNEUMONIA	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH OTHER RESPIRATORY MANIFESTATIONS	Inpatient setting, primary position
		J10.2			INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH GASTROINTESTINAL MANIFESTATIONS	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH ENCEPHALOPATHY	Inpatient setting, primary position
		J10.81			INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH MYOCARDITIS	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH OTITIS MEDIA	Inpatient setting, primary position
		J10.82			INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH OTHER MANIFESTATIONS	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH UNSPECIFIED TYPE OF PNEUMONIA	Inpatient setting, primary position
		J10.83			INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH SPECIFIED PNEUMONIA	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH OTHER RESPIRATORY MANIFESTATIONS	Inpatient setting, primary position
		J10.89			INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH GASTROINTESTINAL MANIFESTATIONS	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH ENCEPHALOPATHY	Inpatient setting, primary position
		J11.0			INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH MYOCARDITIS	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH OTITIS MEDIA	Inpatient setting, primary position
		J11.08			INFLUENZA DUE TO UNIDENTIFIED INFLUENZA VIRUS WITH OTHER MANIFESTATIONS	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE	Inpatient setting, primary position
		J11.1			PNEUMONIA DUE TO PSEUDOMONAS	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	PNEUMONIA DUE TO STAPHYLOCOCCUS	Inpatient setting, primary position
		J11.2			PNEUMONIA DUE TO STREPTOCOCCUS	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM	PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA	Inpatient setting, primary position
		J11.81			OTHER VIRAL PNEUMONIA	
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM		Inpatient setting, primary position
		J11.82				
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM		Inpatient setting, primary position
		J11.83				
10	Safety outcome: Serious bacterial infection		DX	ICD-10-CM		Inpatient setting, primary position
		J11.89				
10	Safety outcome: Serious bacterial infection	J12.2	DX	ICD-10-CM		Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	J12.0	DX	ICD-10-CM		Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	J12.1	DX	ICD-10-CM		Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	J12.3	DX	ICD-10-CM		Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	J12.81	DX	ICD-10-CM		Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	J12.89	DX	ICD-10-CM		Inpatient setting, primary position

10 Safety outcome: Serious bacterial infection	J12.9	DX	ICD-10-CM	VIRAL PNEUMONIA, UNSPECIFIED	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A32.12	DX	ICD-10-CM	LISTERIAL MENINGITIS AND MENINGOENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A83.0	DX	ICD-10-CM	JAPANESE ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A83.1	DX	ICD-10-CM	WESTERN EQUINE ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A83.2	DX	ICD-10-CM	EASTERN EQUINE ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A83.3	DX	ICD-10-CM	ST. LOUIS ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A83.4	DX	ICD-10-CM	AUSTRALIAN ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A83.5	DX	ICD-10-CM	CALIFORNIA ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A83.6	DX	ICD-10-CM	ROCIO VIRUS DISEASE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A83.8	DX	ICD-10-CM	OTHER MOSQUITO-BORNE VIRAL ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A83.9	DX	ICD-10-CM	MOSQUITO-BORNE VIRAL ENCEPHALITIS, UNSPECIFIED	Inpatient setting, primary position
	A84.0			FAR EASTERN TICK-BORNE ENCEPHALITIS [RUSSIAN SPRING-SUMMER ENCEPHALITIS]	
10 Safety outcome: Serious bacterial infection		DX	ICD-10-CM	CENTRAL EUROPEAN TICK-BORNE ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A84.1	DX	ICD-10-CM	OTHER TICK-BORNE VIRAL ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A84.8	DX	ICD-10-CM	TICK-BORNE VIRAL ENCEPHALITIS, UNSPECIFIED	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A84.9	DX	ICD-10-CM	ARTHROPOD-BORNE VIRAL ENCEPHALITIS, UNSPECIFIED	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A85.2	DX	ICD-10-CM	WEST NILE VIRUS WITH ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A92.31	DX	ICD-10-CM	HERPESVIRAL ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.4	DX	ICD-10-CM	VARICELLA ENCEPHALITIS, MYELITIS AND ENCEPHALOMYELITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B01.1	DX	ICD-10-CM	VARICELLA ENCEPHALITIS AND ENCEPHALOMYELITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B01.11	DX	ICD-10-CM	ZOSTER ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B02.0	DX	ICD-10-CM	RUBELLA ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B06.01	DX	ICD-10-CM	HUMAN HERPESVIRUS 6 ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B10.01	DX	ICD-10-CM	OTHER HUMAN HERPESVIRUS ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B10.09	DX	ICD-10-CM	MUMPS ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B26.2	DX	ICD-10-CM	GAMMAHERPESVIRAL MONONUCLEOSIS WITH MENINGITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B27.02	DX	ICD-10-CM	CYTOMEGALOVIRAL MONONUCLEOSIS WITH MENINGITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B27.12	DX	ICD-10-CM	ENCEPHALITIS AND ENCEPHALOMYELITIS, UNSPECIFIED	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	G04.90	DX	ICD-10-CM	ENCEPHALITIS, MYELITIS AND ENCEPHALOMYELITIS IN PARASITIC DISEASES CLASSIFIED ELSEWHERE	Inpatient setting, primary position
	G05.3			HERPESVIRAL INFECTION OF UROGENITAL SYSTEM, UNSPECIFIED	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection		DX	ICD-10-CM	HERPESVIRAL INFECTION OF PENIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A60.00	DX	ICD-10-CM	HERPESVIRAL INFECTION OF OTHER MALE GENITAL ORGANS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A60.01	DX	ICD-10-CM	HERPESVIRAL INFECTION OF VULVA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A60.02	DX	ICD-10-CM	HERPESVIRAL INFECTION OF VAGINA AND VULVA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A60.03	DX	ICD-10-CM	HERPESVIRAL INFECTION OF OTHER UROGENITAL TRACT	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A60.04	DX	ICD-10-CM	HERPESVIRAL INFECTION OF PERIANAL SKIN AND RECTUM	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A60.09	DX	ICD-10-CM	ANOGENITAL HERPESVIRAL INFECTION, UNSPECIFIED	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A60.1	DX	ICD-10-CM	ECZEMA HERPETICUM	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.0	DX	ICD-10-CM	HERPESVIRAL VESICULAR DERMATITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.1	DX	ICD-10-CM	HERPESVIRAL GINGIVOSTOMATITIS AND PHARYNGOTONSILLITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.2	DX	ICD-10-CM	HERPESVIRAL MENINGITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.3	DX	ICD-10-CM	HERPESVIRAL ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.4	DX	ICD-10-CM	HERPESVIRAL OCULAR DISEASE, UNSPECIFIED	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.50	DX	ICD-10-CM	HERPESVIRAL IRIDOCYCLITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.51	DX	ICD-10-CM	HERPESVIRAL KERATITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.52	DX	ICD-10-CM	HERPESVIRAL CONJUNCTIVITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.53	DX	ICD-10-CM	OTHER HERPESVIRAL DISEASE OF EYE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.59	DX	ICD-10-CM	DISSEMINATED HERPESVIRAL DISEASE	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.7	DX	ICD-10-CM	HERPESVIRAL HEPATITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.81	DX	ICD-10-CM	HERPES SIMPLEX MYELITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.82	DX	ICD-10-CM	OTHER FORMS OF HERPESVIRAL INFECTIONS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.89	DX	ICD-10-CM	HERPESVIRAL INFECTION, UNSPECIFIED	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B00.9	DX	ICD-10-CM	ZOSTER ENCEPHALITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B02.0	DX	ICD-10-CM	ZOSTER MENINGITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B02.1	DX	ICD-10-CM	POSTHERPETIC GENICULATE GANGLIONITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B02.30	DX	ICD-10-CM	POSTHERPETIC TRIGEMINAL NEURALGIA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B02.31	DX	ICD-10-CM	POSTHERPETIC POLYNEUROPATHY	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B02.32	DX	ICD-10-CM	POSTHERPETIC MYELITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B02.33	DX	ICD-10-CM	POSTHERPETIC MENINGITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B02.34	DX	ICD-10-CM	OTHER POSTHERPETIC NERVOUS SYSTEM INVOLVEMENT	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B02.39	DX	ICD-10-CM	DISSEMINATED ZOSTER	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B02.7	DX	ICD-10-CM	ZOSTER WITH OTHER COMPLICATIONS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B02.8	DX	ICD-10-CM	ZOSTER WITHOUT COMPLICATIONS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B02.9	DX	ICD-10-CM	TUBERCULOSIS OF LUNG	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A15.0	DX	ICD-10-CM	TUBERCULOSIS OF INTRATHORACIC LYMPH NODES	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A15.4	DX	ICD-10-CM	TUBERCULOSIS OF LARYNX, TRACHEA AND BRONCHUS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	A15.5	DX	ICD-10-CM		

10	Safety outcome: Serious bacterial infection	A15.6	DX	ICD-10-CM	TUBERCULOUS PLEURISY	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A15.7	DX	ICD-10-CM	PRIMARY RESPIRATORY TUBERCULOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A15.8	DX	ICD-10-CM	OTHER RESPIRATORY TUBERCULOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A15.9	DX	ICD-10-CM	RESPIRATORY TUBERCULOSIS UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A17.0	DX	ICD-10-CM	TUBERCULOUS MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A17.1	DX	ICD-10-CM	MENINGEAL TUBERCULOMA	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A17.81	DX	ICD-10-CM	TUBERCULOMA OF BRAIN AND SPINAL CORD	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A17.82	DX	ICD-10-CM	TUBERCULOUS MENINGOENCEPHALITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A17.83	DX	ICD-10-CM	TUBERCULOUS NEURITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A17.89	DX	ICD-10-CM	OTHER TUBERCULOSIS OF NERVOUS SYSTEM	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A17.9	DX	ICD-10-CM	TUBERCULOSIS OF NERVOUS SYSTEM, UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.01	DX	ICD-10-CM	TUBERCULOSIS OF SPINE	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.03	DX	ICD-10-CM	TUBERCULOSIS OF OTHER BONES	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.2	DX	ICD-10-CM	TUBERCULOSIS OF PERIPHERAL LYMPH NODES	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.31	DX	ICD-10-CM	TUBERCULOUS PERITONITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.32	DX	ICD-10-CM	TUBERCULOUS ENTERITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.39	DX	ICD-10-CM	RETROPERITONEAL TUBERCULOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.4	DX	ICD-10-CM	TUBERCULOSIS OF SKIN AND SUBCUTANEOUS TISSUE	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.50	DX	ICD-10-CM	TUBERCULOSIS OF EYE, UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.51	DX	ICD-10-CM	TUBERCULOUS EPISCLERITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.52	DX	ICD-10-CM	TUBERCULOUS KERATITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.53	DX	ICD-10-CM	TUBERCULOUS CHORIORETINITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.54	DX	ICD-10-CM	TUBERCULOUS IRIDOCYCLITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.59	DX	ICD-10-CM	OTHER TUBERCULOSIS OF EYE	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.6	DX	ICD-10-CM	TUBERCULOSIS OF INNER/MIDDLE EAR	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.7	DX	ICD-10-CM	TUBERCULOSIS OF ADRENAL GLANDS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.81	DX	ICD-10-CM	TUBERCULOSIS OF THYROID GLAND	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.82	DX	ICD-10-CM	TUBERCULOSIS OF OTHER ENDOCRINE GLANDS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.83	DX	ICD-10-CM	TUBERCULOSIS OF DIGESTIVE TRACT ORGANS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.84	DX	ICD-10-CM	TUBERCULOSIS OF HEART	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.85	DX	ICD-10-CM	TUBERCULOSIS OF SPLEEN	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A18.89	DX	ICD-10-CM	TUBERCULOSIS OF OTHER SITES	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A19.0	DX	ICD-10-CM	ACUTE MILIARY TUBERCULOSIS OF A SINGLE SPECIFIED SITE	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A19.1	DX	ICD-10-CM	ACUTE MILIARY TUBERCULOSIS OF MULTIPLE SITES	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A19.2	DX	ICD-10-CM	ACUTE MILIARY TUBERCULOSIS, UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A19.8	DX	ICD-10-CM	OTHER MILIARY TUBERCULOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A19.9	DX	ICD-10-CM	MILIARY TUBERCULOSIS, UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A31.0	DX	ICD-10-CM	PULMONARY MYCOBACTERIAL INFECTION	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A31.1	DX	ICD-10-CM	CUTANEOUS MYCOBACTERIAL INFECTION	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A31.2	DX	ICD-10-CM	DISSEMINATED MYCOBACTERIAL INFECTION	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A31.8	DX	ICD-10-CM	OTHER MYCOBACTERIAL INFECTIONS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A31.9	DX	ICD-10-CM	MYCOBACTERIAL INFECTION, UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A32.0	DX	ICD-10-CM	CUTANEOUS LISTERIOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A32.11	DX	ICD-10-CM	LISTERIAL MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A32.12	DX	ICD-10-CM	LISTERIAL MENINGOENCEPHALITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A32.7	DX	ICD-10-CM	LISTERIAL SEPSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A32.81	DX	ICD-10-CM	OCULAR LISTERIOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A32.82	DX	ICD-10-CM	LISTERIAL ENDOCARDITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A32.89	DX	ICD-10-CM	OTHER FORMS OF LISTERIOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A32.9	DX	ICD-10-CM	LISTERIOSIS, UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A81.2	DX	ICD-10-CM	PROGRESSIVE MULTIFOCAL LEUKOENCEPHALOPATHY	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	B39.0	DX	ICD-10-CM	ACUTE PULMONARY COCCIDIOIDOMYCOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	B39.2	DX	ICD-10-CM	ACUTE DISSEMINATED COCCIDIOIDOMYCOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	B39.3	DX	ICD-10-CM	CHRONIC PULMONARY COCCIDIOIDOMYCOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	B39.4	DX	ICD-10-CM	CHRONIC DISSEMINATED COCCIDIOIDOMYCOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	B39.5	DX	ICD-10-CM	COCCIDIOIDOMYCOSIS MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	B39.9	DX	ICD-10-CM	COCCIDIOIDOMYCOSIS, UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A42.0	DX	ICD-10-CM	PULMONARY ACTINOMYCOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A42.1	DX	ICD-10-CM	ABDOMINAL ACTINOMYCOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A42.2	DX	ICD-10-CM	CERVICOFACIAL ACTINOMYCOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A42.7	DX	ICD-10-CM	ACTINOMYCOTIC SEPSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A42.81	DX	ICD-10-CM	ACTINOMYCOTIC MENINGITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A42.82	DX	ICD-10-CM	ACTINOMYCOTIC ENCEPHALITIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A42.89	DX	ICD-10-CM	OTHER FORMS OF ACTINOMYCOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	A42.9	DX	ICD-10-CM	ACTINOMYCOSIS, UNSPECIFIED	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	B47.1	DX	ICD-10-CM	CUTANEOUS PHAEOHYPHOMYCOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	B48.0	DX	ICD-10-CM	LOBOMYCOSIS	Inpatient setting, primary position
10	Safety outcome: Serious bacterial infection	B58.01	DX	ICD-10-CM	ACUTE TOXOPLASMA MENINGITIS	Inpatient setting, primary position





