

**Mortality and Complications Outcomes
2014 Methodology**

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Introduction

To help consumers evaluate and compare hospital performance for care provided during a hospital stay for specific conditions or procedures, Healthgrades analyzed clinical outcomes data for virtually every hospital in the country. Analyses included Medicare-patient care records for nearly 4,500 short-term, acute care hospitals nationwide, assessing hospital performance relative to each of 33 common conditions and procedures (cohorts). The Healthgrades methodology uses multivariate logistic regression to risk adjust for patient demographic and clinical risk factors that influence patient outcomes in significant and systematic ways.

The purpose of risk adjustment is to obtain fair statistical comparisons of mortality and complication rates between hospitals while accounting for differences in underlying risk factors observed in the data among disparate populations or groups. Significant differences in demographic and clinical risk factors are found among patients treated in different hospitals; thus, it is necessary to make accurate and valid comparisons of clinical outcomes with a methodology using risk-adjustment techniques. Risk factors may include age, gender, specific procedure performed, and co-morbid conditions, such as hypertension and diabetes.

Individual risk models are constructed and tailored for each of the 33 conditions or procedures relative to each specific outcome. Model clinical outcomes reflect clinical-based measures of patient status during and after care (during the episode of care in a hospital stay) and include in-hospital complications, in-hospital or 30-day post-admission mortality. In cases where Medicare data does not adequately represent to population with a specific condition or procedure, such as appendectomy, Healthgrades analyzed all-payer data from 18 states.

Data Acquisition

Healthgrades used the following data sources in the analysis of hospital patient records:

- Medicare inpatient data from the Medicare Provider Analysis and Review (MedPAR) database purchased from the Centers for Medicare and Medicaid Services (CMS) for years 2010 through 2012. The MedPAR data was selected for several reasons:
 - Almost every hospital in the country is included in the database, with the exception of military and Veterans Administration hospitals.
 - Accuracy is regulated. Hospitals are required by law to submit complete and accurate information with substantial penalties for those that report inaccurate or incomplete data.
 - The Medicare population represents a majority of the patients for virtually all of the clinical categories studied.
- Inpatient data for the appendectomy cohort was provided by 18 states that provide all-payer state data (AZ, CA, CO, FL, IA, MA, MD, NJ, NV, NY, OR, PA, RI, TX, UT, VA, WA, and WI) for years 2009 through 2011 (one year behind MedPAR data years 2010-2012). Since the appendectomy cohort includes very few patients older than 65 years of age, all-payer state data were used to rate hospitals in those states where state data were available. Consequently, appendectomy is based exclusively on state data from years 2009 through 2011.

Healthgrades conducted a series of data quality checks to preserve the integrity of the analyses. Based on the applied integrity checks, a range of 0.12% to 15.2% of patient records were excluded from the 2010-2012 analysis, depending on the cohort. Patient records were identified for exclusion because, for example, they were determined to be miscoded or were otherwise inappropriate for inclusion in the data sets used for analyses.

Examples of Healthgrades standard rules used to exclude patient records are:

- Patients who left the hospital against medical advice or who were transferred to another acute care hospital.
- Patients discharged alive with a length of stay that is inconsistent with the reason for admission (e.g., a patient discharged alive with a one-day length of stay for valve surgery would be excluded because this procedure requires several days for recovery).
- Patients who were still in the hospital when the Medicare claim was filed.
- Patients with an invalid gender (e.g., a prostatectomy related to a female patient).
- Patients who have had any organ transplant.
- Patients in medical cohorts who were discharged to hospice.*
- Patients in medical cohorts with metastatic cancers.*

* Medical cohorts include non-surgical cohorts: bowel obstruction, chronic obstructive pulmonary disease, diabetic emergencies, gastrointestinal bleed, heart attack, heart failure, hip fracture treatment, pancreatitis, pneumonia, pulmonary embolism, respiratory failure, sepsis, and stroke.

Cohort Definitions and Outcomes

Healthgrades analyzed clinical outcomes (mortality and complications) for each of 33 condition or procedure cohorts. For each, a list of specific procedures and diagnoses that define the cohort as well as a list of exclusions representing rare and/or clinically complex diagnoses and procedures that cannot be adequately risk-adjusted were developed (*Appendix B*).

Inclusion criteria for cohort analyses required at least 30 cases across three years of data and at least five cases in the most current year per hospital. As a result, the number of hospitals that qualified ranged from a low of 663 rated for prostate removal surgery to a high of 4,281 rated for chronic obstructive pulmonary disease.

For 19 of the cohorts, clinical outcomes evaluated were in-hospital and 30-day post-admission mortality (see *Table 1*).

For 14 of the cohorts, the clinical outcome evaluated was the occurrence of one or more in-hospital complications (see table below). Clinical and coding experts define the complications for these 14 cohorts. A list of in-hospital complications by cohort can be found in *Appendix C*.

For the analyses, clinical outcomes were dichotomous:

- Complications were documented in the patient record as either present or not present.
- Mortality was documented in the patient record as either recorded as alive or deceased.

In cohorts where the clinical outcome was complications, mortality was considered a complication.

Table 1. Mortality and Complication Cohorts

Mortality Cohorts	
Bowel Obstruction	Neurosurgery
Chronic Obstructive Pulmonary Disease (COPD)	Pancreatitis
Colorectal Surgeries	Pneumonia
Coronary Artery Bypass Graft (CABG) Surgery	Pulmonary Embolism
Coronary Interventional Procedures	Respiratory Failure
Diabetic Emergencies	Sepsis
Esophageal/Stomach Surgeries	Small Intestine Surgeries
Gastrointestinal Bleed	Stroke
Heart Attack	Valve Surgery
Heart Failure	
In-Hospital Complication Cohorts	
Abdominal Aortic Aneurysm Repair	Hip Replacement
Appendectomy	Pacemaker Procedures
Back and Neck Surgery (Without Spinal Fusion)	Peripheral Vascular Bypass
Carotid Surgery	Prostate Removal Surgery
Defibrillator Procedures	Spinal Fusion
Gallbladder Removal Surgery	Total Knee Replacement
Hip Fracture Treatment	Transurethral Prostate Resection Surgery

Defining In-Hospital Complications

For some procedures and treatments, Healthgrades evaluates hospital complications—if patients experienced problems as a result of their procedure or treatment.

While complications sometimes occur during a patient's hospital stay, Healthgrades pinpoints complications that should not occur with a typical patient. Many of these complications are preventable and usually cause a prolonged hospital stay, additional and costly medical treatments, harm, and sometimes even death.

In October of 2007 (fiscal year 2008), CMS began requiring most hospitals to provide a present on admission (POA) indicator for every diagnosis submitted. This indicator is intended to distinguish hospital-acquired conditions from those present at the time the patient was admitted to the hospital.

Hospitals excluded from the POA requirement included: critical access hospital, long-term care hospitals, cancer hospitals, children's inpatient facilities, rural health clinics, inpatient rehabilitation or psychiatric hospitals, and federal healthcare facilities.

Table 2 shows the POA indicators listed in the 2012 MedPAR file layout document* and how they were used by Healthgrades in determining in-hospital complications in the current 2014 award year analyses.

Table 2. Present On Admissions Indicators

POA Indicator (Interpretation)	CMS Description*	Use by Healthgrades
Y (Yes, Present)	Present at the time of inpatient admission	Utilized in the risk-adjustment process
N (No, Not Present)	Not present at the time of inpatient admission	Used to identify in-hospital complications
U, [blank], Other (Unknown)	Documentation is insufficient to determine if condition was present on admission Unreported/not used—exempt from POA reporting	May require the co-occurrence of other codes to be a complication, see Records with No POA Indicator section below. If not considered a complication, it may be used in risk adjustment.
W (Clinically Undetermined)	Provider is unable to clinically determine whether condition was present on admission or not.	Not considered a complication nor used in risk adjustment

* MedPAR Limited Data Set – Hospital (National) File Layout. Also known as, Expanded Modified MedPAR File Layout. March 2013. Available from the Centers for Medicare and Medicaid Services. http://www.cms.gov/Research-Statistics-Data-and-Systems/Files-for-Order/LimitedDataSets/Downloads/2012_MedPAR_Version_R2K_Layout-.zip.

Records With No POA Indicator

When utilizing administrative patient records, Healthgrades identifies diagnosed conditions as either pre-existing or hospital-acquired. Only the hospital-acquired conditions are considered as in-hospital complications in our analyses.

To differentiate between pre-existing and hospital-acquired conditions when there is no POA indicator, Healthgrades uses the presence of a 900 postoperative complication code to identify a documented occurrence of a complication. For example, in the case where a patient record contains ICD 427.31 (Atrial Fibrillation), that code is considered a co-morbid risk factor if it occurs by itself and an in-hospital complication if there is an ICD 997.1 Cardiac Complications code also present in the patient record.

Healthgrades does not require the presence of a postoperative complication code for diagnoses that were clearly hospital-acquired (i.e., heart attack in an elective procedure such as total knee replacement).

Records With POA Indicators

When there is a POA indicator present, a diagnosis is only considered an in-hospital complication if the POA indicator is set to *No*. This means that the condition was not present at the time of admission and was acquired during the hospitalization episode of care. Records where the POA indicator is *Unknown* were treated as described for records that have no POA indicator.

Multivariate Logistic Regression Models

For each of the 33 cohorts, individual risk models were constructed and tailored for each condition or procedure relative to the specific clinical outcome; including, in-hospital complications, in-hospital mortality or 30-day post-admission mortality.

Healthgrades methodology uses multivariate logistic regression to adjust for patient risk factors that influence patient outcomes in significant and systematic ways. Risk factors may include age, gender, specific procedure performed, and co-morbid conditions such as hypertension, chronic renal failure, heart failure, and diabetes.

Statistically Significant Risk Factors

For each cohort, comorbid diagnoses (e.g., hypertension, chronic renal failure, anemia, and diabetes), demographic characteristics (e.g., age and gender), and specific procedures (e.g., percutaneous coronary intervention in heart bypass surgery) were classified as potential risk factors. Healthgrades used logistic regression to determine which of these potential risk factors were statistically significant in predicting the outcome measure (e.g., mortality). All risk factors that remained in the final model were statistically significant at the $p < 0.05$ level in predicting the clinical outcome.

Risk factors with an odds ratio less than 1.0 were removed from the final model. There were occasional exceptions to this rule, determined by statistical and clinical expert review. For example, risk factors that have been documented in the medical literature to be associated with lower risk of mortality or complications and risk factors that are part of the cohort definition remained in the model even if the odds ratio was less than one (e.g., pneumococcal pneumonia is one type of pneumonia that defines the pneumonia cohort).

Appendix D lists the top five risk factors for each condition or procedure that were most likely (e.g., highest odds ratio) to lead to the clinical outcome (mortality or complications). They are not necessarily those with the highest volume.

The statistical models were checked for predictive ability and finalized. All of the models were predictive of the outcome being measured, with c-statistics ranging from 0.6 to 0.9. These cohort-specific and outcome-specific models were then used to estimate the probability of the outcome for each patient in the cohort (predicted probability of mortality and complications).

Adjustment for POA Fill Rate as an Additional Model Variable

For the 2014 award year logistic regression models, POA fill rates were included as an additional independent variable for each year of data. The POA fill rate was calculated as the percent of diagnosis codes having a known POA indicator value of Yes, No or Clinically Undetermined among patients in that cohort at that hospital.

This additional risk adjustment was necessary because critical access hospitals and some Maryland hospitals are exempt from POA reporting. Thus, these hospitals had lower rates of detectable in-hospital complications and conversely, more conditions potentially factored into the acuity adjustment. Testing verified that the inclusion of POA fill rates in the logistic regression model adequately adjusted for the differing overall rates of complications between hospitals reporting POA and the exempt hospitals.

Hospital Performance

Once the regression models were developed, Healthgrades stratified hospital performance for each of the 33 conditions or procedures into three categories:

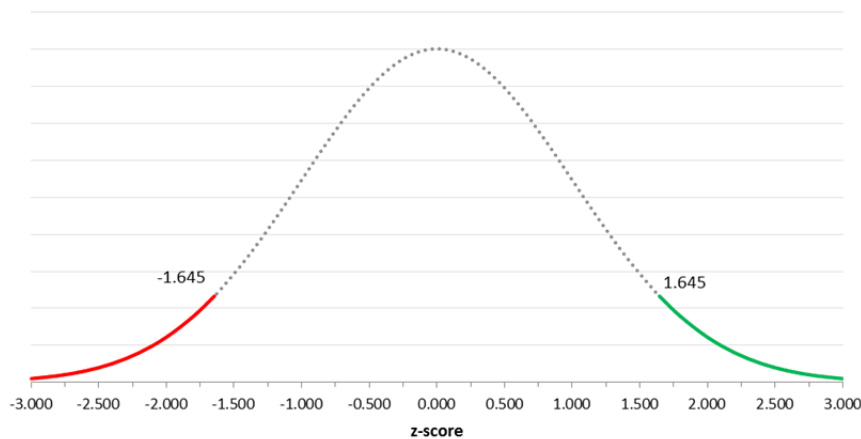
- ★★★★★ **Better Than Expected** – Actual performance was better than predicted and the difference was statistically significant.
- ★★★ **As Expected** – Actual performance was not statistically significantly different from what was predicted.
- ★ **Worse Than Expected** – Actual performance was worse than predicted and the difference was statistically significant.

Developing the Healthgrades hospital performance categories involved four steps:

1. The hospital predicted value (predicted number of deaths or complications at each hospital) was calculated by summing the individual patient record predicted values determined from logistic regression models discussed above.
2. The hospital predicted value was compared with the actual or observed value (e.g., actual number of deaths or complications at each hospital).
3. A test was conducted to determine whether the difference between the predicted and actual values was statistically significant. This test was performed to make sure that differences were very unlikely to be caused by chance alone. A z-score was used to establish an approximate 90% confidence interval.*
4. Hospital performance star-levels were determined based upon the outcome of the test for statistical significance.

*In stratifying hospital performance categories, Healthgrades establishes a 90% confidence interval for z-score distribution with cut-offs of 1.645 standard deviations above and below the mean. The 5-star hospital performance category for a specific condition or procedure includes scores more than 1.645 standard deviations better than the mean. The 1-star hospital performance category for a specific condition or procedure includes scores more than 1.645 standard deviations worse than the mean.