10 Safety outcome: Serious bacterial infection	B78.1	DX	ICD-10-CM	INTESTINAL STRONGYLOIDIASIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B77.81	DX	ICD-10-CM	VISCERAL LARVA MIGRANS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B37.81	DX	ICD-10-CM	CANDIDAL OTITIS EXTERNA	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B37.83	DX	ICD-10-CM	CANDIDAL CYSTITIS AND URETHRITIS	Inpatient setting, primary position
10 Safety outcome: Serious bacterial infection	B37.0	DX	ICD-10-CM	CANDIDAL STOMATITIS	Inpatient setting, primary position

Outcome	Category	Subcategory	ICD	Validation source	Type of the source	PPV	Codes in the study	Codes in the emulation	Modification	Description of Modifications
	1 Acute myocardial infarction		ICD-10-CM	<a href="#">Accuracy of Medicare claims-based diagnosis of acute myocardial infarction estimating positive predictive value on the basis of review of hospital records</a>	Validation study	94%				
	2 Stroke		ICD-10-CM	<a href="#">Validation of claims-based diagnostic and procedure codes for cardiovascular and gastrointestinal serious adverse events in a commercially insured population: Validating administrative data in stroke research</a>	Validation study	95%			No	
	3 All-cause mortality		N/A	<a href="#">Bias Implications of Outcome Misclassification in Observational Studies Evaluating Association Between Treatments and All-Cause or Cardiovascular Mortality Using Administrative Claims</a>	N/A					
	4 Coronary revascularization		ICD-10-CM	<a href="#">Sempaglutide and Tirzepatide in Patients With Heart Failure With Preserved Ejection Fraction: Major adverse cardiovascular event definitions used in observational analysis of administrative databases: A systematic review</a>	Study w/ same criteria					
	5 Unstable angina		ICD-10-CM	<a href="#">Clinical Outcomes of Tirzepatide or GLP-1 Receptor Agonists in Individuals With Type 2 Diabetes: Association between chiropractic spinal manipulation and lumbar discectomy in adults with lumbar disc herniation and radiculopathy: retrospective cohort study using United States' data</a>	Systematic review					
	6 Lumbar radiculopathy		ICD-10-CM	<a href="#">Clinical Outcomes of Tirzepatide or GLP-1 Receptor Agonists in Individuals With Type 2 Diabetes</a>	Study w/ same criteria					
	7 Hernia		ICD-10-CM	<a href="#">Risk of Gastrointestinal Adverse Events Associated With Olanzapine-Like Peptide-1 Receptor Agonists for Weight Loss</a> <a href="https://pubmed.ncbi.nlm.nih.gov/24523355/">https://pubmed.ncbi.nlm.nih.gov/24523355/</a> ; <a href="https://pubmed.ncbi.nlm.nih.gov/3585129/">https://pubmed.ncbi.nlm.nih.gov/3585129/</a>	Study w/ same criteria					
	8 Gastrointestinal adverse events		ICD-10-CM	<a href="#">Performance characteristics of code-based algorithms to identify urinary tract infections in large United States administrative claims databases</a>	Validation study	80.9%				
	9 Urinary tract infection		ICD-10-CM	<a href="#">Veterans Affairs hospital discharge databases coded serious bacterial infections accurately</a> <a href="https://pubmed.ncbi.nlm.nih.gov/29921683/">https://pubmed.ncbi.nlm.nih.gov/29921683/</a>	Validation study					
	10 Serious bacterial infection		ICD-10-CM	<a href="https://pubmed.ncbi.nlm.nih.gov/23335588/">https://pubmed.ncbi.nlm.nih.gov/23335588/</a>	Validation study	90%				
<b>Inclusion criteria</b>										
	1 Men and women aged 40 years or older		ICD-10-CM	Can't be validated	N/A	N/A	N/A	N/A	N/A	N/A
	2 Type 2 Diabetes		PROMISE team	PROMISE team	DoPE					
	3 HbA1c >7% and <10.5%		ICD-10-CM	Can't be validated	N/A					
	4 BMI > 25kg/m <sup>2</sup>		ICD-10-CM	<a href="#">Validation of body mass index (BMI)-related ICD-9-CM and ICD-10-CM administrative diagnosis codes recorded in US claims data</a> <a href="#">Validation of body mass index (BMI)-related ICD-9-CM and ICD-10-CM administrative diagnosis codes recorded in US claims data</a>	Validation study	98%			Yes	Added E66.2; E66.8
	5 Established atherosclerotic CV-disease, either one of:									
	5.1 Coronary artery disease, either one of:									
	5.1.1 Documented history of myocardial infarction		ICD-10-CM	PROMISE team	DoPE				No	
	5.1.2 ≥50% stenosis in ≥1 major coronary arteries determined by invasive angiography			RCT-DUPLICATE team	DoPE	N/A	N/A	N/A	Yes	Excluded ICD-10-CM I25.10 due to freedom of symptoms
	5.1.3 ≥50% stenosis in 2 or more major coronary arteries			RCT-DUPLICATE team	DoPE	N/A	N/A	N/A	N/A	N/A
	5.1.4 History of surgical or percutaneous coronary revascularization procedure		ICD-10-CM	PROMISE team	DoPE				No	
	5.2 Cerebrovascular disease, either one of:									
	5.2.1 Documented history of ischemic stroke		ICD-10-CM	PROMISE team	DoPE				No	
	5.2.2 Carotid arterial disease with ≥50% stenosis, documented by carotid ultrasound, MRI, or angiography		ICD-10-CM	RCT-DUPLICATE team	DoPE	N/A	N/A	N/A	N/A	N/A
	5.2.3 History of carotid stenting or surgical revascularization		ICD-10-CM	PROMISE team	DoPE					
	5.3 Peripheral arterial disease, either one of:									
	5.3.1 Intermittent claudication and ankle-brachial index <0.9		ICD-10-CM	RCT-DUPLICATE team	DoPE				Yes	Excluded I70.20x due to freedom of symptoms
	5.3.2 Prior nontraumatic amputation or peripheral vascular procedure (eg, stenting or surgical revascularization), due to peripheral arterial ischemia		ICD-10-CM, CPT	RCT-DUPLICATE team	DoPE					
<b>Exclusion criteria</b>										
	6 HbA1c >10.5%			Can't be validated	N/A					
	7 Planning treatment for diabetic retinopathy and/or macular edema		CPT/HCPSC	LEAD-2	DoPE				No	
	8 Hospitalized for chronic heart failure within 2 months prior to screening		ICD-10-CM	<a href="#">Validity of International Classification of Diseases (ICD)-10 Diagnosis Codes for Identification of Acute Heart Failure Hospitalization and Heart Failure with Reduced Versus Preserved Ejection Fraction in a National Medicare Sample</a>	DoPE	98%	I50.x	I09.81 I10 I13.0 I13.2 I50.x	Based on PROMISE team	Added hypertensive heart disease with heart failure codes.
	9 Chronic New York Heart Association Functional Classification IV heart failure			Can't be validated	N/A					
	10 Planned coronary, carotid, or peripheral artery revascularization			Can't be validated	N/A					
	11 History of chronic or acute pancreatitis		ICD-10-CM	PROMISE team	DoPE				No	
	12 Known clinically significant gastric emptying abnormality or bariatric surgery		ICD-10-CM	<a href="#">Epidemiology, Etiology, and Treatment of Gastroparesis: Real-World Evidence From a Large US National Claims Database</a>	Study w/ same criteria		K31.84	K31.84	No	
		Gastroparesis								
		Opioids / Antidiuretics / Laxative tablets		<a href="https://www.drugs.com/">https://www.drugs.com/</a>	N/A					
		Bariatric surgery		PROMISE Team	DoPE				No	
	13 Liver disease (not including non-alcoholic fatty liver disease [NAFLD] or ALT level ≥3X the ULN)		ICD-10-CM	PROMISE Team	DoPE			I12.0, N18.6	No	Added: I13.2 Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease
	14 eGFR <15 mL/Min/1.73 m <sup>2</sup> or on chronic dialysis		ICD-10-CM, CPT, HCPCS	PROMISE team	DoPE			I12.0, I13.2, N18.6	Yes	
	15 Family or personal history of multiple endocrine neoplasia or medullary thyroid carcinoma		ICD-10-CM	PROMISE team	DoPE				No	
	16 Elevated serum calcium level			Can't be validated	N/A					
	17 CV event or intervention <60 D prior to screening		ICD-10-CM	PROMISE team	DoPE					
		Myocardial infarction CABG		PROMISE team	DoPE					
		Major CV surgery		ICD-10-CM	<a href="#">Assessment of Potentially Preventable Hospital Readmissions After Major Surgery and Association With Public vs Private Health Insurance and Comorbidities</a>	Study w/ same criteria			Yes	Added categories and codes for major CV operations.
		Stroke TIA		ICD-10-CM	<a href="#">Validating administrative data in stroke research: Validation of claims-based diagnostic and procedure codes for cardiovascular and gastrointestinal serious adverse events in a commercially insured population</a>	Validation study	88%; 95%		No	
				ICD-10-CM	DoPE			I20.0, I24.0, I24.1, I24.8, I24.9, I24.99, I24.9, I25.110, I25.700, I25.710, I25.720, I25.730, I25.750, I25.760, I25.790		Added codes with mention of angina pectoris in atherosclerosis
		Unstable angina pectoris		ICD-10-CM	<a href="#">Validity of coronary heart diseases and heart failure based on hospital discharge and mortality data in the Netherlands using the cardiovascular registry Maastricht cohort study</a>	Validation study	78% I20		Yes	
	18 GLP-1 RA or pramlintide treatment within 3 Mo prior to visit 1		Prescriptions	<a href="https://www.drugs.com/">https://www.drugs.com/</a>	N/A					
	19 Are women who are pregnant or breastfeeding		ICD-10-CM	Pregnancy team	DoPE					

Notes

N/A

N/A

N/A

N/A

Codes indicate  
stage V or end-  
stage renal  
disease (ESRD)

Appendix 3. Flowchart for cohort assembly

OPTUM (May 13, 2022 to May 31, 2025)	Excluded Patients	Remaining Patients
Patients in dataset		96,791,997
Patients meeting cohort entry criteria		705,899
Excluded due to insufficient enrollment	-198,502 (28%)	507,397
Excluded due to prior use of referent	-137,947 (27%)	369,450
Excluded due to prior use of exposure	-268,183 (73%)	101,267
Excluded because patient qualified in >1 exposure category	-11 (<1%)	101,256
Excluded based on 1 - Age	-3,583 (4%)	97,673
Excluded based on 1 - Gender	-11 (<1%)	97,662
Excluded based on 2 - Type 2 diabetes mellitus	-10,623 (11%)	87,039
Excluded based on 4 - BMI ≥ 25kg/m <sup>2</sup> (ICD-10)	-17,659 (20%)	69,380
Excluded based on 4 - BMI ≥ 25kg/m <sup>2</sup> (Truncated)	-582 (<1%)	68,798
Excluded based on 5 - Established atherosclerotic cardiovascular disease	-16,249 (24%)	52,549
Excluded based on 7 - Planning treatment for diabetic retinopathy and/or macular edema	-786 (1%)	51,763
Excluded based on 8 - Hospitalized for chronic heart failure within 2 months prior to screening	-191 (<1%)	51,572
Excluded based on 11 - History of chronic or acute pancreatitis	-302 (<1%)	51,270
Excluded based on 12 - Known clinically significant gastric emptying abnormality or bariatric surgery	-2,942 (6%)	48,328
Excluded based on 13 - Liver disease (not including non-alcoholic fatty liver disease (NAFLD) or ALT level ≥3X the ULN	-314 (<1%)	48,014
Excluded based on 14 - eGFR <15 mL/Min/1.73 m <sup>2</sup> or on chronic dialysis	-381 (<1%)	47,633
Excluded based on 15 - Family or personal history of multiple endocrine neoplasia or medullary thyroid carcinoma	-79 (<1%)	47,554
Excluded based on 17 - Cardiovascular event or intervention <90 days prior to screening	-221 (<1%)	47,333
Excluded based on 18 - GLP-1RA or pramlintide treatment within 3 months prior to Visit 1	-3,735 (8%)	43,598
Excluded based on 19 - Women who are pregnant or breastfeeding	-2 (<1%)	43,596
Patients in Exposure Group		29,761
Patients in Referent Group		13,835
Total Patients		43,596

MARKETSCAN (May 13, 2022 to Dec 31, 2023)	Excluded Patients	Remaining Patients
Patients in dataset		126,118,011
Patients meeting cohort entry criteria		252,147
Excluded due to insufficient enrollment	-53,707 (8%)	238,440
Excluded due to prior use of referent	-91,632 (38%)	146,808
Excluded due to prior use of exposure	-105,424 (72%)	41,384
Excluded because patient qualified in >1 exposure category	-7 (<1%)	41,377
Excluded based on 1 - Age	-4,046 (10%)	37,331
Excluded based on 1 - Gender	-0 (<1%)	37,331
Excluded based on 2 - Type 2 diabetes mellitus	-5,682 (15%)	31,649
Excluded based on 4 - BMI ≥ 25kg/m <sup>2</sup>	-8,718 (28%)	22,931
Excluded based on 5 - Established atherosclerotic cardiovascular disease	-10,471 (46%)	12,460
Excluded based on 7 - Planning treatment for diabetic retinopathy and/or macular edema	-204 (2%)	12,256
Excluded based on 8 - Hospitalized for chronic heart failure within 2 months prior to screening	-69 (<1%)	12,187
Excluded based on 11 - History of chronic or acute pancreatitis	-60 (<1%)	12,127
Excluded based on 12 - Known clinically significant gastric emptying abnormality or bariatric surgery	-764 (6%)	11,363
Excluded based on 13 - Liver disease (not including non-alcoholic fatty liver disease (NAFLD) or ALT level ≥3X the ULN	-62 (<1%)	11,301
Excluded based on 14 - eGFR <15 mL/Min/1.73 m <sup>2</sup> or on chronic dialysis	-72 (<1%)	11,229
Excluded based on 15 - Family or personal history of multiple endocrine neoplasia or medullary thyroid carcinoma	-36 (<1%)	11,193
Excluded based on 17 - Cardiovascular event or intervention <90 days prior to screening	-69 (<1%)	11,124
Excluded based on 18 - GLP-1RA or pramlintide treatment within 3 months prior to Visit 1	-3,678 (15%)	9,446
Excluded based on 19 - Women who are pregnant or breastfeeding	-4 (<1%)	9,442
Patients in Exposure Group		5,610
Patients in Referent Group		3,832
Total Patients		9,442

## Appendix 4. 1st Feasibility Assessment

### Table of Contents

- A. Patient characteristics by treatment group
- B. Summary Parameters of Study Population
- C. Median Follow up Time in Overall Study Population
- D. Reasons for Censoring in Overall Study Population
- E. Initial Power Assessment
- F. Action report link
- G. Review by Principal Investigator

In order to complete the initial power analysis, a dummy outcome of a 90-day gap in database enrollment was used. This outcome is used to ensure that no information on the comparative risks of the outcomes of interest are available at this stage. We completed a PS overlap weighted comparative analysis using this outcome. The PS included only 3 covariates: age, sex, and combined comorbidity index. Power calculations are based on the formulas from Chow et al. (2008).