**Normal distribution showing
90% confidence intervals**



Limitations of the Data Models

While logistic regression models may be valuable in identifying hospitals that perform better than others for care provided during a hospital stay, one should not use this information alone to determine the quality of care provided at each hospital. The models are limited by the following factors:

- Cases may have been coded incorrectly or incompletely by the hospital.
- The models can only account for risk factors that are coded into the billing data. If a particular risk factor was not coded into the billing data, such as a patient's socioeconomic status and health behavior, then it was not accounted for with these models.
- A portion of the 2010 MedPAR inpatient data file contains only the first nine diagnoses and the first six procedure codes for an inpatient stay. For some patients, this may not be representative of the full list of codes submitted. Starting with the final release of the 2010 MedPAR file, all code positions were included. Where these fields were populated, Healthgrades has used them to define inclusion and exclusion criteria, complications, and risk factors.

Please note that hospitals grouped into the 5-star category for performance in a specific cohort do not serve as a recommendation or endorsement by Healthgrades for a particular hospital; it means that the data associated with a particular hospital has met the foregoing qualifications. Individual patients should decide, in conjunction with their doctor, whether a particular hospital is suited for their unique needs.

Also note that if more than one hospital reported to CMS under a single provider ID, Healthgrades analyzed patient outcomes data for those hospitals as a single unit. Throughout this document, therefore, "hospital" refers to one hospital or a group of hospitals reporting under a single provider ID. Some hospitals that operate as a single unit submit data under multiple provider IDs. In this case, the data from the multiple provider IDs are combined and reported under the parent hospital provider ID.

Appendix A. Patient Cohort Definitions

Appendectomy

Cohort	Inclusions	Notable Exclusions
Appendectomy First Listed Procedure Evaluated on in-hospital complication rates	<ul style="list-style-type: none"> Laparoscopic Other open procedures 	<ul style="list-style-type: none"> None

Cardiac Service Line

Cohort	Inclusions	Notable Exclusions
Coronary Artery Bypass Graft (CABG) Surgery (Isolated) First Listed Procedure Evaluated on mortality rates at two time periods: <ul style="list-style-type: none"> In-hospital 30-days post-admission 	<ul style="list-style-type: none"> Coronary bypass for cardiac revascularization with: internal mammary artery or vein One or more vessels Without valve replacement or repair Can have a PCI in this stay 	<ul style="list-style-type: none"> Valve repair and replacement, including catheter-based valve procedures Aortic aneurysm repair Carotid endarterectomy
Coronary Interventional Procedures (PCI) - Inpatient First Listed Procedure was PCI or Principal Procedure Intra-aortic balloon pump with PCI in a subsequent position Evaluated on mortality rates at two time periods: <ul style="list-style-type: none"> In-hospital 30-days post-admission 	<ul style="list-style-type: none"> Removal of coronary artery obstruction Single or multi-vessel Atherectomy or balloon angioplasty with or without thrombolytic agent Stent can be bare metal or drug eluting Can be multi-vessel 	<ul style="list-style-type: none"> CABG or valve surgery during the same stay
Defibrillator Procedures Diagnosis Related Group (DRG) Evaluated on in-hospital complication rates	<ul style="list-style-type: none"> Defibrillator implants 	<ul style="list-style-type: none"> CABG or valve surgery during the same stay Coronary angioplasty/Stent during the same stay
Heart Attack First Listed Diagnosis Evaluated on mortality rates at two time periods: <ul style="list-style-type: none"> In-hospital 30-days post-admission 	<ul style="list-style-type: none"> Anterior, inferior, posterior, lateral, RV infarcts <ul style="list-style-type: none"> ST elevation Non ST elevation Not otherwise specified Includes patients who receive thrombolytics, PCI, CABG, or medical management only 	<ul style="list-style-type: none"> Respirator-dependent status (V46.11) Left ventricular assist device (V43.21) Metastatic cancers Discharge to hospice
Heart Failure First Listed Diagnosis Evaluated on mortality rates at two time periods: <ul style="list-style-type: none"> In-hospital 30-days post-admission 	<ul style="list-style-type: none"> Systolic or diastolic, combined, left, valvular, acute or chronic, decompensated or compensated 	<ul style="list-style-type: none"> Dialysis during the same stay (39.95) Respirator-dependent status (V46.11) Left ventricular assist device (V43.21) Metastatic cancers Discharge to hospice

Cardiac Service Line (continued)

<p>Pacemaker Procedures Diagnosis Related Group (DRG) Evaluated on in-hospital complication rates</p>	<ul style="list-style-type: none"> • Pacemaker implants • Replacement of pacemaker implant • Revision of pacemaker implants 	<ul style="list-style-type: none"> • CABG or valve surgery during the same stay • Coronary angioplasty/Stent during the same stay
<p>Valve Surgery Procedure at any position Evaluated on mortality rates at two time periods: <ul style="list-style-type: none"> • In-hospital • 30-days post-admission </p>	<ul style="list-style-type: none"> • Replacement with repair • Open repair • Aortic, mitral, pulmonary, or tricuspid • With or without CABG 	<ul style="list-style-type: none"> • Percutaneous repair • Thoracic and aortic dissections

Critical Care Service Line

Cohort	Inclusions	Notable Exclusions
<p>Diabetic Emergencies First Listed Diagnosis Evaluated on mortality rates at two time periods: <ul style="list-style-type: none"> • In-hospital • 30-days post-admission </p>	<ul style="list-style-type: none"> • With coma • Hypoglycemic shock 	<ul style="list-style-type: none"> • Metastatic cancers • Left ventricular assist device (V43.21) • Respirator-dependent status (V46.11) • Patients discharged alive with a length of stay < 1 day
<p>Pulmonary Embolism First Listed Diagnosis Evaluated on mortality rates at two time periods: <ul style="list-style-type: none"> • In-hospital • 30-days post-admission </p>	<ul style="list-style-type: none"> • Pulmonary embolism and infarction • Iatrogenic 	<ul style="list-style-type: none"> • Metastatic cancers • Left ventricular assist device (V43.21) • Patients discharged alive with a length of stay < 1 day • Discharge to hospice
<p>Respiratory Failure First Listed Diagnosis Evaluated on mortality rates at two time periods: <ul style="list-style-type: none"> • In-hospital • 30-days post-admission </p>	<ul style="list-style-type: none"> • Acute respiratory failure • Acute on chronic respiratory failure 	<ul style="list-style-type: none"> • Metastatic cancers • Left ventricular assist device (V43.21) • Discharge to hospice
<p>Sepsis First Listed Diagnosis Evaluated on mortality rates at two time periods: <ul style="list-style-type: none"> • In-hospital • 30-days post-admission </p>	<ul style="list-style-type: none"> • Sepsis <ul style="list-style-type: none"> • Bacterial • Fungal • Viral • Unspecified organism • Severe Sepsis • Septic Shock 	<ul style="list-style-type: none"> • Metastatic cancers • Left ventricular assist device (V43.21) • Patients discharged alive with a length of stay < 1 day • Discharge to hospice

Gastrointestinal Service Line

Cohort	Inclusions	Notable Exclusions
<p>Bowel Obstruction First Listed Diagnosis Evaluated on mortality rates at two time periods:</p> <ul style="list-style-type: none"> • In-hospital • 30-days post-admission 	<ul style="list-style-type: none"> • Duodenal ulcer with obstruction • Gastrojejunal ulcer with obstruction • Pyloric stenosis • Other obstruction of duodenum • Hernia with obstruction • Intestinal obstruction without hernia • Gallstone ileus • Intussusception 	<ul style="list-style-type: none"> • Metastatic cancers • Left ventricular assist device (V43.21) • Discharge to hospice • Patients deceased with a length of stay < 1 day
<p>Colorectal Surgeries First Listed Procedure Evaluated on mortality rates at two time periods:</p> <ul style="list-style-type: none"> • In-hospital • 30-days post-admission 	<ul style="list-style-type: none"> • Hemicolectomy (Open and laparoscopic) • Sigmoidectomy (Open and laparoscopic) • Colostomy • Cecectomy (Open and laparoscopic) • Large-to-Large intestine anastomosis • Resection of Colon • Resection of Rectum 	<ul style="list-style-type: none"> • Metastatic cancers
<p>Esophageal/Stomach Surgeries First Listed Procedure Evaluated on mortality rates at two time periods:</p> <ul style="list-style-type: none"> • In-hospital • 30-days post-admission 	<ul style="list-style-type: none"> • Gastrostomy • Gastrectomy • Procedures for control of bleeding • Sutures of ulcer sites • Vagotomy • Enterostomies • Repairs of stomach or esophagus 	<ul style="list-style-type: none"> • Metastatic cancers • Patients undergoing a bariatric (weight-loss) procedure
<p>Gallbladder Removal Surgery (Cholecystectomy) First Listed Procedure Evaluated on in-hospital complication rates</p>	<ul style="list-style-type: none"> • Open or laparoscopic • Partial • Revision of prior gallbladder surgery 	<ul style="list-style-type: none"> • Does not include primary procedure of gallbladder stenting
<p>Gastrointestinal Bleed First Listed Diagnosis Evaluated on mortality rates at two time periods:</p> <ul style="list-style-type: none"> • In-hospital • 30-days post-admission 	<ul style="list-style-type: none"> • Bleeding/hemorrhage from any of the following: <ul style="list-style-type: none"> • Esophageal varices • Esophageal ulcer • Gastric ulcer • Duodenal ulcer • Peptic ulcer • Gastrojejunal ulcer • Gastritis or duodenitis • Angiodysplasia of stomach and duodenum • Diverticulosis • Rectum or anus • Dieulafoy lesion of intestine • Hematemesis • Melena • Hemorrhage of GI tract, unspecified 	<ul style="list-style-type: none"> • Metastatic cancers • Left ventricular assist device (V43.21) • Respirator-dependent status (V46.11) • Discharge to hospice • Patients deceased with a length of stay < 1 day
<p>Small Intestine Surgeries First Listed Procedure Evaluated on mortality rates at two time periods:</p> <ul style="list-style-type: none"> • In-hospital • 30-days post-admission 	<ul style="list-style-type: none"> • Resection of small intestine • Small to small intestine anastomosis • Closure of stoma of small intestine • Suture of small intestine laceration 	<ul style="list-style-type: none"> • Metastatic cancers • Patients undergoing a bariatric (weight-loss) procedure

Gastrointestinal Service Line (continued)

<p>Pancreatitis First Listed Diagnosis Evaluated on mortality rates at two time periods:</p> <ul style="list-style-type: none"> • In-hospital • 30-days post-admission 	<ul style="list-style-type: none"> • Acute • Chronic 	<ul style="list-style-type: none"> • Metastatic cancers • Left ventricular assist device (V43.21) • Respirator-dependent status (V46.11) • Discharge to hospice
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Neurosciences Service Line

Cohort	Inclusions	Notable Exclusions
<p>Neurosurgery First Listed Procedure Evaluated on mortality rates at two time periods:</p> <ul style="list-style-type: none"> • In-hospital • 30-days post-admission 	<ul style="list-style-type: none"> • Intracranial vascular procedures for hemorrhage: <ul style="list-style-type: none"> • Aneurysm repairs • Clippings • Coilings • Intracranial angioplasties • Craniotomies • Ventricular shunts 	<ul style="list-style-type: none"> • Head trauma
<p>Stroke First Listed Diagnosis Evaluated on mortality rates at two time periods:</p> <ul style="list-style-type: none"> • In-hospital • 30-days post-admission 	<ul style="list-style-type: none"> • Subarachnoid hemorrhage • Intracerebral hemorrhage • Intracranial hemorrhage, unspecified • Occlusion and stenosis of basilar, carotid, or vertebral artery • Cerebral thrombosis, embolism, or occlusion • Acute but ill-defined cerebrovascular disease 	<ul style="list-style-type: none"> • Hospitals transferring more than 10% of their population • Subdural bleeds • Extradural bleeds • Patients deceased with a length of stay < 1 day • Patients discharged alive with a length of stay < 1 day • Metastatic cancers • Left ventricular assist device (V43.21) • Respirator-dependent status (V46.11) • Discharge to hospice

Orthopedic Service Line

Cohort	Inclusions	Notable Exclusions
<p>Back & Neck Surgery (Without Spinal Fusion) First Listed Procedure Evaluated on in-hospital complication rates</p>	<ul style="list-style-type: none"> • Cervical, thoracic, and/or lumbar spine laminectomy, laminoplasty, foraminectomy • Repair or reduction of vertebral fracture • Removal on bony spicules • Elevation of spinal bone fragments • Excision or destruction of intervertebral disc • Removal of herniated nucleus pulposus • Insertion of posterior spinal motion preservation devices 	<ul style="list-style-type: none"> • Injuries associated with major trauma • Post-laminectomy syndrome: cervical, thoracic, or lumbar • Repair of joint structure • Patients with secondary bone cancer
<p>Hip Fracture Treatment First Listed Diagnosis Evaluated on in-hospital complication rates</p>	<ul style="list-style-type: none"> • Closed femur neck fractures • Closed trochanteric and subtrochanteric fractures • Closed intertrochanteric fractures 	<ul style="list-style-type: none"> • Injuries associated with major trauma • Patients with open skull fractures • Open fractures of the femur neck: transcervical and trochanteric • Closed fracture of the epiphysis of the neck of the femur • Femur shaft fractures • Hip replacement/knee replacement during same hospital stay • Patients discharged alive with a length of stay < 1 day • Discharge to hospice
<p>Hip Replacement First Listed Procedure Evaluated on in-hospital complication rates</p>	<ul style="list-style-type: none"> • Primary hip replacement • Bilaterals • Partial and total hip resurfacing 	<ul style="list-style-type: none"> • Revisions • Removal of hardware • Knee replacement during the same stay • Femur neck fractures • Injuries associated with major trauma
<p>Spinal Fusion First Listed Procedure Evaluated on in-hospital complication rates</p>	<ul style="list-style-type: none"> • Fusion at any level: spinal, cervical, dorsal, dorsolumbar, lumbar, lumbosacral • Single incision approach • Any number of vertebrae 	<ul style="list-style-type: none"> • Refusion • Post-laminectomy syndrome: cervical, thoracic, or lumbar • Patients with secondary bone cancer • Injuries associated with major trauma
<p>Total Knee Replacement First Listed Procedure Evaluated on in-hospital complication rates</p>	<ul style="list-style-type: none"> • Primary total knee replacement [bicompartamental, tricompartmental, unicompartmental (hemi-joint)] • Bilaterals 	<ul style="list-style-type: none"> • Revisions • Removal of hardware • Hip replacement (total or partial) or hip resurfacing during the same stay • Injuries associated with major trauma