OPTUM: Study period from May 13, 2022 to May 31, 2025

MARKETSCAN: Study period from May 13, 2022 to Dec 31, 2023

### A. Patient characteristics by treatment group (follow-up start is 1 days after CED, so few patients and dropped, hence table 1 could include slightly fewer patients than the attrition table)

Before weighting Variable	Optum			Marketscan		
	Reference: Dulaglutide	Exposure: Tirzepatide	Difference	Reference: Dulaglutide	Exposure: Tirzepatide	Difference
Number of patients	13,793	29,744	- (-, -)	5,329	5,116	- (-, -)
Age						
...mean (sd)	73.95 (7.67)	66.65 (9.20)	7.30 (7.13, 7.46)	63.74 (10.60)	59.86 (9.36)	3.88 (3.50, 4.26)
...median [IQR]	74.00 [69.00, 79.00]	68.00 [61.00, 73.00]	- (-, -)	63.00 [56.00, 72.00]	59.00 [53.00, 65.00]	- (-, -)
Gender						
...Male; n (%)	6,699 (48.6%)	14,518 (48.8%)	-0.2% (-1.3%, 0.8%)	2,885 (54.1%)	2,538 (49.6%)	4.5% (2.6%, 6.5%)
CCI (365 days)						
...mean (sd)	3.64 (3.09)	2.84 (2.66)	0.81 (0.75, 0.87)	2.34 (2.50)	1.78 (2.02)	0.57 (0.48, 0.65)
...median [IQR]	3.00 [1.00, 5.00]	2.00 [1.00, 4.00]	- (-, -)	2.00 [1.00, 3.00]	1.00 [0.00, 3.00]	- (-, -)

### B. Summary Parameters of Overall Study Population (Step 1)

Variable	Optum	Marketscan
	Value	Value
Number of patients in full cohort	43,596	9,442
Number of patients dropped as incomplete cases	0	0
Number of patients that did not begin follow-up	59	8
Number of patients in analytic cohort	43,537	9,434
Number of events	322	88
Number of person-years	22,000.1	4,052.00
Number of patients in group: Reference: Sitagliptin	13,793	3,825
Number of patients in group: Exposure: Tirzepatide	29,744	5,609

### C. Median Follow up Time in Overall Study Population (Step 1)

Patient Group	Optum	Marketscan
	Median Follow-Up Time (Days) [IQR]	Median Follow-Up Time (Days) [IQR]
Overall Patient Population	145 [75, 297]	133 [71, 231]

**D. Reasons for Censoring in Overall Study Population (Step 1)**

	Optum	Marketscan
Overall	Value	Value
Outcome	322 (0.7%)	88 (0.9%)
Start of an additional exposure	341 (0.8%)	97 (1.0%)
End of index exposure	16,757 (38.5%)	2,397 (25.4%)
Maximum follow-up time	8,118 (18.6%)	773 (8.2%)
Specified date reached	10,456 (24.0%)	4,917 (52.1%)
End of patient data	0 (0.0%)	0 (0.0%)
End of patient enrollment	4,150 (9.5%)	563 (6.0%)
Switch to other GLP-1-RA (for censoring) / Nursing home admission	3,029 (7.0%)	577 (6.1%)

**E. Power Assessment**

Superiority Analysis	Optum	Marketscan	Pooled
Number of patients			
Reference	9,834	2,442	12,276
Exposed	15,677	3,375	19,052
Risk per 1,000 patients	14.64	21.72	15.89
Expected HR	0.75	0.75	0.75
Alpha (2-sided)	0.05	0.05	0.05
Number of events expected	373	126	498
Power	0.79	0.37	0.89

**F. Aetion report link**

Optum Step 1: <https://bwh-dope.aetion.com/project/2951/rwrs/142679>

Marketscan Step 1: <https://bwh-dope.aetion.com/project/2950/rwrs/142680>

**F. Review by principal investigator**

**Stop analyses until feasibility and power are reviewed by primary investigators.**

Reviewed by PI:	Nils Krüger	Date reviewed:	September 25, 2025
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## Appendix 5. 2nd Feasibility Assessment

### Table of Contents

- A. Median Follow up Time by Treatment Group
- B. Reasons for Censoring by Treatment Group
- C. Final Power Assessment
- D. Action report link
- E. Review by Principal Investigator

*In order to complete the feasibility analysis, a dummy outcome of a 90-day gap in database enrollment was used. This outcome is used to ensure that no information on the comparative risks of the outcomes of interest are available at this stage. We completed a PS overlap weighted comparative analysis using this outcome. The PS included all prespecified covariates listed in the protocol. Power calculations are based on the formulas from Chow et al. (2008).*

### A. Median Follow Up Time by Treatment Group

Patient Group	Median Follow-Up Time (Days) [IQR]	Median Follow-Up Time (Days) [IQR]
Overall Patient Population	145 [75, 297]	133 [71, 231]

### B. Reasons for Censoring in Overall Study Population

	Optum	Marketscan
Overall	Value	Value
Outcome	322 (0.7%)	88 (0.9%)
Start of an additional exposure	341 (0.8%)	97 (1.0%)
End of index exposure	16,757 (38.5%)	2,397 (25.4%)
Maximum follow-up time	8,118 (18.6%)	773 (8.2%)
Specified date reached	10,456 (24.0%)	4,917 (52.1%)
End of patient data	0 (0.0%)	0 (0.0%)
End of patient enrollment	4,150 (9.5%)	563 (6.0%)
Switch to other GLP-1-RA (for censoring) / Nursing home admission	3,029 (7.0%)	577 (6.1%)

### C. Power Assessment

Superiority Analysis	Optum	Marketscan	Pooled
Number of patients			
Reference	9,834	2,442	12,276
Exposed	15,677	3,375	19,052
Risk per 1,000 patients	14.64	21.72	15.89
Expected HR	0.75	0.75	0.75
Alpha (2-sided)	0.05	0.05	0.05



Number of events expected	373	126	498
Power	0.79	0.37	0.89

**D. Aetion report link**

Optum Step 1: <https://bwh-dope.aetion.com/project/2951/rwrs/142679>

Marketscan Step 1: <https://bwh-dope.aetion.com/project/2950/rwrs/142680>

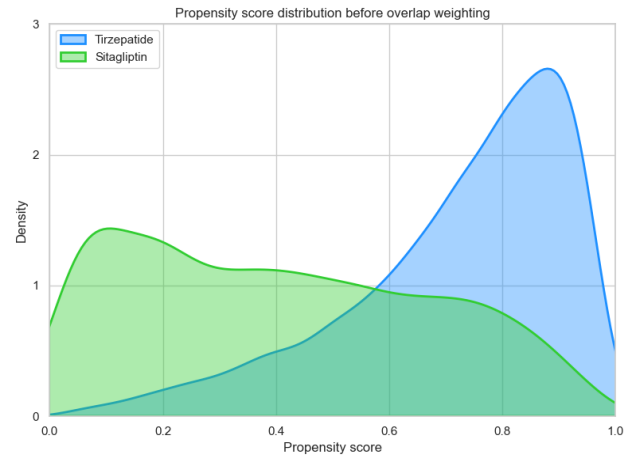
**E. Review by principal investigator**

**Stop analyses until feasibility and power are reviewed by primary investigators.**

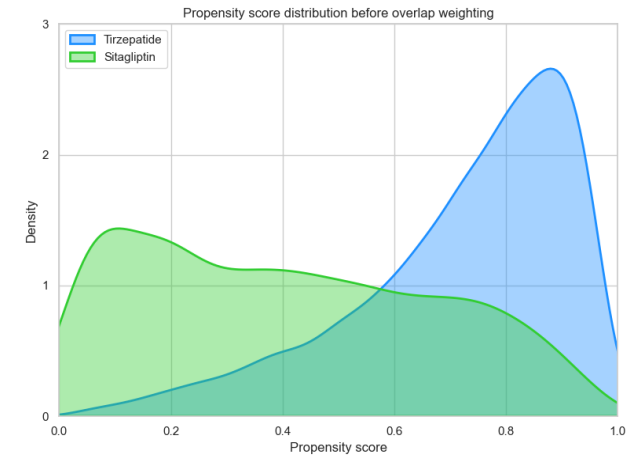
<b>Reviewed by PI:</b>	<b>Nils Krüger</b>	<b>Date reviewed:</b>	<b>September 25, 2025</b>
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## Appendix 6. Balance Assessment - PS Distribution and C-Statistic

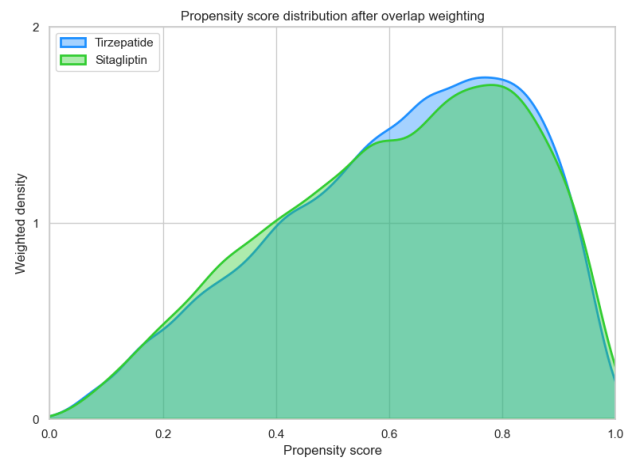
C-statistics unadjusted, OPTUM: 0.823



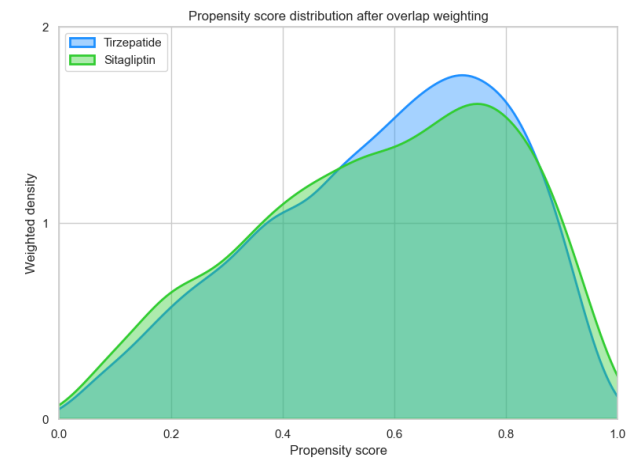
C-statistics unadjusted, MARKETSCAN: 0.822



C-statistics adjusted after overlap weighing on the PS, OPTUM: 0.505



C-statistics adjusted after overlap weighing on the PS, MARKETSCAN: 0.505



Appendix 7. Balance Assessment - Table 1

OPTUM				
Variable	Reference: Sitagliptin	Exposure: Tirzepatide	Reference: Sitagliptin	Exposure: Tirzepatide
Number of patients	13,970	20,263	13,793	29,744
Sum of weights			6,027.46	6,027.46
Effective sample size			9,834	15,677
Age				
...mean (sd)	73.95 (7.67)	66.65 (9.20)	71.37 (7.77)	71.37 (7.57)
Gender (male); n (%)	6,699 (48.6%)	14,518 (48.8%)	2,899.0 (48.1%)	2,899.0 (48.1%)
Race				
...White; n (%)	8,030 (58.2%)	18,967 (63.8%)	3,751.3 (62.2%)	3,751.3 (62.2%)
...Black; n (%)	2,806 (20.3%)	4,186 (14.1%)	1,073.5 (17.8%)	1,073.5 (17.8%)
...Unknown / Missing; n (%)	2,478 (18.0%)	6,134 (20.6%)	1,063.0 (17.6%)	1,063.0 (17.6%)
...Others; n (%)	479 (3.5%)	457 (1.5%)	139.7 (2.3%)	139.7 (2.3%)
Region / State				
...Northeast; n (%)	1,855 (13.4%)	2,523 (8.5%)	645.4 (10.7%)	645.4 (10.7%)
...Midwest / North central; n (%)	2,152 (15.6%)	5,933 (19.9%)	1,039.3 (17.2%)	1,039.3 (17.2%)
...South; n (%)	7,684 (55.7%)	17,385 (58.4%)	3,472.4 (57.6%)	3,472.4 (57.6%)
...West; n (%)	2,092 (15.2%)	3,884 (13.1%)	866.1 (14.4%)	866.1 (14.4%)
...Missing; n (%)	10 (0.1%)	19 (0.1%)	4.2 (0.1%)	4.2 (0.1%)
Smoking / Tobacco use; n (%)	3,847 (27.9%)	8,616 (29.0%)	1,732.4 (28.7%)	1,732.4 (28.7%)
Weight				
...Overweight; n (%)	3,104 (22.5%)	1,893 (6.4%)	808.3 (13.4%)	808.3 (13.4%)
...Class 1 Obesity; n (%)	4,150 (30.1%)	5,950 (20.0%)	1,647.7 (27.3%)	1,647.7 (27.3%)
...Class 2 Obesity; n (%)	3,720 (27.0%)	10,508 (35.3%)	1,960.3 (32.5%)	1,960.3 (32.5%)
...Class 3 Obesity; n (%)	1,443 (10.5%)	7,750 (26.1%)	935.1 (15.5%)	935.1 (15.5%)
...Unspecified Obesity; n (%)	1,376 (10.0%)	3,643 (12.2%)	676.0 (11.2%)	676.0 (11.2%)
Diabetic retinopathy; n (%)	1,759 (12.8%)	3,319 (11.2%)	738.0 (12.2%)	738.0 (12.2%)
Diabetic neuropathy; n (%)	5,337 (38.7%)	9,824 (33.0%)	2,226.9 (37.0%)	2,226.9 (37.0%)
Diabetic nephropathy; n (%)	5,198 (37.7%)	8,040 (27.0%)	2,004.3 (33.3%)	2,004.3 (33.3%)
Diabetes with other ophthalmic complications; n (%)	1,043 (7.6%)	1,376 (4.6%)	386.2 (6.4%)	386.2 (6.4%)
Diabetes with peripheral circulatory disorders; n (%)	3,722 (27.0%)	6,013 (20.2%)	1,447.6 (24.0%)	1,447.6 (24.0%)
Diabetic foot; n (%)	587 (4.3%)	1,201 (4.0%)	249.7 (4.1%)	249.7 (4.1%)
Erectile dysfunction; n (%)	642 (4.7%)	1,722 (5.8%)	310.0 (5.1%)	310.0 (5.1%)
Hypoglycemia; n (%)	4,267 (30.9%)	8,127 (27.3%)	1,763.1 (29.3%)	1,763.1 (29.3%)
Hyperglycemia/DKA/HONK; n (%)	7,494 (54.3%)	15,277 (51.4%)	3,196.7 (53.0%)	3,196.7 (53.0%)
Skin infections; n (%)	1,580 (11.5%)	3,699 (12.4%)	711.4 (11.8%)	711.4 (11.8%)
Stable angina; n (%)	1,275 (9.2%)	2,946 (9.9%)	580.1 (9.6%)	580.1 (9.6%)
Unstable angina; n (%)	593 (4.3%)	1,342 (4.5%)	262.4 (4.4%)	262.4 (4.4%)
Hypertension; n (%)	13,088 (94.9%)	27,506 (92.5%)	5,681.7 (94.3%)	5,681.7 (94.3%)
Hypotension; n (%)	883 (6.4%)	1,287 (4.3%)	320.8 (5.3%)	320.8 (5.3%)
Hyperlipidemia; n (%)	12,534 (90.9%)	26,680 (89.7%)	5,469.4 (90.7%)	5,469.4 (90.7%)
Atrial fibrillation; n (%)	2,611 (18.9%)	5,104 (17.2%)	1,099.6 (18.2%)	1,099.6 (18.2%)
Cardiac conduction disorder; n (%)	1,552 (11.3%)	2,828 (9.5%)	630.9 (10.5%)	630.9 (10.5%)
Previous cardiac procedure (CABG, PTCA, Stent); n (%)	334 (2.4%)	824 (2.8%)	157.0 (2.6%)	157.0 (2.6%)
Ischemic stroke; n (%)	217 (1.6%)	280 (0.9%)	73.3 (1.2%)	73.3 (1.2%)
PVD diagnosis or surgery; n (%)	3,375 (24.5%)	5,515 (18.5%)	1,313.2 (21.8%)	1,313.2 (21.8%)
Other cardiac dysrhythmia; n (%)	4,215 (30.6%)	8,680 (29.2%)	1,785.7 (29.6%)	1,785.7 (29.6%)
Cardiomyopathy; n (%)	1,236 (9.0%)	2,549 (8.6%)	534.5 (8.9%)	534.5 (8.9%)
Valve disorders; n (%)	2,870 (20.8%)	5,355 (18.0%)	1,191.3 (19.8%)	1,191.3 (19.8%)
Valve replacement; n (%)	347 (2.5%)	672 (2.3%)	151.5 (2.5%)	151.5 (2.5%)
TIA; n (%)	530 (3.8%)	857 (2.9%)	201.3 (3.3%)	201.3 (3.3%)
Edema; n (%)	2,564 (18.6%)	5,387 (18.1%)	1,101.5 (18.3%)	1,101.5 (18.3%)
Venous thromboembolism / Pulmonary embolism; n (%)	702 (5.1%)	1,387 (4.7%)	285.4 (4.7%)	285.4 (4.7%)
Pulmonary hypertension; n (%)	787 (5.7%)	1,424 (4.8%)	314.3 (5.2%)	314.3 (5.2%)
Implantable cardioverter defibrillator; n (%)	53 (0.4%)	146 (0.5%)	27.1 (0.4%)	27.1 (0.4%)
Hyperkalemia; n (%)	852 (6.2%)	1,184 (4.0%)	304.4 (5.1%)	304.4 (5.1%)
Coronary atherosclerosis; n (%)	6,176 (44.8%)	13,983 (47.0%)	2,785.0 (46.2%)	2,785.0 (46.2%)
Cerebrovascular procedure; n (%)	40 (0.3%)	60 (0.2%)	14.8 (0.2%)	14.8 (0.2%)
Insertion of pacemakers / removal of cardiac lead; n (%)	64 (0.5%)	74 (0.2%)	21.3 (0.4%)	21.3 (0.4%)
CKD Stage 1-2; n (%)	1,256 (9.1%)	2,025 (6.8%)	505.9 (8.4%)	505.9 (8.4%)