Prostatectomy

Cohort	Inclusions	Notable Exclusions
Prostate Removal Surgery First Listed Procedure Evaluated on in-hospital complication rates	<ul style="list-style-type: none"> • Radical prostatectomy – suprapubic, retropubic, and perineal approaches • Local excision of lesion of prostate 	<ul style="list-style-type: none"> • None
Transurethral Prostate Resection Surgery First Listed Procedure Evaluated on in-hospital complication rates	<ul style="list-style-type: none"> • Transurethral guided laser induced prostatectomy (TULIP) • Other transurethral prostatectomies (including TURP) 	<ul style="list-style-type: none"> • None

Pulmonary Service Line

Cohort	Inclusions	Notable Exclusions
Chronic Obstructive Pulmonary Disease First Listed Diagnosis Evaluated on mortality rates at two time periods: <ul style="list-style-type: none"> • In-hospital • 30-days post-admission 	<ul style="list-style-type: none"> • Chronic bronchitis • Simple and obstructive bronchitis with and without exacerbation • Chronic airway obstruction, not elsewhere classified • Chronic obstructive asthma • Other emphysema • Bronchiectasis 	<ul style="list-style-type: none"> • Respirator-dependent status (V46.11) • Metastatic cancers • Left ventricular assist device (V43.21) • Discharge to hospice
Pneumonia First Listed Diagnosis Evaluated on mortality rates at two time periods: <ul style="list-style-type: none"> • In-hospital • 30-days post-admission 	<ul style="list-style-type: none"> • Pneumonia <ul style="list-style-type: none"> • Bacterial • Fungal • Viral • Unspecified organism 	<ul style="list-style-type: none"> • Metastatic cancers • Left ventricular assist device (V43.21) • SARS-related • Discharge to hospice

Vascular Service Line

Cohort	Inclusions	Notable Exclusions
<p>Abdominal Aorta Aneurysm Repair First Listed Procedure Evaluated on in-hospital complication rates</p>	<ul style="list-style-type: none"> • Excision of aneurysm and resection with anastomosis with and without replacement of the aorta • Endovascular implantation of a graft in the abdominal aorta 	<ul style="list-style-type: none"> • Rupture of abdominal aortic aneurysm • Aortic dissection • During the same stay: <ul style="list-style-type: none"> • CABG and/or Valve surgery • Aorto-renal bypass • Aorto-iliac-femoral bypass • Angioplasty of non-coronary vessel • Resection of thoracic vessel • Combination of stenting/anastomosis procedures • Incision of vessel for embolectomy or thrombectomy
<p>Carotid Surgery First Listed Procedure Evaluated on in-hospital complication rates</p>	<ul style="list-style-type: none"> • Carotid endarterectomy • Carotid stent placement • Endovascular graft placement • Percutaneous angioplasty of pre-cerebral vessels 	<ul style="list-style-type: none"> • Subarachnoid, intracerebral and subdural hemorrhage (due to excessive patient severity) • CABG during the same stay • Resection of other peripheral vessel with anastomosis
<p>Peripheral Vascular Bypass First Listed Procedure Evaluated on in-hospital complication rates</p>	<ul style="list-style-type: none"> • Peripheral vascular shunt or bypass: <ul style="list-style-type: none"> • Axillary-brachial • Axillary-femoral • Brachial • Femoral-femoral • Femoroperoneal • Femoropopliteal • Femorotibial • Popliteal • Vascular bypass not otherwise specified 	<ul style="list-style-type: none"> • Revisions • Upper extremity vascular resection

Appendix B. Patient Cohorts and Related ICD-9-CM Codes

Abdominal Aorta Aneurysm Repair

Inclusions

Procedure (First listed): 38.34, 38.44, 39.71

Exclusions

Procedure (Any position): 00.61, 35.10, 35.11, 35.12, 35.13, 35.14, 35.20, 35.21, 35.22, 35.23, 35.24, 35.25, 35.26, 35.27, 35.28, 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.17, 36.19, 37.51, 37.52, 37.53, 37.54, 37.62, 37.63, 38.08, 38.16, 38.18, 38.36, 38.45, 38.64, 39.59

Procedure (Other than first listed): 38.34, 38.44

Diagnosis (Any position): 441.00, 441.01, 441.02, 441.03, 441.1, 441.2, 441.3, 441.5, 441.6, 441.7, 441.9, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Appendectomy

Inclusions

Procedure (First listed): 47.01, 47.09, 47.2

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63

Diagnosis (Any position): 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Back and Neck Surgery (Without Spinal Fusion)

Inclusions

"Procedure and Diagnosis Related Group Combination: Procedure (First Listed): 80.51 , 03.09 , 03.53 , 84.59 , 84.62 , 84.63 , 84.64 , 84.65 , 84.80 , 84.82 , 80.50 , 80.59 , 84.61 , 84.84 , 84.60 AND One of the following DRGs: 3,28,29,30,490,491

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 78.49, 78.69, 81.00, 81.01, 81.02, 81.03, 81.04, 81.05, 81.06, 81.07, 81.08, 81.30, 81.31, 81.32, 81.33, 81.34, 81.35, 81.36, 81.37, 81.38, 81.39, 81.61, 81.62, 81.63, 81.64, 84.66, 84.67, 84.68, 84.69, 84.81, 84.83, 84.85

Diagnosis (Any position): 198.5, 996.45, 996.46, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V54.01, V54.09

Diagnosis (First listed): 996.42, 996.43, 996.47, 996.49, 996.78

Diagnosis and Procedure Combination: Procedure (Other than first listed) 03.02 occurring with any of the following diagnoses (Any position): 722.80,722.81,722.82,722.83

Bowel Obstruction

Inclusions

Diagnosis (First listed): 531.01, 531.21, 531.31, 531.41, 531.51, 531.61, 531.71, 531.91, 532.01, 532.11, 532.21, 532.31, 532.41, 532.51, 532.61, 532.71, 532.91, 534.01, 534.11, 534.21, 534.31, 534.41, 534.51, 534.61, 534.71, 534.91, 537.2, 537.3, 550.10, 550.11, 550.12, 550.13, 552.00, 552.01, 552.02, 552.03, 552.1, 552.20, 552.21, 552.29, 552.8, 552.9, 560.0, 560.1, 560.2, 560.31, 560.39, 560.81, 560.89, 560.9

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63, 50.59

Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V43.21

Carotid Surgery

Inclusions

Procedure (First listed): 00.61, 00.63, 38.12, 39.74

Exclusions

Procedure (Any position): 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.17, 36.19, 37.51, 37.52, 37.53, 37.54, 37.62, 37.63, 38.08, 38.16, 38.18, 38.36, 39.24, 39.25, 39.29, 39.59, 39.90