CKD Stage 3-4; n (%)	4,247 (30.8%)	6,403 (21.5%)	1,638.6 (27.2%)	1,638.6 (27.2%)
Unspecified CKD; n (%)	1,800 (13.1%)	2,543 (8.5%)	654.1 (10.9%)	654.1 (10.9%)
Acute kidney injury; n (%)	1,862 (13.5%)	2,387 (8.0%)	635.4 (10.5%)	635.4 (10.5%)
Hypertensive nephropathy; n (%)	3,582 (26.0%)	5,317 (17.9%)	1,365.5 (22.7%)	1,365.5 (22.7%)
Urinary tract infections; n (%)	2,902 (21.0%)	4,703 (15.8%)	1,123.9 (18.7%)	1,123.9 (18.7%)
Genital infections; n (%)	406 (2.9%)	720 (2.4%)	166.3 (2.8%)	166.3 (2.8%)
Urolithiasis (Kidney and urinary stone); n (%)	832 (6.0%)	1,606 (5.4%)	356.9 (5.9%)	356.9 (5.9%)
COPD; n (%)	2,762 (20.0%)	5,169 (17.4%)	1,180.6 (19.6%)	1,180.6 (19.6%)
Asthma; n (%)	1,511 (11.0%)	4,043 (13.6%)	733.0 (12.2%)	733.0 (12.2%)
Obstructive sleep apnea; n (%)	3,212 (23.3%)	12,358 (41.5%)	1,830.6 (30.4%)	1,830.6 (30.4%)
Serious bacterial infections; n (%)	840 (6.1%)	995 (3.3%)	272.9 (4.5%)	272.9 (4.5%)
Pneumonia; n (%)	1,079 (7.8%)	1,674 (5.6%)	402.1 (6.7%)	402.1 (6.7%)
Liver disease; n (%)	2,698 (19.6%)	5,752 (19.3%)	1,164.5 (19.3%)	1,164.5 (19.3%)
MASH/MASLD; n (%)	1,034 (7.5%)	3,105 (10.4%)	525.2 (8.7%)	525.2 (8.7%)
Fractures / Falls; n (%)	1,486 (10.8%)	1,901 (6.4%)	515.4 (8.6%)	515.4 (8.6%)
Osteoporosis; n (%)	1,035 (7.5%)	1,573 (5.3%)	402.6 (6.7%)	402.6 (6.7%)
Osteoarthritis; n (%)	4,808 (34.9%)	10,144 (34.1%)	2,089.7 (34.7%)	2,089.7 (34.7%)
Depression; n (%)	2,718 (19.7%)	6,289 (21.1%)	1,201.7 (19.9%)	1,201.7 (19.9%)
Dementia; n (%)	1,752 (12.7%)	1,292 (4.3%)	465.8 (7.7%)	465.8 (7.7%)
Delirium or psychosis; n (%)	394 (2.9%)	389 (1.3%)	117.3 (2.0%)	117.3 (2.0%)
Anxiety; n (%)	2,526 (18.3%)	6,755 (22.7%)	1,181.1 (19.6%)	1,181.1 (19.6%)
Sleep disorders; n (%)	4,942 (35.8%)	11,677 (39.3%)	2,236.1 (37.1%)	2,236.1 (37.1%)
Anemia; n (%)	4,280 (31.0%)	6,827 (23.0%)	1,625.9 (27.0%)	1,625.9 (27.0%)
Influenza; n (%)	265 (1.9%)	633 (2.1%)	121.2 (2.0%)	121.2 (2.0%)
COVID; n (%)	1,596 (11.6%)	3,110 (10.5%)	650.3 (10.8%)	650.3 (10.8%)
Hyperthyroidism and other thyroid gland disorders; n (%)	4,096 (29.7%)	8,920 (30.0%)	1,799.1 (29.8%)	1,799.1 (29.8%)
Hypothyroidism; n (%)	3,283 (23.8%)	7,054 (23.7%)	1,433.7 (23.8%)	1,433.7 (23.8%)
Nephrotic syndrome; n (%)	4 (0.0%)	34 (0.1%)	2.5 (0.0%)	2.5 (0.0%)
Urinary incontinence; n (%)	1,267 (9.2%)	2,086 (7.0%)	504.0 (8.4%)	504.0 (8.4%)
Biliary disease; n (%)	27 (0.2%)	39 (0.1%)	10.4 (0.2%)	10.4 (0.2%)
Pancreatitis; n (%)	4 (0.0%)	11 (0.0%)	2.3 (0.0%)	2.3 (0.0%)
Bowel obstruction; n (%)	26 (0.2%)	53 (0.2%)	10.1 (0.2%)	10.1 (0.2%)
Gastroparesis; n (%)	130 (0.9%)	281 (0.9%)	61.5 (1.0%)	61.5 (1.0%)
Number of antidiabetic drugs on CED				
...mean (sd)	1.25 (0.90)	1.09 (0.97)	1.22 (0.91)	1.22 (0.97)
Concomitant use or initiation of Metformin; n (%)	7,516 (54.5%)	12,987 (43.7%)	3,074.9 (51.0%)	3,074.9 (51.0%)
Concomitant use or initiation of Insulins; n (%)	2,085 (15.1%)	6,749 (22.7%)	1,122.5 (18.6%)	1,122.5 (18.6%)
Concomitant use or initiation of Sulfonylureas; n (%)	3,880 (28.1%)	4,591 (15.4%)	1,425.5 (23.7%)	1,425.5 (23.7%)
Concomitant use or initiation of DPP-4i; n (%)	124 (0.9%)	610 (2.1%)	67.6 (1.1%)	67.6 (1.1%)
Concomitant use or initiation of SGLT-2i; n (%)	2,575 (18.7%)	5,937 (20.0%)	1,234.8 (20.5%)	1,234.8 (20.5%)
Concomitant use or initiation of Any other glucose-lowering drugs; n (%)	1,038 (7.5%)	1,666 (5.6%)	437.7 (7.3%)	437.7 (7.3%)
Past use of Metformin; n (%)	8,755 (63.5%)	17,105 (57.5%)	3,763.2 (62.4%)	3,763.2 (62.4%)
Past use of Insulins; n (%)	2,900 (21.0%)	8,822 (29.7%)	1,525.8 (25.3%)	1,525.8 (25.3%)
Past use of Sulfonylureas; n (%)	5,079 (36.8%)	6,256 (21.0%)	1,878.1 (31.2%)	1,878.1 (31.2%)
Past use of DPP-4i; n (%)	373 (2.7%)	1,004 (3.4%)	163.7 (2.7%)	163.7 (2.7%)
Past use of SGLT-2i; n (%)	3,791 (27.5%)	8,329 (28.0%)	1,792.7 (29.7%)	1,792.7 (29.7%)
Past use of Any other glucose-lowering drugs; n (%)	1,462 (10.6%)	2,407 (8.1%)	622.1 (10.3%)	622.1 (10.3%)
ACE-is/ARB's; n (%)	10,334 (74.9%)	21,664 (72.8%)	4,516.0 (74.9%)	4,516.0 (74.9%)
ARNI; n (%)	416 (3.0%)	1,038 (3.5%)	199.2 (3.3%)	199.2 (3.3%)
Thiazides; n (%)	4,354 (31.6%)	10,043 (33.8%)	1,983.4 (32.9%)	1,983.4 (32.9%)
Beta-blockers; n (%)	8,224 (59.6%)	16,912 (56.9%)	3,563.0 (59.1%)	3,563.0 (59.1%)
Calcium channel blockers; n (%)	5,855 (42.4%)	10,905 (36.7%)	2,432.9 (40.4%)	2,432.9 (40.4%)
Digoxin / Digitoxin; n (%)	174 (1.3%)	267 (0.9%)	71.2 (1.2%)	71.2 (1.2%)
Loop diuretics; n (%)	3,598 (26.1%)	7,919 (26.6%)	1,610.4 (26.7%)	1,610.4 (26.7%)
Other diuretics; n (%)	1,318 (9.6%)	3,641 (12.2%)	646.1 (10.7%)	646.1 (10.7%)
Intravenous diuretics; n (%)	301 (2.2%)	592 (2.0%)	122.9 (2.0%)	122.9 (2.0%)
Nitrates; n (%)	1,579 (11.4%)	3,536 (11.9%)	717.3 (11.9%)	717.3 (11.9%)
Anti-arrhythmics; n (%)	537 (3.9%)	1,285 (4.3%)	254.8 (4.2%)	254.8 (4.2%)
Statins; n (%)	11,936 (86.5%)	24,562 (82.6%)	5,195.0 (86.2%)	5,195.0 (86.2%)
PCSK9 inhibitors and other lipid-lowering drugs; n (%)	2,228 (16.2%)	5,648 (19.0%)	1,080.3 (17.9%)	1,080.3 (17.9%)
Antiplatelet medications; n (%)	2,618 (19.0%)	5,429 (18.3%)	1,132.8 (18.8%)	1,132.8 (18.8%)
Oral anticoagulants; n (%)	2,500 (18.1%)	4,944 (16.6%)	1,052.2 (17.5%)	1,052.2 (17.5%)

COPD/Asthma medications; n (%)	5,087 (36.9%)	12,140 (40.8%)	2,378.7 (39.5%)	2,378.7 (39.5%)
NSAIDs; n (%)	3,834 (27.8%)	9,022 (30.3%)	1,755.7 (29.1%)	1,755.7 (29.1%)
Oral corticosteroids; n (%)	3,057 (22.2%)	8,624 (29.0%)	1,505.2 (25.0%)	1,505.2 (25.0%)
Osteoporosis agents (incl. bisphosphonates); n (%)	669 (4.9%)	895 (3.0%)	258.9 (4.3%)	258.9 (4.3%)
Opioids; n (%)	2,986 (21.6%)	7,686 (25.8%)	1,436.5 (23.8%)	1,436.5 (23.8%)
Anti-depressants; n (%)	4,742 (34.4%)	12,228 (41.1%)	2,254.4 (37.4%)	2,254.4 (37.4%)
Antipsychotics; n (%)	673 (4.9%)	1,287 (4.3%)	265.1 (4.4%)	265.1 (4.4%)
Anxiolytics / hypnotics, benzos; n (%)	2,537 (18.4%)	6,967 (23.4%)	1,228.0 (20.4%)	1,228.0 (20.4%)
Dementia medications; n (%)	818 (5.9%)	564 (1.9%)	216.6 (3.6%)	216.6 (3.6%)
Urinary tract infections antibiotics; n (%)	6,714 (48.7%)	15,066 (50.7%)	3,004.7 (49.9%)	3,004.7 (49.9%)
Laxatives; n (%)	523 (3.8%)	1,269 (4.3%)	247.0 (4.1%)	247.0 (4.1%)
Number of distinct medications				
...mean (sd)	15.85 (6.57)	16.30 (7.11)	16.29 (6.76)	16.29 (6.71)
Number of office visits				
...mean (sd)	10.78 (7.30)	11.53 (7.55)	11.23 (7.66)	11.23 (7.14)
Number of endocrinologist visits				
...mean (sd)	0.42 (1.69)	0.56 (1.57)	0.44 (1.70)	0.44 (1.34)
Number of cardiologist visits				
...mean (sd)	2.65 (4.43)	2.66 (4.09)	2.62 (4.17)	2.62 (4.08)
Number of internal/family medicine visits				
...mean (sd)	9.94 (11.47)	7.64 (8.32)	8.79 (9.74)	8.79 (9.86)
Number of electrocardiograms (ECG/EKG)				
...mean (sd)	1.47 (2.01)	1.33 (1.87)	1.38 (1.90)	1.38 (1.88)
Number of echocardiograms				
...mean (sd)	0.46 (0.77)	0.45 (0.77)	0.45 (0.74)	0.45 (0.75)
Out-of-pocket medication cost				
...mean (sd)	617.36 (799.68)	710.57 (960.32)	659.83 (853.88)	659.83 (748.45)
Unique brand medicines				
...mean (sd)	16.12 (6.79)	16.57 (7.33)	16.56 (6.97)	16.56 (6.93)
Unique generic medicines				
...mean (sd)	15.85 (6.57)	16.30 (7.11)	16.29 (6.76)	16.29 (6.71)
Colonoscopy Sigmoidoscopy; n (%)	1,327 (9.6%)	3,581 (12.0%)	653.7 (10.8%)	653.7 (10.8%)
Flu/Pneumococcal vaccine; n (%)	4,556 (33.0%)	9,154 (30.8%)	1,942.5 (32.2%)	1,942.5 (32.2%)
Pap smear; n (%)	374 (2.7%)	1,617 (5.4%)	220.4 (3.7%)	220.4 (3.7%)
PSA test; n (%)	3,511 (25.5%)	8,259 (27.8%)	1,601.9 (26.6%)	1,601.9 (26.6%)
Fecal occult blood test; n (%)	872 (6.3%)	1,183 (4.0%)	324.0 (5.4%)	324.0 (5.4%)
Bone mineral density tests; n (%)	1,183 (8.6%)	2,624 (8.8%)	559.3 (9.3%)	559.3 (9.3%)
Mammograms; n (%)	2,812 (20.4%)	7,654 (25.7%)	1,437.2 (23.8%)	1,437.2 (23.8%)
Telemedicine; n (%)	2,855 (20.7%)	6,957 (23.4%)	1,236.9 (20.5%)	1,236.9 (20.5%)
HbA1c tests				
...mean (sd)	2.48 (1.34)	2.41 (1.37)	2.49 (1.33)	2.49 (1.38)
Lipid panels				
...mean (sd)	1.72 (1.22)	1.76 (1.23)	1.75 (1.21)	1.75 (1.21)
Creatinine tests				
...mean (sd)	3.88 (3.36)	3.42 (3.41)	3.73 (3.11)	3.73 (4.17)
Natriuretic peptide tests				
...mean (sd)	0.26 (0.78)	0.26 (0.81)	0.25 (0.76)	0.25 (0.75)
Urine tests				
...mean (sd)	1.44 (1.92)	1.23 (1.80)	1.36 (1.85)	1.36 (1.89)
Combined comorbidity score				
...mean (sd)	3.64 (3.09)	2.84 (2.66)	3.26 (2.82)	3.26 (2.89)
Frailty Score				
...mean (sd)	0.20 (0.07)	0.18 (0.06)	0.19 (0.06)	0.19 (0.06)
Number of Hospitalizations				
...mean (sd)	0.42 (1.05)	0.23 (0.67)	0.30 (0.82)	0.30 (0.81)
Any hospitalization within prior 91 days; n (%)	1,307 (9.5%)	1,190 (4.0%)	366.2 (6.1%)	366.2 (6.1%)
Any hospitalization within prior 92-365 days; n (%)	2,336 (16.9%)	3,757 (12.6%)	886.0 (14.7%)	886.0 (14.7%)
Number of hospitalizations (0, 1, 2 or more)				
...< 1; n (%)	10,738 (77.9%)	25,280 (85.0%)	4,931.8 (81.8%)	4,931.8 (81.8%)
...1 - <2; n (%)	1,709 (12.4%)	3,139 (10.6%)	693.2 (11.5%)	693.2 (11.5%)
...>= 2; n (%)	1,346 (9.8%)	1,325 (4.5%)	402.4 (6.7%)	402.4 (6.7%)

Heart failure hospitalization; n (%)	978 (7.1%)	1,473 (5.0%)	355.2 (5.9%)	355.2 (5.9%)
ED visit; n (%)	6,077 (44.1%)	10,116 (34.0%)	2,419.8 (40.2%)	2,419.8 (40.2%)
Acute MI; n (%)	242 (1.8%)	467 (1.6%)	98.8 (1.6%)	98.8 (1.6%)
Old MI; n (%)	1,160 (8.4%)	2,392 (8.0%)	493.3 (8.2%)	493.3 (8.2%)
Heart failure; n (%)	3,490 (25.3%)	6,804 (22.9%)	1,474.1 (24.5%)	1,474.1 (24.5%)
Acute heart failure; n (%)	848 (6.1%)	1,448 (4.9%)	330.4 (5.5%)	330.4 (5.5%)
Microalbuminuria or proteinuria; n (%)	1,107 (8.0%)	2,260 (7.6%)	467.9 (7.8%)	467.9 (7.8%)
Ratio of brand to generic medications				
...mean (sd)	1.02 (0.04)	1.01 (0.03)	1.01 (0.04)	1.01 (0.03)
CEd				
...2022	3,157 (22.9%)	1,553 (5.2%)	651.5 (10.8%)	651.5 (10.8%)
...2023	4,846 (35.1%)	9,004 (30.3%)	2,160.0 (35.8%)	2,160.0 (35.8%)
...2024	4,522 (32.8%)	13,188 (44.3%)	2,418.1 (40.1%)	2,418.1 (40.1%)
...2025	1,268 (9.2%)	5,999 (20.2%)	797.9 (13.2%)	797.9 (13.2%)

Appendix 7. Balance Assessment - Table 1

MARKETSCAN				
Variable	Reference: Sitagliptin	Exposure: Tirzepatide	Reference: Sitagliptin	Exposure: Tirzepatide
Number of patients	3,825	5,609	3,825	5,609
Sum of weights			1,413.43	1,413.43
Effective sample size			2,442	3,375
Age				
...mean (sd)	68.34 (11.44)	59.43 (9.10)	63.13 (10.46)	63.13 (9.54)
Gender (male); n (%)	2,110 (55.2%)	2,813 (50.2%)	760.0 (53.8%)	760.0 (53.8%)
Region / State				
...Northeast; n (%)	710 (18.6%)	571 (10.2%)	193.6 (13.7%)	193.6 (13.7%)
...Midwest / North central; n (%)	1,526 (39.9%)	1,476 (26.3%)	459.6 (32.5%)	459.6 (32.5%)
...South; n (%)	1,432 (37.4%)	3,261 (58.1%)	692.9 (49.0%)	692.9 (49.0%)
...West; n (%)	152 (4.0%)	295 (5.3%)	65.5 (4.6%)	65.5 (4.6%)
...Missing; n (%)	5 (0.1%)	6 (0.1%)	1.8 (0.1%)	1.8 (0.1%)
Smoking / Tobacco use; n (%)	529 (13.8%)	742 (13.2%)	193.4 (13.7%)	193.4 (13.7%)
Weight				
...Overweight; n (%)	1,097 (28.7%)	443 (7.9%)	206.1 (14.6%)	206.1 (14.6%)
...Class 1 Obesity; n (%)	500 (13.1%)	457 (8.1%)	166.4 (11.8%)	166.4 (11.8%)
...Class 2 Obesity; n (%)	193 (5.0%)	385 (6.9%)	93.5 (6.6%)	93.5 (6.6%)
...Class 3 Obesity; n (%)	547 (14.3%)	1,102 (19.6%)	256.2 (18.1%)	256.2 (18.1%)
...Unspecified Obesity; n (%)	1,488 (38.9%)	3,222 (57.4%)	691.2 (48.9%)	691.2 (48.9%)
Diabetic retinopathy; n (%)	402 (10.5%)	494 (8.8%)	125.8 (8.9%)	125.8 (8.9%)
Diabetic neuropathy; n (%)	1,175 (30.7%)	1,261 (22.5%)	370.7 (26.2%)	370.7 (26.2%)
Diabetic nephropathy; n (%)	994 (26.0%)	870 (15.5%)	273.9 (19.4%)	273.9 (19.4%)
Diabetes with other ophthalmic complications; n (%)	160 (4.2%)	115 (2.1%)	40.5 (2.9%)	40.5 (2.9%)
Diabetes with peripheral circulatory disorders; n (%)	642 (16.8%)	700 (12.5%)	196.9 (13.9%)	196.9 (13.9%)
Diabetic foot; n (%)	115 (3.0%)	150 (2.7%)	38.0 (2.7%)	38.0 (2.7%)
Erectile dysfunction; n (%)	182 (4.8%)	263 (4.7%)	65.7 (4.7%)	65.7 (4.7%)
Hypoglycemia; n (%)	748 (19.6%)	1,102 (19.6%)	273.4 (19.3%)	273.4 (19.3%)
Hyperglycemia/DKA/HONK; n (%)	1,954 (51.1%)	2,858 (51.0%)	720.5 (51.0%)	720.5 (51.0%)
Skin infections; n (%)	413 (10.8%)	598 (10.7%)	147.3 (10.4%)	147.3 (10.4%)
Stable angina; n (%)	282 (7.4%)	347 (6.2%)	95.5 (6.8%)	95.5 (6.8%)
Unstable angina; n (%)	155 (4.1%)	188 (3.4%)	50.1 (3.6%)	50.1 (3.6%)
Hypertension; n (%)	3,474 (90.8%)	4,960 (88.4%)	1,256.9 (88.9%)	1,256.9 (88.9%)
Hypotension; n (%)	156 (4.1%)	119 (2.1%)	36.1 (2.6%)	36.1 (2.6%)
Hyperlipidemia; n (%)	3,345 (87.5%)	4,853 (86.5%)	1,235.0 (87.4%)	1,235.0 (87.4%)
Atrial fibrillation; n (%)	625 (16.3%)	605 (10.8%)	178.9 (12.7%)	178.9 (12.7%)
Cardiac conduction disorder; n (%)	317 (8.3%)	282 (5.0%)	83.8 (5.9%)	83.8 (5.9%)
Previous cardiac procedure (CABG, PTCA, Stent); n (%)	102 (2.7%)	134 (2.4%)	38.5 (2.7%)	38.5 (2.7%)
Ischemic stroke; n (%)	115 (3.0%)	67 (1.2%)	23.9 (1.7%)	23.9 (1.7%)
PVD diagnosis or surgery; n (%)	693 (18.1%)	658 (11.7%)	206.0 (14.6%)	206.0 (14.6%)
Other cardiac dysrhythmia; n (%)	1,004 (26.2%)	1,291 (23.0%)	327.5 (23.2%)	327.5 (23.2%)
Cardiomyopathy; n (%)	303 (7.9%)	362 (6.5%)	94.3 (6.7%)	94.3 (6.7%)
Valve disorders; n (%)	641 (16.8%)	636 (11.3%)	190.9 (13.5%)	190.9 (13.5%)
Valve replacement; n (%)	56 (1.5%)	44 (0.8%)	15.0 (1.1%)	15.0 (1.1%)
TIA; n (%)	160 (4.2%)	128 (2.3%)	39.2 (2.8%)	39.2 (2.8%)
Edema; n (%)	518 (13.5%)	655 (11.7%)	173.3 (12.3%)	173.3 (12.3%)
Venous thromboembolism / Pulmonary embolism; n (%)	172 (4.5%)	191 (3.4%)	51.6 (3.7%)	51.6 (3.7%)
Pulmonary hypertension; n (%)	138 (3.6%)	112 (2.0%)	30.6 (2.2%)	30.6 (2.2%)
Implantable cardioverter defibrillator; n (%)	14 (0.4%)	18 (0.3%)	4.4 (0.3%)	4.4 (0.3%)
Hyperkalemia; n (%)	142 (3.7%)	85 (1.5%)	30.4 (2.2%)	30.4 (2.2%)
Coronary atherosclerosis; n (%)	1,612 (42.1%)	2,022 (36.0%)	559.8 (39.6%)	559.8 (39.6%)
Cerebrovascular procedure; n (%)	8 (0.2%)	6 (0.1%)	2.2 (0.2%)	2.2 (0.2%)
Insertion of pacemakers / removal of cardiac lead; n (%)	11 (0.3%)	4 (0.1%)	1.7 (0.1%)	1.7 (0.1%)
CKD stage 1-2; n (%)	145 (3.8%)	165 (2.9%)	50.7 (3.6%)	50.7 (3.6%)
CKD stage 3-4; n (%)	689 (18.0%)	493 (8.8%)	170.0 (12.0%)	170.0 (12.0%)
Unspecified CKD; n (%)	246 (6.4%)	170 (3.0%)	58.5 (4.1%)	58.5 (4.1%)
Acute kidney injury; n (%)	358 (9.4%)	213 (3.8%)	78.0 (5.5%)	78.0 (5.5%)