Diagnosis (Any position): 430, 431, 432.1, 432.9, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Chronic Obstructive Pulmonary Disease (COPD)

Inclusions

Diagnosis (First listed): 491.1, 491.20, 491.21, 491.22, 491.8, 491.9, 492.0, 492.8, 493.20, 493.21, 493.22, 494.0, 494.1, 496

Exclusions

Procedure (Any position): 33.51, 33.52, 37.51, 37.52, 37.53, 37.54, 37.62, 37.63

Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 480.3, 480.8, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V43.21, V46.11

Colorectal Surgeries

Inclusions

Procedure (First listed): 17.31, 17.32, 17.33, 17.34, 17.35, 17.36, 17.39, 45.00, 45.03, 45.52, 45.71, 45.72, 45.73, 45.74, 45.75, 45.76, 45.79, 45.81, 45.82, 45.83, 45.90, 45.94, 45.95, 46.03, 46.04, 46.10, 46.11, 46.13, 46.14, 46.20, 46.42, 46.50, 46.52, 46.60, 46.63, 46.64, 46.75, 46.76, 46.79, 46.80, 46.82, 46.85, 46.86, 46.87, 48.0, 48.40, 48.43, 48.49, 48.50, 48.51, 48.52, 48.59, 48.61, 48.62, 48.63, 48.64, 48.69, 48.71, 48.72, 48.74, 48.75, 48.76, 48.79, 48.81, 48.82, 48.91, 48.92, 49.01, 49.02, 49.03, 49.04, 49.11, 49.12, 49.21, 49.42, 49.44, 49.45, 49.46, 49.49, 49.51, 49.52, 49.6, 49.71, 49.72, 49.73, 49.75, 49.76, 49.79, 49.95

Exclusions

Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 209.00, 209.01, 209.02, 209.03, 209.10, 209.11, 209.12, 209.13, 209.14, 209.15, 209.16, 209.17, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Coronary Artery Bypass Surgery (CABG) Surgery

Inclusions

Procedure (First listed): 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.19

Exclusions

Procedure (Any position): 35.10, 35.11, 35.12, 35.13, 35.14, 35.20, 35.21, 35.22, 35.23, 35.24, 35.25, 35.26, 35.27, 35.28, 35.33, 35.55, 35.96, 35.97, 36.31, 36.32, 36.33, 36.34, 37.51, 37.52, 37.53, 37.54, 37.62, 37.63, 38.12, 38.34, 38.44, 38.45, 38.64, 39.71

Diagnosis (Any position): 414.06, 414.07, 441.00, 441.01, 441.02, 441.03, 441.2, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Coronary Interventional Procedures

Inclusions

Procedure (First listed): 00.66, 36.07, 36.09

Procedure (First listed and only when occurs with 00.66,36.06,36.07,36.09): 37.61

Exclusions

Procedure (Any position): 35.10, 35.11, 35.12, 35.13, 35.14, 35.20, 35.21, 35.22, 35.23, 35.24, 35.25, 35.26, 35.27, 35.28, 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.19, 37.51, 37.52, 37.53, 37.54, 37.62, 37.63

Diagnosis (Any position): 414.06, 414.07, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Defibrillator Procedures

Inclusions

DRG: 222, 223, 224, 225, 226, 227

Exclusions

Procedure (Any position): 00.66, 35.10, 35.11, 35.12, 35.13, 35.14, 35.20, 35.21, 35.22, 35.23, 35.24, 35.25, 35.26, 35.27, 35.28, 36.06, 36.07, 36.09, 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.17, 36.19, 37.62, 37.63

Diagnosis (First listed): 414.06, 414.07

Diagnosis (Any position): 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Diabetic Emergencies

Inclusions

Diagnosis (First listed): 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.80, 250.81, 250.82, 250.83

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63

Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V43.21, V46.11

Esophageal/Stomach Surgeries

Inclusions

Procedure (First listed): 42.41, 42.42, 42.52, 42.59, 42.7, 42.81, 42.82, 42.84, 42.85, 42.87, 42.89, 42.92, 42.99, 43.0, 43.1, 43.11, 43.19, 43.3, 43.5, 43.6, 43.7, 43.89, 43.99, 44.00, 44.01, 44.02, 44.03, 44.21, 44.22, 44.29, 44.32, 44.38, 44.39, 44.40, 44.41, 44.42, 44.43, 44.44, 44.49, 44.61, 44.62, 44.63, 44.64, 44.65, 44.66, 44.67, 44.68, 44.69, 44.92, 44.93, 44.94, 44.99

Exclusions

Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 209.00, 209.01, 209.02, 209.03, 209.10, 209.11, 209.12, 209.13, 209.14, 209.15, 209.16, 209.17, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Diagnosis (First listed): 278.00, 278.01

Gallbladder Removal Surgery (Cholecystectomy)

Inclusions

Procedure (First listed): 51.21, 51.22, 51.23, 51.24

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63

Diagnosis (Any position): 156.0, 197.7, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Gastrointestinal Bleed

Inclusions

Diagnosis (First listed): 456.0, 456.20, 530.21, 530.7, 530.82, 531.00, 531.01, 531.20, 531.21, 531.40, 531.41, 531.60, 531.61, 532.00, 532.01, 532.20, 532.21, 532.40, 532.41, 532.60, 532.61, 533.00, 533.01, 533.20, 533.21, 533.40, 533.41, 533.60, 533.61, 534.00, 534.01, 534.20, 534.21, 534.40, 534.41, 534.60, 534.61, 535.01, 535.11, 535.21, 535.31, 535.41, 535.51, 535.61, 537.83, 537.84, 562.02, 562.03, 562.12, 562.13, 569.3, 569.85, 569.86, 578.0, 578.1, 578.9

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63

Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V43.21, V46.11

Heart Attack

Inclusions

Diagnosis (First listed): 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63

Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 414.06, 414.07, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V43.21, V46.11

Heart Failure

Inclusions

Diagnosis (First listed): 398.91, 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63, 39.95, 55.69

Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 414.06, 414.07, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V43.21, V46.11

Hip Fracture Treatment

Inclusions

Diagnosis and Diagnosis Related Group Combination: Diagnosis (First Listed): 820.8, 820.20, 820.03, 820.21, 820.02, 820.22, 820.00, 820.09 AND One of the following DRGs: 3, 4, 469, 470, 535, 536, 480, 481, 482

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 78.65, 78.66, 78.67, 80.05, 80.06, 81.51, 81.53, 81.54, 81.55

Diagnosis (Any position): 733.15, 733.42, 733.82, 800.61, 800.62, 800.63, 800.64, 800.65, 800.66, 800.69, 820.01, 820.10, 820.11, 820.12, 820.13, 820.19, 820.30, 820.31, 820.32, 820.9, 821.00, 821.01, 821.10, 821.11, 821.20, 821.21, 821.22, 821.23, 821.29, 821.30, 821.31, 821.32, 821.33, 821.39, 996.40, 996.41, 996.42, 996.43, 996.44, 996.45, 996.46, 996.47, 996.49, 996.78, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Hip Replacement

Inclusions

Procedure and Diagnosis Related Group Combination: Procedure (First Listed): 81.51, 00.85, 00.86, 00.87 AND One of the following DRGs: 3, 461, 462, 469, 470