Hypertensive nephropathy; n (%)	573 (15.0%)	446 (8.0%)	143.7 (10.2%)	143.7 (10.2%)
Urinary tract infections; n (%)	609 (15.9%)	641 (11.4%)	176.8 (12.5%)	176.8 (12.5%)
Genital infections; n (%)	130 (3.4%)	167 (3.0%)	45.7 (3.2%)	45.7 (3.2%)
Urolithiasis (Kidney and urinary stone); n (%)	207 (5.4%)	245 (4.4%)	69.5 (4.9%)	69.5 (4.9%)
COPD; n (%)	478 (12.5%)	476 (8.5%)	146.3 (10.4%)	146.3 (10.4%)
Asthma; n (%)	344 (9.0%)	591 (10.5%)	140.8 (10.0%)	140.8 (10.0%)
Obstructive sleep apnea; n (%)	1,001 (26.2%)	2,193 (39.1%)	459.1 (32.5%)	459.1 (32.5%)
Serious bacterial infections; n (%)	250 (6.5%)	190 (3.4%)	62.4 (4.4%)	62.4 (4.4%)
Pneumonia; n (%)	269 (7.0%)	224 (4.0%)	68.0 (4.8%)	68.0 (4.8%)
Liver disease; n (%)	575 (15.0%)	879 (15.7%)	206.8 (14.6%)	206.8 (14.6%)
MASH/MASLD; n (%)	217 (5.7%)	501 (8.9%)	101.2 (7.2%)	101.2 (7.2%)
Fractures / Falls; n (%)	294 (7.7%)	206 (3.7%)	67.5 (4.8%)	67.5 (4.8%)
Osteoporosis; n (%)	150 (3.9%)	103 (1.8%)	37.9 (2.7%)	37.9 (2.7%)
Osteoarthritis; n (%)	976 (25.5%)	1,354 (24.1%)	330.4 (23.4%)	330.4 (23.4%)
Depression; n (%)	497 (13.0%)	878 (15.7%)	187.2 (13.3%)	187.2 (13.3%)
Dementia; n (%)	272 (7.1%)	90 (1.6%)	39.9 (2.8%)	39.9 (2.8%)
Delirium or psychosis; n (%)	41 (1.1%)	26 (0.5%)	9.3 (0.7%)	9.3 (0.7%)
Anxiety; n (%)	540 (14.1%)	1,175 (20.9%)	228.6 (16.2%)	228.6 (16.2%)
Sleep disorders; n (%)	939 (24.5%)	1,593 (28.4%)	366.3 (25.9%)	366.3 (25.9%)
Anemia; n (%)	1,009 (26.4%)	1,094 (19.5%)	301.8 (21.3%)	301.8 (21.3%)
Influenza; n (%)	62 (1.6%)	142 (2.5%)	29.3 (2.1%)	29.3 (2.1%)
COVID; n (%)	533 (13.9%)	809 (14.4%)	190.9 (13.5%)	190.9 (13.5%)
Hyperthyroidism and other thyroid gland disorders; n (%)	1,001 (26.2%)	1,498 (26.7%)	353.3 (25.0%)	353.3 (25.0%)
Hypothyroidism; n (%)	774 (20.2%)	1,148 (20.5%)	275.7 (19.5%)	275.7 (19.5%)
Nephrotic syndrome; n (%)	4 (0.1%)	2 (0.0%)	0.7 (0.1%)	0.7 (0.1%)
Urinary incontinence; n (%)	222 (5.8%)	191 (3.4%)	59.2 (4.2%)	59.2 (4.2%)
Biliary disease; n (%)	15 (0.4%)	12 (0.2%)	2.8 (0.2%)	2.8 (0.2%)
Pancreatitis; n (%)	1 (0.0%)	4 (0.1%)	0.8 (0.1%)	0.8 (0.1%)
Bowel obstruction; n (%)	15 (0.4%)	11 (0.2%)	3.0 (0.2%)	3.0 (0.2%)
Gastroparesis; n (%)	25 (0.7%)	49 (0.9%)	12.2 (0.9%)	12.2 (0.9%)
Number of antidiabetic drugs on CED				
...mean (sd)	1.17 (0.87)	1.06 (0.94)	1.17 (0.86)	1.17 (0.94)
Concomitant use or initiation of Metformin; n (%)	2,198 (57.5%)	2,557 (45.6%)	777.2 (55.0%)	777.2 (55.0%)
Concomitant use or initiation of Insulins; n (%)	488 (12.8%)	1,145 (20.4%)	226.6 (16.0%)	226.6 (16.0%)
Concomitant use or initiation of Sulfonylureas; n (%)	821 (21.5%)	576 (10.3%)	231.0 (16.3%)	231.0 (16.3%)
Concomitant use or initiation of DPP-4i; n (%)	35 (0.9%)	77 (1.4%)	16.2 (1.2%)	16.2 (1.2%)
Concomitant use or initiation of SGLT-2i; n (%)	753 (19.7%)	1,345 (24.0%)	332.6 (23.5%)	332.6 (23.5%)
Concomitant use or initiation of Any other glucose-lowering drugs; n (%)	186 (4.9%)	221 (3.9%)	68.1 (4.8%)	68.1 (4.8%)
Past use of Metformin; n (%)	2,620 (68.5%)	3,503 (62.5%)	959.2 (67.9%)	959.2 (67.9%)
Past use of Insulins; n (%)	739 (19.3%)	1,495 (26.7%)	315.6 (22.3%)	315.6 (22.3%)
Past use of Sulfonylureas; n (%)	1,197 (31.3%)	887 (15.8%)	333.2 (23.6%)	333.2 (23.6%)
Past use of DPP-4i; n (%)	98 (2.6%)	112 (2.0%)	30.3 (2.2%)	30.3 (2.2%)
Past use of SGLT-2i; n (%)	1,053 (27.5%)	1,749 (31.2%)	441.4 (31.2%)	441.4 (31.2%)
Past use of Any other glucose-lowering drugs; n (%)	285 (7.5%)	309 (5.5%)	92.2 (6.5%)	92.2 (6.5%)
ACE-is/ARB's; n (%)	2,833 (74.1%)	3,963 (70.7%)	1,035.3 (73.3%)	1,035.3 (73.3%)
ARNi; n (%)	104 (2.7%)	183 (3.3%)	37.0 (2.6%)	37.0 (2.6%)
Thiazides; n (%)	1,178 (30.8%)	1,946 (34.7%)	458.2 (32.4%)	458.2 (32.4%)
Beta-blockers; n (%)	2,149 (56.2%)	2,931 (52.3%)	765.6 (54.2%)	765.6 (54.2%)
Calcium channel blockers; n (%)	1,544 (40.4%)	1,783 (31.8%)	502.2 (35.5%)	502.2 (35.5%)
Digoxin / Digitoxin; n (%)	41 (1.1%)	43 (0.8%)	13.5 (1.0%)	13.5 (1.0%)
Loop diuretics; n (%)	791 (20.7%)	1,019 (18.2%)	263.9 (18.7%)	263.9 (18.7%)
Other diuretics; n (%)	331 (8.7%)	586 (10.4%)	127.5 (9.0%)	127.5 (9.0%)
Intravenous diuretics; n (%)	53 (1.4%)	54 (1.0%)	15.2 (1.1%)	15.2 (1.1%)
Nitrates; n (%)	424 (11.1%)	543 (9.7%)	147.2 (10.4%)	147.2 (10.4%)
Anti-arrhythmics; n (%)	136 (3.6%)	190 (3.4%)	49.2 (3.5%)	49.2 (3.5%)
Statins; n (%)	3,165 (82.7%)	4,325 (77.1%)	1,144.6 (81.0%)	1,144.6 (81.0%)
PCSK9 inhibitors and other lipid-lowering drugs; n (%)	622 (16.3%)	985 (17.6%)	243.0 (17.2%)	243.0 (17.2%)
Antiplatelet medications; n (%)	821 (21.5%)	1,004 (17.9%)	285.2 (20.2%)	285.2 (20.2%)
Oral anticoagulants; n (%)	663 (17.3%)	713 (12.7%)	204.5 (14.5%)	204.5 (14.5%)
COPD/Asthma medications; n (%)	1,262 (33.0%)	2,160 (38.5%)	513.0 (36.3%)	513.0 (36.3%)



NSAIDs; n (%)	1,077 (28.2%)	1,891 (33.7%)	436.3 (30.9%)	436.3 (30.9%)
Oral corticosteroids; n (%)	938 (24.5%)	1,738 (31.0%)	382.8 (27.1%)	382.8 (27.1%)
Osteoporosis agents (incl. bisphosphonates); n (%)	90 (2.4%)	89 (1.6%)	28.4 (2.0%)	28.4 (2.0%)
Opioids; n (%)	748 (19.6%)	1,198 (21.4%)	294.1 (20.8%)	294.1 (20.8%)
Anti-depressants; n (%)	1,090 (28.5%)	2,150 (38.3%)	458.2 (32.4%)	458.2 (32.4%)
Antipsychotics; n (%)	127 (3.3%)	186 (3.3%)	42.7 (3.0%)	42.7 (3.0%)
Anxiolytics / hypnotics, benzos; n (%)	612 (16.0%)	1,294 (23.1%)	276.5 (19.6%)	276.5 (19.6%)
Dementia medications; n (%)	146 (3.8%)	34 (0.6%)	19.1 (1.4%)	19.1 (1.4%)
Urinary tract infections antibiotics; n (%)	1,757 (45.9%)	2,750 (49.0%)	658.8 (46.6%)	658.8 (46.6%)
Laxatives; n (%)	115 (3.0%)	195 (3.5%)	44.9 (3.2%)	44.9 (3.2%)
Number of distinct medications				
...mean (sd)	14.08 (6.15)	15.02 (6.65)	14.37 (6.47)	14.37 (6.17)
Number of office visits				
...mean (sd)	10.51 (7.12)	10.65 (6.99)	10.33 (7.18)	10.33 (6.77)
Number of endocrinologist visits				
...mean (sd)	0.46 (1.61)	0.51 (1.39)	0.45 (1.54)	0.45 (1.29)
Number of cardiologist visits				
...mean (sd)	2.54 (4.18)	1.99 (3.41)	2.11 (3.66)	2.11 (3.48)
Number of internal/family medicine visits				
...mean (sd)	6.70 (7.91)	5.41 (5.75)	5.73 (6.20)	5.73 (6.25)
Number of Electrocardiograms (ECG/EKG)				
...mean (sd)	1.50 (1.99)	1.20 (1.72)	1.29 (1.71)	1.29 (1.85)
Number of Echocardiograms				
...mean (sd)	0.54 (0.93)	0.42 (0.79)	0.45 (0.80)	0.45 (0.83)
Out-of-pocket medication cost				
...mean (sd)	525.86 (1,080.34)	603.48 (1,048.58)	554.16 (1,206.55)	554.16 (913.40)
Unique brand medicines				
...mean (sd)	14.34 (6.36)	15.28 (6.84)	14.63 (6.69)	14.62 (6.33)
Unique generic medicines				
...mean (sd)	14.08 (6.15)	15.02 (6.65)	14.37 (6.47)	14.37 (6.17)
Colonoscopy Sigmoidoscopy; n (%)	393 (10.3%)	723 (12.9%)	160.9 (11.4%)	160.9 (11.4%)
Flu Pneumococcal vaccine; n (%)	1,242 (32.5%)	1,562 (27.8%)	426.2 (30.2%)	426.2 (30.2%)
Pap smear; n (%)	181 (4.7%)	554 (9.9%)	97.8 (6.9%)	97.8 (6.9%)
PSA test; n (%)	1,046 (27.3%)	1,546 (27.6%)	404.9 (28.6%)	404.9 (28.6%)
Fecal occult blood test; n (%)	180 (4.7%)	233 (4.2%)	63.5 (4.5%)	63.5 (4.5%)
Bone mineral density tests; n (%)	188 (4.9%)	285 (5.1%)	70.5 (5.0%)	70.5 (5.0%)
Mammograms; n (%)	702 (18.4%)	1,473 (26.3%)	323.2 (22.9%)	323.2 (22.9%)
Telemedicine; n (%)	969 (25.3%)	1,736 (31.0%)	389.1 (27.5%)	389.1 (27.5%)
HbA1C tests				
...mean (sd)	2.14 (1.52)	2.30 (1.81)	2.26 (1.50)	2.26 (1.52)
Lipid panels				
...mean (sd)	1.55 (1.31)	1.72 (1.34)	1.66 (1.32)	1.66 (1.29)
Creatinine tests				
...mean (sd)	0.08 (0.44)	0.04 (0.27)	0.06 (0.34)	0.06 (0.32)
Natriuretic peptide tests				
...mean (sd)	0.20 (0.80)	0.20 (0.99)	0.20 (0.86)	0.20 (0.93)
Urine tests				
...mean (sd)	1.23 (1.91)	1.08 (1.88)	1.13 (1.74)	1.13 (1.84)
Combined comorbidity score				
...mean (sd)	2.64 (2.81)	1.70 (2.01)	1.98 (2.30)	1.98 (2.23)
Frailty Score				
...mean (sd)	0.18 (0.06)	0.16 (0.04)	0.17 (0.05)	0.17 (0.05)
Number of Hospitalizations				
...mean (sd)	11.51 (35.04)	5.80 (24.31)	7.25 (25.65)	7.25 (27.50)
Any hospitalization within prior 91 days; n (%)	272 (7.1%)	160 (2.9%)	60.5 (4.3%)	60.5 (4.3%)
Any hospitalization within prior 92-365 days; n (%)	548 (14.3%)	486 (8.7%)	140.7 (10.0%)	140.7 (10.0%)
Number of hospitalizations (0, 1, 2 or more)				
...< 1; n (%)	3,091 (80.8%)	5,017 (89.4%)	1,229.0 (87.0%)	1,229.0 (87.0%)
...1 - <2; n (%)	32 (0.8%)	30 (0.5%)	9.1 (0.7%)	9.1 (0.7%)
...>= 2; n (%)	702 (18.4%)	562 (10.0%)	175.3 (12.4%)	175.3 (12.4%)

Heart failure hospitalization; n (%)	247 (6.5%)	164 (2.9%)	54.8 (3.9%)	54.8 (3.9%)
ED visit; n (%)	1,601 (41.9%)	2,012 (35.9%)	518.1 (36.7%)	518.1 (36.7%)
Acute MI; n (%)	90 (2.4%)	97 (1.7%)	28.6 (2.0%)	28.6 (2.0%)
Old MI; n (%)	169 (4.4%)	212 (3.8%)	60.2 (4.3%)	60.2 (4.3%)
Heart failure; n (%)	704 (18.4%)	665 (11.9%)	194.8 (13.8%)	194.8 (13.8%)
Acute heart failure; n (%)	192 (5.0%)	149 (2.7%)	47.1 (3.3%)	47.1 (3.3%)
Microalbuminuria or proteinuria; n (%)	190 (5.0%)	208 (3.7%)	62.1 (4.4%)	62.1 (4.4%)
Ratio of brand to generic medications ...mean (sd)	1.02 (0.04)	1.02 (0.04)	1.02 (0.04)	1.02 (0.04)
...CED				
...2022	1,611 (42.1%)	940 (16.8%)	399.6 (28.3%)	399.6 (28.3%)
...2023	2,214 (57.9%)	4,669 (83.2%)	1,013.9 (71.7%)	1,013.9 (71.7%)

Variable Name	Algorithm Sources
Age	
Gender	
Race	
Region	If region not available, from State, <a href="https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf">https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf</a>
Smoking / Tobacco use	<a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcoder_mpl2p_wp015">Investigator review of codes based on: https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcoder_mpl2p_wp015</a> , <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcoder_sir_wp002">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcoder_sir_wp002</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/34953068/">https://pubmed.ncbi.nlm.nih.gov/34953068/</a> , <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9154288/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9154288/</a> , <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3721171/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3721171/</a>
Underweight	<a href="https://pubmed.ncbi.nlm.nih.gov/34338404/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34338404/</a>
Normal weight, if BMI is 20.0-24.9	<a href="https://pubmed.ncbi.nlm.nih.gov/34338404/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34338404/</a>
Overweight, if BMI is 25.0 to 29.9	<a href="https://pubmed.ncbi.nlm.nih.gov/34338404/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34338404/</a>
Class 1 (low-risk) obesity, if BMI is 30.0 to 34.9	<a href="https://pubmed.ncbi.nlm.nih.gov/34338404/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34338404/</a>
Class 2 (moderate-risk) obesity, if BMI is 35.0 to 39.9	<a href="https://pubmed.ncbi.nlm.nih.gov/34338404/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34338404/</a>
Class 3 (high-risk) obesity if BMI is equal to or greater than 40	<a href="https://pubmed.ncbi.nlm.nih.gov/34338404/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34338404/</a>
Unspecified obesity	<a href="https://pubmed.ncbi.nlm.nih.gov/34338404/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34338404/</a>
Diabetic retinopathy	<a href="https://pubmed.ncbi.nlm.nih.gov/34953068/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34953068/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">https://pubmed.ncbi.nlm.nih.gov/35043165/</a>
Diabetic neuropathy	<a href="https://pubmed.ncbi.nlm.nih.gov/34953068/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34953068/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">https://pubmed.ncbi.nlm.nih.gov/35043165/</a>
Diabetic nephropathy	<a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/35043165/</a>
Diabetes with other ophthalmic complications	<a href="https://pubmed.ncbi.nlm.nih.gov/34953068/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34953068/</a> , ICD9 to ICD10 conversion <a href="https://www.ncbi.nlm.nih.gov/books/NBK368403/table/sb203.t5/">Investigator review of codes based on: https://www.ncbi.nlm.nih.gov/books/NBK368403/table/sb203.t5/</a> , <a href="https://www.health.mil/Reference-Center/Publications/2016/03/01/Diabetes-Mellitus">https://www.health.mil/Reference-Center/Publications/2016/03/01/Diabetes-Mellitus</a> , <a href="http://www.icd9data.com/2014/Volume1/240-279/249-259/250/default.htm">http://www.icd9data.com/2014/Volume1/240-279/249-259/250/default.htm</a> , <a href="https://www.icd10data.com/ICD10CM/Codes/E00-E89/E08-E13/E11-">https://www.icd10data.com/ICD10CM/Codes/E00-E89/E08-E13/E11-</a>
Diabetes with peripheral circulatory disorders	
Diabetic foot	<a href="https://pubmed.ncbi.nlm.nih.gov/36102675/">Investigator review of codes based on: (modified codes) https://pubmed.ncbi.nlm.nih.gov/36102675/</a> <a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">Investigator review of codes based on: the paper then used ICD9/ICD10 website to expand it, https://www.icd10data.com/ICD10CM/Codes/N00-N99/N40-N53/N52-</a> , <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4857901/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4857901/</a>
Erectile dysfunction	<a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4857901/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4857901/</a>
Hypoglycemia	<a href="https://pubmed.ncbi.nlm.nih.gov/34953068/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34953068/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">https://pubmed.ncbi.nlm.nih.gov/35043165/</a> <a href="https://pubmed.ncbi.nlm.nih.gov/34953068/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34953068/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">https://pubmed.ncbi.nlm.nih.gov/35043165/</a> <a href="https://pubmed.ncbi.nlm.nih.gov/34953068/">Hyperglycemia: https://pubmed.ncbi.nlm.nih.gov/34953068/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">https://pubmed.ncbi.nlm.nih.gov/35043165/</a> <a href="https://pubmed.ncbi.nlm.nih.gov/29773640/">DKA: https://pubmed.ncbi.nlm.nih.gov/29773640/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/38262528/">https://pubmed.ncbi.nlm.nih.gov/38262528/</a> <a href="https://dam.assets.ohio.gov/image/upload/medicaid.ohio.gov/Providers/PaymentInnovation/DEF/DKA.pdf">HONK: https://dam.assets.ohio.gov/image/upload/medicaid.ohio.gov/Providers/PaymentInnovation/DEF/DKA.pdf</a>
Hyperglycemia/DKA/HONK	<a href="https://pubmed.ncbi.nlm.nih.gov/34953068/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34953068/</a> , ICD9 to ICD10 conversion
Skin infections	<a href="https://pubmed.ncbi.nlm.nih.gov/34953068/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/34953068/</a> , ICD9 to ICD10 conversion
Stable angina	<a href="https://pubmed.ncbi.nlm.nih.gov/19337843/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/19337843/</a> , <a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC9172873/">https://pmc.ncbi.nlm.nih.gov/articles/PMC9172873/</a>

Unstable angina	Investigator review of codes based on: <a href="https://pubmed.ncbi.nlm.nih.gov/19337843/">https://pubmed.ncbi.nlm.nih.gov/19337843/</a> , <a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC9172873/">https://pmc.ncbi.nlm.nih.gov/articles/PMC9172873/</a>
Hypertension	Investigator review of codes based on: <a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">https://pubmed.ncbi.nlm.nih.gov/35043165/</a> , <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8929186/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8929186/</a>
Hypotension	Investigator review of codes based on: <a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC8064679/">https://pmc.ncbi.nlm.nih.gov/articles/PMC8064679/</a>
Hyperlipidemia	Investigator review of codes based on: <a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">https://pubmed.ncbi.nlm.nih.gov/35043165/</a> , <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002</a> , <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_mpl2p_wp015">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_mpl2p_wp015</a>
Atrial fibrillation	<a href="https://pubmed.ncbi.nlm.nih.gov/31933524/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/31933524/</a>
Acute myocardial infarction	<a href="https://pubmed.ncbi.nlm.nih.gov/24682186/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/24682186/</a>
Old myocardial infarction	<a href="https://pubmed.ncbi.nlm.nih.gov/24682186/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/24682186/</a>
Cardiac conduction disorder	Investigator review of codes based on: <a href="https://stacks.cdc.gov/view/cdc/31381/cdc_31381_DS8.pdf">https://stacks.cdc.gov/view/cdc/31381/cdc_31381_DS8.pdf</a> , <a href="https://www.health.ny.gov/health_care/medicaid/redesign/dsrp/vbp_library/docs/arrblk.pdf">https://www.health.ny.gov/health_care/medicaid/redesign/dsrp/vbp_library/docs/arrblk.pdf</a> , <a href="https://www.cdc.gov/dhdsp/maps/atlas/data-sources.html">https://www.cdc.gov/dhdsp/maps/atlas/data-sources.html</a> , <a href="https://www.cms.gov/medicare/coding/icd10/downloads/icd10clinicalconceptscardiology1.pdf">https://www.cms.gov/medicare/coding/icd10/downloads/icd10clinicalconceptscardiology1.pdf</a> , ICD9 to ICD10 conversion
Previous cardiac procedure (CABG, PTCA, Stent)	Modified codes based on eligibility criteria, here we implement any care setting, any diagnosis position
Ischemic stroke	Modified codes based on eligibility criteria, here we implement any care setting, any diagnosis position
PVD diagnosis or surgery	<a href="https://www.icd10data.com/">Investigator review of codes, https://www.icd10data.com/</a>
Other cardiac dysrhythmia	Investigator review of codes based on: <a href="https://stacks.cdc.gov/view/cdc/31381/cdc_31381_DS8.pdf">https://stacks.cdc.gov/view/cdc/31381/cdc_31381_DS8.pdf</a> , <a href="https://www.health.ny.gov/health_care/medicaid/redesign/dsrp/vbp_library/docs/arrblk.pdf">https://www.health.ny.gov/health_care/medicaid/redesign/dsrp/vbp_library/docs/arrblk.pdf</a> , <a href="https://www.cdc.gov/dhdsp/maps/atlas/data-sources.html">https://www.cdc.gov/dhdsp/maps/atlas/data-sources.html</a> , <a href="https://www.cms.gov/medicare/coding/icd10/downloads/icd10clinicalconceptscardiology1.pdf">https://www.cms.gov/medicare/coding/icd10/downloads/icd10clinicalconceptscardiology1.pdf</a> , ICD9 to ICD10 conversion
Heart failure	Investigator review of codes
Acute heart failure	Investigator review of codes
Microalbuminuria/proteinuria	Modified codes based on inclusion criteria, here we implement any care setting, any diagnosis position <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_mpl2p_wp015">Investigator review of codes based on: https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_mpl2p_wp015</a>
Cardiomyopathy	Investigator review of codes based on: <a href="https://stacks.cdc.gov/view/cdc/31381/cdc_31381_DS8.pdf">https://stacks.cdc.gov/view/cdc/31381/cdc_31381_DS8.pdf</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/38440888/">https://pubmed.ncbi.nlm.nih.gov/38440888/</a> , <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8751938/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8751938/</a> , <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_mpl2p_wp015">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_mpl2p_wp015</a> , <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=cder_mpl2p_wp009">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=cder_mpl2p_wp009</a>
Valve disorders	Modified codes based on eligibility criteria, here we implement any care setting, any diagnosis position
Valve replacement	Modified codes based on eligibility criteria, here we implement any care setting, any diagnosis position
TIA	<a href="https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleid=52993&amp;ver=45&amp;">Investigator review of codes based on: https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleid=52993&amp;ver=45&amp;</a>
Edema	<a href="https://www.sciencedirect.com/science/article/pii/S2666572723000251">Investigator review of codes based on: https://www.sciencedirect.com/science/article/pii/S2666572723000251</a>
Venous thromboembolism/ pulmonary embolism	

Pulmonary hypertension	Investigator review of codes
Implantable cardioverter defibrillator	Modified codes based on eligibility criteria, here we implement any care setting, any diagnosis position
Hyperkalemia	<a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC4399109/">https://pmc.ncbi.nlm.nih.gov/articles/PMC4399109/</a>
Coronary atherosclerosis	<a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC10251803/">Investigator review of codes based on: https://pmc.ncbi.nlm.nih.gov/articles/PMC10251803/</a>
Cerebrovascular procedure	<a href="https://www.icd10data.com/">Investigator review of codes. https://www.icd10data.com/</a>
Insertion of pacemakers / removal of cardiac lead	Modified codes based on eligibility criteria, here we implement any care setting, any diagnosis position
CKD stage 1-2	<a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/35043165/</a>
CKD stage 3-4	<a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC2978782/">Investigator review of codes based on: https://pmc.ncbi.nlm.nih.gov/articles/PMC2978782/</a>
Unspecified CKD	<a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC5888226/">Investigator review of codes based on: https://pmc.ncbi.nlm.nih.gov/articles/PMC5888226/</a>
Acute kidney injury	<a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8929186/">Investigator review of codes based on: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8929186/</a>
	Investigator review of codes based on: <a href="https://nccd.cdc.gov/ckd/Methods.aspx?Qnum=Q637">https://nccd.cdc.gov/ckd/Methods.aspx?Qnum=Q637</a> , <a href="https://www.kidneymedicinejournal.org/cms/10.1016/j.xkme.2022.100414/attachment/5e29ab67-7a7d-4621-9af3-81bd071bbc67/mmc1.pdf">https://www.kidneymedicinejournal.org/cms/10.1016/j.xkme.2022.100414/attachment/5e29ab67-7a7d-4621-9af3-81bd071bbc67/mmc1.pdf</a> , <a href="https://www.icd10data.com/ICD10CM/Codes/I00-I99">https://www.icd10data.com/ICD10CM/Codes/I00-I99</a>
Hypertensive nephropathy	
Urinary tract infections	<a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC7558992/#app1-antibiotics-09-00536">Investigator reviewed code based on: https://pmc.ncbi.nlm.nih.gov/articles/PMC7558992/#app1-antibiotics-09-00536</a>
Genital infections	<a href="https://pubmed.ncbi.nlm.nih.gov/30207042/">Investigator reviewed codes based on: https://pubmed.ncbi.nlm.nih.gov/30207042/</a>
Urolithiasis (kidney or urinary stones)	<a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC7793999/">Investigator review of codes based on: https://pmc.ncbi.nlm.nih.gov/articles/PMC7793999/</a>
COPD	<a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10203971/">Investigator review of codes based on: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10203971/</a> <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10203971/">Investigator review of codes based on: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10203971/</a> , modified CCW algorithm (any care setting, any diagnosis position)
Asthma	Investigator review of codes based on: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8636332/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8636332/</a> , <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7927325/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7927325/</a>
Obstructive sleep apnea	<a href="https://pubmed.ncbi.nlm.nih.gov/29921683/">https://pubmed.ncbi.nlm.nih.gov/29921683/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/17346615/">https://pubmed.ncbi.nlm.nih.gov/17346615/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/23335588/">https://pubmed.ncbi.nlm.nih.gov/23335588/</a>
Serious bacterial infections	<a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10203971/">Investigator review of codes based on: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10203971/</a>
Pneumonia	<a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002_">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002_</a> <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_mpl2p_wp015_">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_mpl2p_wp015_</a> Modified algorithmt from <a href="https://pubmed.ncbi.nlm.nih.gov/34256144/">https://pubmed.ncbi.nlm.nih.gov/34256144/</a> , Modified CCW algorithm
Liver disease	
MASH/MASLD	<a href="https://pubmed.ncbi.nlm.nih.gov/32300995/">Investigator review of codes: https://pubmed.ncbi.nlm.nih.gov/32300995/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/39316292/">https://pubmed.ncbi.nlm.nih.gov/39316292/</a>
	<a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_mpl2p_wp015_">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_mpl2p_wp015_</a> , <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=cder_mpl2p_wp009_">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=cder_mpl2p_wp009_</a> , <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_mpl2p_wp015_">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_mpl2p_wp015_</a> , <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=cder_mpl2p_wp010_">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=cder_mpl2p_wp010_</a> <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8202643/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8202643/</a> , <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002_">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002_</a> , CCW Algorithms
Fractures / Falls	
Osteoporosis	Modified CCW algorithm
Osteoarthritis	

Depression	<a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">https://pubmed.ncbi.nlm.nih.gov/35043165/</a> , <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcdcr_mpl2p_wp015">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcdcr_mpl2p_wp015</a>
Dementia	<a href="https://pubmed.ncbi.nlm.nih.gov/28485014/">https://pubmed.ncbi.nlm.nih.gov/28485014/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">https://pubmed.ncbi.nlm.nih.gov/35043165/</a>
Delirium or psychosis	<a href="https://pubmed.ncbi.nlm.nih.gov/28485014/">https://pubmed.ncbi.nlm.nih.gov/28485014/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">https://pubmed.ncbi.nlm.nih.gov/35043165/</a>
Anxiety	<a href="https://pubmed.ncbi.nlm.nih.gov/35043165/">https://pubmed.ncbi.nlm.nih.gov/35043165/</a>
Sleep disorder	Investigator review of codes based on <a href="https://www.verywellhealth.com/sleeping-disorders-list-and-diagnostic-codes-3014779">https://www.verywellhealth.com/sleeping-disorders-list-and-diagnostic-codes-3014779</a>
Anemia	Modified codes based on eligibility criteria, here we implement any care setting, any diagnosis position
Influenza	Investigator review of codes based on: <a href="https://pubmed.ncbi.nlm.nih.gov/38556924/">https://pubmed.ncbi.nlm.nih.gov/38556924/</a>
COVID-19	<a href="https://pubmed.ncbi.nlm.nih.gov/34913208/">https://pubmed.ncbi.nlm.nih.gov/34913208/</a> , <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8427377/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8427377/</a>
Hyperthyroidism and other thyroid gland disorders	<a href="https://www.cms.gov/icd10m/version37-fullcode-cms/fullcode_cms/P0244.html">Investigator review of codes based on: https://www.cms.gov/icd10m/version37-fullcode-cms/fullcode_cms/P0244.html</a>
Hypothyroidism	<a href="https://pubmed.ncbi.nlm.nih.gov/articles/PMC10478599/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/articles/PMC10478599/</a> Investigator review of codes based on: <a href="https://nccd.cdc.gov/ckd/Methods.aspx?Qnum=Q637">https://nccd.cdc.gov/ckd/Methods.aspx?Qnum=Q637</a> , <a href="https://www.cms.gov/icd10m/FY2024-nprmversion41.0-fullcode-cms/fullcode_cms/P2401.html">https://www.cms.gov/icd10m/FY2024-nprmversion41.0-fullcode-cms/fullcode_cms/P2401.html</a>
Nephrotic syndrome	<a href="https://pubmed.ncbi.nlm.nih.gov/38527324/">Investigator review of codes based on: https://pubmed.ncbi.nlm.nih.gov/38527324/</a>
Urinary incontinence	Investigator review of codes based on: <a href="https://pubmed.ncbi.nlm.nih.gov/37796527/">https://pubmed.ncbi.nlm.nih.gov/37796527/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/35851329/">https://pubmed.ncbi.nlm.nih.gov/35851329/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/articles/PMC3985913/">https://pubmed.ncbi.nlm.nih.gov/articles/PMC3985913/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/38503905/">https://pubmed.ncbi.nlm.nih.gov/38503905/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/35513234/">https://pubmed.ncbi.nlm.nih.gov/35513234/</a>
Biliary disease	Investigator review of codes: <a href="https://pubmed.ncbi.nlm.nih.gov/36222554/">https://pubmed.ncbi.nlm.nih.gov/36222554/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/30287807/">https://pubmed.ncbi.nlm.nih.gov/30287807/</a> ,
Pancreatitis	<a href="https://pubmed.ncbi.nlm.nih.gov/22262606/">https://pubmed.ncbi.nlm.nih.gov/22262606/</a> Investigator review of codes based on: <a href="https://pubmed.ncbi.nlm.nih.gov/36798959/">https://pubmed.ncbi.nlm.nih.gov/36798959/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/28438588/">https://pubmed.ncbi.nlm.nih.gov/28438588/</a> ,
Bowel obstruction	<a href="https://pubmed.ncbi.nlm.nih.gov/31095068/">https://pubmed.ncbi.nlm.nih.gov/31095068/</a>
Gastroparesis	<a href="https://pubmed.ncbi.nlm.nih.gov/34624355/">Investigator review of codes: https://pubmed.ncbi.nlm.nih.gov/34624355/</a>
Number of antidiabetic drugs on CED	Investigator review of codes
Concomitant use or initiation of metformin	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK518983/">https://www.ncbi.nlm.nih.gov/books/NBK518983/</a>
Concomitant use or initiation of insulin	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK278938/">https://www.ncbi.nlm.nih.gov/books/NBK278938/</a>
Concomitant use or initiation of sulfonylureas	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK513225/">https://www.ncbi.nlm.nih.gov/books/NBK513225/</a>
Concomitant use or initiation of DPP4i except sitagliptin	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK542331/">https://www.ncbi.nlm.nih.gov/books/NBK542331/</a>
Concomitant use or initiation of SGLT2i	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK576405/">https://www.ncbi.nlm.nih.gov/books/NBK576405/</a> Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK551656/">https://www.ncbi.nlm.nih.gov/books/NBK551656/</a> ,
Concomitant use or initiation of other glucose-lowering drugs	<a href="https://pubmed.ncbi.nlm.nih.gov/articles/PMC4882495/">https://pubmed.ncbi.nlm.nih.gov/articles/PMC4882495/</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK557848/">https://www.ncbi.nlm.nih.gov/books/NBK557848/</a>
Past use of metformin	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK518983/">https://www.ncbi.nlm.nih.gov/books/NBK518983/</a>
Past use of insulin	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK278938/">https://www.ncbi.nlm.nih.gov/books/NBK278938/</a>
Past use of sulfonylureas	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK513225/">https://www.ncbi.nlm.nih.gov/books/NBK513225/</a>
Past use of DPP4i except sitagliptin	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK542331/">https://www.ncbi.nlm.nih.gov/books/NBK542331/</a>
Past use of SGLT2i	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK576405/">https://www.ncbi.nlm.nih.gov/books/NBK576405/</a> Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK551656/">https://www.ncbi.nlm.nih.gov/books/NBK551656/</a> ,
Past use of other glucose-lowering drugs	<a href="https://pubmed.ncbi.nlm.nih.gov/articles/PMC4882495/">https://pubmed.ncbi.nlm.nih.gov/articles/PMC4882495/</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK557848/">https://www.ncbi.nlm.nih.gov/books/NBK557848/</a>
ACEi / ARB	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/">https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/</a>