Exclusions

Procedure (Any position): 00.70, 00.71, 00.72, 00.73, 00.80, 00.81, 00.82, 00.83, 00.84, 37.51, 37.52, 37.53, 37.54, 78.65, 78.67, 80.05, 80.06, 81.53, 81.54, 81.55

Diagnosis (Any position): 733.14, 820.00, 820.02, 820.03, 820.09, 820.20, 820.21, 820.22, 820.8, 996.45, 996.46, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V15.5, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V58.43, V58.49

Diagnosis (First listed): 996.41, 996.43

Neurosurgery

Inclusions

Procedure (First listed): 01.12, 01.14, 01.23, 01.24, 01.25, 01.28, 01.31, 01.39, 01.51, 01.59, 02.02, 02.03, 02.05, 02.06, 02.07, 02.12, 02.2, 02.22, 02.31, 02.32, 02.33, 02.34, 02.39, 02.42, 02.43, 02.93, 04.01, 04.41, 38.11, 38.81

Exclusions

Procedure (Any position): 37.51

Diagnosis (Any position): 800.00, 800.01, 800.02, 800.03, 800.04, 800.05, 800.06, 800.09, 800.10, 800.11, 800.12, 800.13, 800.14, 800.15, 800.16, 800.19, 800.20, 800.21, 800.22, 800.23, 800.24, 800.25, 800.26, 800.29, 800.30, 800.31, 800.32, 800.33, 800.34, 800.35, 800.36, 800.39, 800.40, 800.41, 800.42, 800.43, 800.44, 800.45, 800.46, 800.49, 800.50, 800.51, 800.52, 800.53, 800.54, 800.55, 800.56, 800.59, 800.60, 800.61, 800.62, 800.63, 800.64, 800.65, 800.66, 800.69, 800.70, 800.71, 800.72, 800.73, 800.74, 800.75, 800.76, 800.79, 800.80, 800.81, 800.82, 800.83, 800.84, 800.85, 800.86, 800.89, 800.90, 800.91, 800.92, 800.93, 800.94, 800.95, 800.96, 800.99, 801.00, 801.01, 801.02, 801.03, 801.04, 801.05, 801.06, 801.09, 801.10, 801.11, 801.12, 801.13, 801.14, 801.15, 801.16, 801.19, 801.20, 801.21, 801.22, 801.23, 801.24, 801.25, 801.26, 801.29, 801.30, 801.31, 801.32, 801.33, 801.34, 801.35, 801.36, 801.39, 801.40, 801.41, 801.42, 801.43, 801.44, 801.45, 801.46, 801.49, 801.50, 801.51, 801.52, 801.53, 801.54, 801.55, 801.56, 801.59, 801.60, 801.61, 801.62, 801.63, 801.64, 801.65, 801.66, 801.69, 801.70, 801.71, 801.72, 801.73, 801.74, 801.75, 801.76, 801.79, 801.80, 801.81, 801.82, 801.83, 801.84, 801.85, 801.86, 801.89, 801.90, 801.91, 801.92, 801.93, 801.94, 801.95, 801.96, 801.99, 802.0, 802.1, 802.20, 802.21, 802.22, 802.23, 802.24, 802.25, 802.26, 802.27, 802.28, 802.29, 802.30, 802.31, 802.32, 802.33, 802.34, 802.35, 802.36, 802.37, 802.38, 802.39, 802.4, 802.5, 802.6, 802.7, 802.8, 802.9, 803.00, 803.01, 803.02, 803.03, 803.04, 803.05, 803.06, 803.09, 803.10, 803.11, 803.12, 803.13, 803.14, 803.15, 803.16, 803.19, 803.20, 803.21, 803.22, 803.23, 803.24, 803.25, 803.26, 803.29, 803.30, 803.31, 803.32, 803.33, 803.34, 803.35, 803.36, 803.39, 803.40, 803.41, 803.42, 803.43, 803.44, 803.45, 803.46, 803.49, 803.50, 803.51, 803.52, 803.53, 803.54, 803.55, 803.56, 803.59, 803.60, 803.61, 803.62, 803.63, 803.64, 803.65, 803.66, 803.69, 803.70, 803.71, 803.72, 803.73, 803.74, 803.75, 803.76, 803.79, 803.80, 803.81, 803.82, 803.83, 803.84, 803.85, 803.86, 803.89, 803.90, 803.91, 803.92, 803.93, 803.94, 803.95, 803.96, 803.99, 804.00, 804.01, 804.02, 804.03, 804.04, 804.05, 804.06, 804.09, 804.10, 804.11, 804.12, 804.13, 804.14, 804.15, 804.16, 804.19, 804.20, 804.21, 804.22, 804.23, 804.24, 804.25, 804.26, 804.29, 804.30, 804.31, 804.32, 804.33, 804.34, 804.35, 804.36, 804.39, 804.40, 804.41, 804.42, 804.43, 804.44, 804.45, 804.46, 804.49, 804.50, 804.51, 804.52, 804.53, 804.54, 804.55, 804.56, 804.59, 804.60, 804.61, 804.62, 804.63, 804.64, 804.65, 804.66, 804.69,

804.70, 804.71, 804.72, 804.73, 804.74, 804.75, 804.76, 804.79, 804.80, 804.81, 804.82, 804.83, 804.84, 804.85, 804.86, 804.89, 804.90, 804.91, 804.92, 804.93, 804.94, 804.95, 804.96, 804.99, 805.00, 805.01, 805.02, 805.03, 805.04, 805.05, 805.06, 805.07, 805.08, 805.10, 805.11, 805.12, 805.13, 805.14, 805.15, 805.16, 805.17, 805.18, 806.00, 806.01, 806.02, 806.03, 806.04, 806.05, 806.06, 806.07, 806.08, 806.09, 806.10, 806.11, 806.12, 806.13, 806.14, 806.15, 806.16, 806.17, 806.18, 806.19, 850.0, 850.1, 850.11, 850.12, 850.2, 850.3, 850.4, 850.5, 850.9, 851.00, 851.01, 851.02, 851.03, 851.04, 851.05, 851.06, 851.09, 851.10, 851.11, 851.12, 851.13, 851.14, 851.15, 851.16, 851.19, 851.20, 851.21, 851.22, 851.23, 851.24, 851.25, 851.26, 851.29, 851.30, 851.31, 851.32, 851.33, 851.34, 851.35, 851.36, 851.39, 851.40, 851.41, 851.42, 851.43, 851.44, 851.45, 851.46, 851.49, 851.50, 851.51, 851.52, 851.53, 851.54, 851.55, 851.56, 851.59, 851.60, 851.61, 851.62, 851.63, 851.64, 851.65, 851.66, 851.69, 851.70, 851.71, 851.72, 851.73, 851.74, 851.75, 851.76, 851.79, 851.80, 851.81, 851.82, 851.83, 851.84, 851.85, 851.86, 851.89, 851.90, 851.91, 851.92, 851.93, 851.94, 851.95, 851.96, 851.99, 852.00, 852.01, 852.02, 852.03, 852.04, 852.05, 852.06, 852.09, 852.10, 852.11, 852.12, 852.13, 852.14, 852.15, 852.16, 852.19, 852.20, 852.21, 852.22, 852.23, 852.24, 852.25, 852.26, 852.29, 852.30, 852.31, 852.32, 852.33, 852.34, 852.35, 852.36, 852.39, 852.40, 852.41, 852.42, 852.43, 852.44, 852.45, 852.46, 852.49, 852.50, 852.51, 852.52, 852.53, 852.54, 852.55, 852.56, 852.59, 853.00, 853.01, 853.02, 853.03, 853.04, 853.05, 853.06, 853.09, 853.10, 853.11, 853.12, 853.13, 853.14, 853.15, 853.16, 853.19, 854.00, 854.01, 854.02, 854.03, 854.04, 854.05, 854.06, 854.09, 854.10, 854.11, 854.12, 854.13, 854.14, 854.15, 854.16, 854.19, 950.0, 950.1, 950.2, 950.3, 950.9, 951.0, 951.1, 951.2, 951.3, 951.4, 951.5, 951.6, 951.7, 951.8, 951.9, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89