ARNI	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK507904/">https://www.ncbi.nlm.nih.gov/books/NBK507904/</a>
Thiazides	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/">https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/</a>
Beta-Blockers	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/">https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/</a>
Calcium channel blockers	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/">https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/</a>
Digoxin / Digitoxin	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK556025/">https://www.ncbi.nlm.nih.gov/books/NBK556025/</a> , <a href="https://pubchem.ncbi.nlm.nih.gov/compound/441207">https://pubchem.ncbi.nlm.nih.gov/compound/441207</a>
Loop diuretics	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/">https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/</a>
Other diuretics	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/">https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/</a>
Intravenous diuretics	Investigator review of codes
Nitrates	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/">https://www.ncbi.nlm.nih.gov/books/NBK9626/table/A66/</a>
Anti-arrhythmics	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK482322/">https://www.ncbi.nlm.nih.gov/books/NBK482322/</a> (using class I and class II as class 2 is beta blockers and class 4 is calcium channel blockers) <a href="https://www.drugs.com">Investigator review of codes, https://www.drugs.com</a> , <a href="https://www.heart.org/en/health-topics/cholesterol/prevention-and-treatment-of-high-cholesterol-hyperlipidemia/cholesterol-medications">https://www.heart.org/en/health-topics/cholesterol/prevention-and-treatment-of-high-cholesterol-hyperlipidemia/cholesterol-medications</a> <a href="https://www.drugs.com">Investigator review of codes, https://www.drugs.com</a> , <a href="https://www.heart.org/en/health-topics/cholesterol/prevention-and-treatment-of-high-cholesterol-hyperlipidemia/cholesterol-medications">https://www.heart.org/en/health-topics/cholesterol/prevention-and-treatment-of-high-cholesterol-hyperlipidemia/cholesterol-medications</a>
Statins	<a href="https://www.drugs.com">Investigator review of codes, https://www.drugs.com</a> , <a href="https://www.heart.org/en/health-topics/cholesterol/prevention-and-treatment-of-high-cholesterol-hyperlipidemia/cholesterol-medications">https://www.heart.org/en/health-topics/cholesterol/prevention-and-treatment-of-high-cholesterol-hyperlipidemia/cholesterol-medications</a>
PCSK9 inhibitors and other lipid-lowering drugs	<a href="https://www.drugs.com">Investigator review of codes, https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK537062/">https://www.ncbi.nlm.nih.gov/books/NBK537062/</a>
Antiplatelet agents	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ahajournals.org/doi/full/10.1161/JAHA.120.017559">https://www.ahajournals.org/doi/full/10.1161/JAHA.120.017559</a>
Oral anticoagulants	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.copdfoundation.org/Learn-More/I-am-a-Person-with-COPD/Treatments-Medications.aspx">https://www.copdfoundation.org/Learn-More/I-am-a-Person-with-COPD/Treatments-Medications.aspx</a> , <a href="https://getasthmahelp.org/medications-list.aspx">https://getasthmahelp.org/medications-list.aspx</a>
COPD/Asthma medication	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK547742/">https://www.ncbi.nlm.nih.gov/books/NBK547742/</a>
NSAIDs	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.aaaai.org/tools-for-the-public/drug-guide/oral-corticosteroid-medications">https://www.aaaai.org/tools-for-the-public/drug-guide/oral-corticosteroid-medications</a>
Oral corticosteroids	Investigator review of codes based on: <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK470248/">https://www.ncbi.nlm.nih.gov/books/NBK470248/</a>
Osteoporosis agents (incl. bisphosphonates)	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/31643200/#:~:text=They%20can%20also%20be%20informally,%2C%20codeine%2C%20oxycodone%2C%20hydrocodone%2C">https://pubmed.ncbi.nlm.nih.gov/31643200/#:~:text=They%20can%20also%20be%20informally,%2C%20codeine%2C%20oxycodone%2C%20hydrocodone%2C</a>
Opioids	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK538182/">https://www.ncbi.nlm.nih.gov/books/NBK538182/</a>
Anti-depressants	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a>
Antipsychotics	<a href="https://www.drugs.com">Investigator review of codes, https://www.drugs.com</a> <a href="https://www.drugs.com">Investigator review of codes, https://www.drugs.com</a> , <a href="https://www.dea.gov/sites/default/files/2020-06/Benzodiazepenes-2020.pdf">https://www.dea.gov/sites/default/files/2020-06/Benzodiazepenes-2020.pdf</a> , <a href="https://www.ncbi.nlm.nih.gov/books/NBK470159/">https://www.ncbi.nlm.nih.gov/books/NBK470159/</a> , <a href="https://www.drugs.com">https://www.drugs.com</a>
Anxiolytics/hypnotics, benzodiazepines	Investigator review of codes based on: <a href="https://www.drugs.com">https://www.drugs.com</a> , <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7462122/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7462122/</a> , <a href="https://go.drugbank.com/drugs/DB00382">https://go.drugbank.com/drugs/DB00382</a> <a href="https://pubmed.ncbi.nlm.nih.gov/35790044/">https://pubmed.ncbi.nlm.nih.gov/35790044/</a>
Medication for dementia	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a>
Urinary tract infections antibiotics	
Laxatives	
Number of distinct medications, median (iqr), mean (sd)	N/A <a href="https://www.cms.gov/files/document/mm13473-how-use-office-and-outpatient-evaluation-and-management-visit-complexity-add-code-g2211.pdf">https://www.cms.gov/files/document/mm13473-how-use-office-and-outpatient-evaluation-and-management-visit-complexity-add-code-g2211.pdf</a> , <a href="https://www.cms.gov/files/document/physician-fee-schedule-pfs-payment-officeoutpatient-evaluation-and-management-em-visits-fact-sheet.pdf">https://www.cms.gov/files/document/physician-fee-schedule-pfs-payment-officeoutpatient-evaluation-and-management-em-visits-fact-sheet.pdf</a>
Number of office visits median (iqr), mean (sd)	

Number of endocrinologist visits, median (iqr), mean (sd)	Data dictionary of Optum, Marketscan and <a href="https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/MedicareProviderSupEnroll/downloads/taxonomy.pdf">https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/MedicareProviderSupEnroll/downloads/taxonomy.pdf</a> , <a href="https://www.cms.gov/medicare/provider-enrollment-and-certification/medicareprovidersupenroll/downloads/taxonomycrosswalk.pdf">https://www.cms.gov/medicare/provider-enrollment-and-certification/medicareprovidersupenroll/downloads/taxonomycrosswalk.pdf</a>
Number of cardiologist visits, median (iqr), mean (sd)	Data dictionary of Optum, Marketscan and <a href="https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/MedicareProviderSupEnroll/downloads/taxonomy.pdf">https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/MedicareProviderSupEnroll/downloads/taxonomy.pdf</a> , <a href="https://www.cms.gov/medicare/provider-enrollment-and-certification/medicareprovidersupenroll/downloads/taxonomycrosswalk.pdf">https://www.cms.gov/medicare/provider-enrollment-and-certification/medicareprovidersupenroll/downloads/taxonomycrosswalk.pdf</a>
Number of internal medicine/family medicine visits, median (iqr), mean (sd)	Data dictionary of Optum, Marketscan and <a href="https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/MedicareProviderSupEnroll/downloads/taxonomy.pdf">https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/MedicareProviderSupEnroll/downloads/taxonomy.pdf</a> , <a href="https://www.cms.gov/medicare/provider-enrollment-and-certification/medicareprovidersupenroll/downloads/taxonomycrosswalk.pdf">https://www.cms.gov/medicare/provider-enrollment-and-certification/medicareprovidersupenroll/downloads/taxonomycrosswalk.pdf</a>
Number of electrocardiograms, median (iqr), mean (sd)	<a href="https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=57326">https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=57326</a> , <a href="https://firstcoastbillinggroup.com/ekg-billing-and-reimbursement/">https://firstcoastbillinggroup.com/ekg-billing-and-reimbursement/</a> , <a href="https://www.aapc.com/codes/coding-newsletters/my-cardiology-coding-alert/cpt-answer-5-common-ecg-coding-questions-175952-article">https://www.aapc.com/codes/coding-newsletters/my-cardiology-coding-alert/cpt-answer-5-common-ecg-coding-questions-175952-article</a> <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8511132/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8511132/</a> , <a href="https://pubmed.ncbi.nlm.nih.gov/34778785/">https://pubmed.ncbi.nlm.nih.gov/34778785/</a> , <a href="https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=56625&amp;ver=27&amp;">https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=56625&amp;ver=27&amp;</a> , <a href="https://www.medicalbillgurus.com/echocardiogram-cpt-code/">https://www.medicalbillgurus.com/echocardiogram-cpt-code/</a>
Number of echocardiograms, median (iqr), mean (sd)	N/A
Pharmacy out-of-pocket cost, median (iqr), mean (sd)	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a>
Unique brand medications	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a>
Unique generic medications	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a>
Ratio of unique brand to generic medications	Investigator review of codes, <a href="https://www.drugs.com">https://www.drugs.com</a>
Colonoscopy/ Sigmoidoscopy	<a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002</a>
Flu vaccine / Pneumococcal vaccine	<a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002</a> , <a href="https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=54767&amp;DocID=A54767">https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=54767&amp;DocID=A54767</a> , <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002</a> , <a href="https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=54767&amp;DocID=A54767">https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=54767&amp;DocID=A54767</a> , <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002</a> , <a href="http://www.icd9data.com/2012/Volume1/V01-V91/V70-V82/V72/default.htm">http://www.icd9data.com/2012/Volume1/V01-V91/V70-V82/V72/default.htm</a> , <a href="http://www.icd9data.com/2012/Volume1/V01-V91/V70-V82/V76/default.htm">http://www.icd9data.com/2012/Volume1/V01-V91/V70-V82/V76/default.htm</a>
Pap smear test	
PSA test	<a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002</a>
Fecal occult blood test	Investigator review of codes
Bone mineral density tests	N/A
Mammograms	Investigator review of codes based on: <a href="https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002">https://dev.sentinelssystem.org/projects/AP/repos/sentinel-analytic-packages/browse?at=refs%2Fheads%2Fcder_sir_wp002</a> , <a href="https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=56448&amp;ver=16&amp;bc=0">https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=56448&amp;ver=16&amp;bc=0</a> , <a href="http://www.icd9data.com/2012/Volume1/V01-V91/V70-V82/V76/default.htm">http://www.icd9data.com/2012/Volume1/V01-V91/V70-V82/V76/default.htm</a>



	Investigator review of codes based on: <a href="https://pubmed.ncbi.nlm.nih.gov/33151319/">https://pubmed.ncbi.nlm.nih.gov/33151319/</a> , <a href="https://www.cms.gov/newsroom/fact-sheets/medicare-telemedicine-health-care-provider-fact-sheet">https://www.cms.gov/newsroom/fact-sheets/medicare-telemedicine-health-care-provider-fact-sheet</a> , <a href="https://www.aafp.org/family-physician/practice-and-career/getting-paid/coding/coding-telehealth-audio-virtual-digital-visits.html">https://www.aafp.org/family-physician/practice-and-career/getting-paid/coding/coding-telehealth-audio-virtual-digital-visits.html</a>
Telemedicine	
Number of HbA1c tests, median (iqr), mean (sd)	<a href="https://pubmed.ncbi.nlm.nih.gov/34953068/">https://pubmed.ncbi.nlm.nih.gov/34953068/</a>
Number of lipid panels, median (iqr), mean (sd)	<a href="https://pubmed.ncbi.nlm.nih.gov/34953068/">https://pubmed.ncbi.nlm.nih.gov/34953068/</a>
Number of creatinine tests, median (iqr), mean (sd)	<a href="https://pubmed.ncbi.nlm.nih.gov/34953068/">https://pubmed.ncbi.nlm.nih.gov/34953068/</a>
Number of natriuretic peptide tests, median (iqr), mean (sd)	Investigator review of codes
Number of urine tests, median (iqr), mean (sd)	Investigator review of codes
HbA1c	N/A
Glucose	N/A
Creatinine	N/A
Systolic blood pressure	N/A
Heart rate	N/A
BMI	N/A
eGFR	N/A
LDL	N/A
HDL	N/A
Total cholesterol	N/A
Triglycerides	N/A
	<a href="#">A combined comorbidity score predicted mortality in elderly patients better than existing scores.</a>
Combined comorbidity score	<a href="https://pubmed.ncbi.nlm.nih.gov/21208778/">https://pubmed.ncbi.nlm.nih.gov/21208778/</a> <a href="#">Measuring Frailty in Medicare Data: Development and Validation of a Claims-Based Frailty Index.</a> <a href="https://pubmed.ncbi.nlm.nih.gov/29244057/">https://pubmed.ncbi.nlm.nih.gov/29244057/</a>
Frailty score	
Number of any hospitalization, median (iqr), mean (sd)	N/A
Any hospitalization within prior 90 days; n (%)	N/A
Any hospitalization within prior 91-365 days; n (%)	N/A
0, 1, >1 hospitalizations (any)	N/A
Hospitalization for heart failure; n (%)	N/A
	Different in all 3 databases and measure already created in all 3 as well;
	ED visit (Medicare): Revenue center codes: 0450, 0451, 0452, 0456, 0459, 0981; Place of service: 23
	ED visit (Optum): Place of service: 23
	ED visit (Marketscan): Service sub-category codes: 10120, 10220, 10320, 10420, 10520, 12220, 20120, 20220, 21120, 21220,
Number of emergency department visit median (iqr), mean (sd)	22120, 22320, 30120, 30220, 30320, 30420, 30520, 30620, 31120, 31220, 31320, 31420, 31520, 31620; Place of service: 23
Calendar year	N/A