Pacemaker Procedures

Inclusions

DRG: 242, 243, 244, 258, 259, 260, 261, 262

Exclusions

Procedure (Any position): 00.66, 35.10, 35.11, 35.12, 35.13, 35.14, 35.20, 35.21, 35.22, 35.23, 35.24, 35.25, 35.26, 35.27, 35.28, 36.06, 36.07, 36.09, 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.17, 36.19, 37.62, 37.63

Diagnosis (First listed): 414.06, 414.07

Diagnosis (Any position): 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Pancreatitis

Inclusions

Diagnosis (First listed): 577.0, 577.1

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63

Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V43.21, V46.11

Peripheral Vascular Bypass

Inclusions

Diagnosis (First listed): 250.60, 250.61, 250.62, 250.63, 250.70, 250.71, 250.72, 250.73, 250.80, 250.81, 250.82, 250.83, 440.20, 440.21, 440.22, 440.23, 440.24, 440.29, 440.30, 440.32, 442.2, 442.3, 443.89, 443.9, 444.22, 444.81, 445.02, 447.1, 681.10, 682.6, 682.7, 686.8, 707.10, 707.12, 707.13, 707.14, 707.15, 707.19, 707.8, 730.06, 730.07, 730.16, 730.17, 730.18, 730.26, 730.27, 785.4, 902.53, 904.41

Procedure (First listed): 39.29

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63, 39.25, 39.49

Diagnosis (Any position): 440.31, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Diagnosis (First listed): 445.01, 996.74

Pneumonia

Inclusions

Diagnosis (First listed): 481, 482.0, 482.1, 482.2, 482.30, 482.31, 482.32, 482.39, 482.40, 482.41, 482.42, 482.49, 482.81, 482.82, 482.83, 482.84, 482.89, 482.9, 483.0, 483.1, 483.8, 485, 486, 487.0

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63

Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 480.3, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V43.21, V46.11

Prostate Removal Surgery

Inclusions

Procedure (First listed): 60.3, 60.4, 60.5, 60.61, 60.62, 60.69

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63

Diagnosis (Any position): 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Pulmonary Embolism

Inclusions

Diagnosis (First listed): 415.11, 415.19

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63

Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V43.21

Respiratory Failure

Inclusions

Diagnosis (First listed): 518.81, 518.84

Exclusions

Procedure (Any position): 33.51, 37.51, 37.52, 37.53, 37.54, 50.51

Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V43.21

Sepsis

Inclusions

Diagnosis (First listed): 003.1, 027.0, 036.2, 036.3, 038.0, 038.10, 038.11, 038.12, 038.19, 038.2, 038.3, 038.40, 038.41, 038.42, 038.43, 038.44, 038.49, 038.8, 038.9, 785.52

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63, 50.59, 50.69
Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.00, 203.02, 203.12, 203.82, 204.02, 204.10, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V43.21

Small Intestine Surgeries

Inclusions

Procedure (First listed): 45.01, 45.02, 45.51, 45.61, 45.62, 45.63, 45.91, 45.92, 45.93, 46.01, 46.02, 46.21, 46.22, 46.23, 46.31, 46.32, 46.39, 46.41, 46.51, 46.71, 46.72, 46.73, 46.74, 46.81

Exclusions

Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 209.00, 209.01, 209.02, 209.03, 209.10, 209.11, 209.12, 209.13, 209.14, 209.15, 209.16, 209.17, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9
Diagnosis (First listed): 278.00, 278.01

Spinal Fusion

Inclusions

Procedure and Diagnosis Related Group Combination: Procedure (First Listed): 81.00 , 81.01 , 81.02 , 81.03 , 81.04 , 81.05 , 81.06 , 81.07 , 81.08 , 81.61 AND One of the following DRGs: 3 , 28 , 29 , 30 , 453 , 454 , 455 , 456 , 457 , 458 , 459 , 460 , 471 , 472 , 473

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 78.69, 81.30, 81.31, 81.32, 81.33, 81.34, 81.35, 81.36, 81.37, 81.38, 81.39, 81.65, 81.66, 84.58, 84.59, 84.60, 84.61, 84.62, 84.63, 84.64, 84.65, 84.66, 84.67, 84.68, 84.69, 84.80, 84.81, 84.82, 84.83, 84.84, 84.85
Diagnosis (Any position): 198.5, 996.45, 996.46, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V45.4
Diagnosis (First listed): 996.41, 996.42, 996.43
Diagnosis and Procedure Combination: Procedure (Other than first listed) 03.02 occurring with any of the following diagnoses (Any position): 722.80, 722.81, 722.82, 722.83

Stroke

Inclusions

Diagnosis (First listed): 430, 431, 432.9, 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63
Diagnosis (Any position): 196.0, 196.1, 196.2, 196.3, 196.5, 196.6, 196.8, 196.9, 197.0, 197.1, 197.2, 197.3, 197.4, 197.5, 197.6, 197.7, 197.8, 198.0, 198.1, 198.2, 198.3, 198.4, 198.5, 198.6, 198.7, 198.81, 198.82, 198.89, 203.02, 203.12, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.12, 205.22, 205.82, 205.92, 206.02, 206.12, 206.22, 206.82, 206.92, 207.02, 207.12, 207.22, 207.82, 208.02, 208.12, 208.22, 208.82, 208.92, 432.1, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9, V43.21, V46.11

Total Knee Replacement

Inclusions

Procedure and Diagnosis Related Group Combination: Procedure (First Listed): 81.54 AND One of the following DRGs: 3, 461, 462, 469, 470

Exclusions

Procedure (Any position): 00.74, 00.75, 00.76, 00.80, 00.81, 00.82, 00.83, 00.84, 37.51, 37.52, 37.53, 37.54, 78.65, 78.67, 80.05, 80.06, 81.51, 81.52, 81.53

Procedure (Other than first listed): 81.55

Diagnosis (Any position): 996.45, 996.46, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Diagnosis (First listed): 996.43

Transurethral Prostate Resection Surgery

Inclusions

Procedure (First listed): 60.21, 60.29

Exclusions

Procedure (Any position): 37.51, 37.52, 37.53, 37.54, 37.62, 37.63

Diagnosis (Any position): 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Valve Surgery

Inclusions

Procedure (Any position): 35.10, 35.11, 35.12, 35.13, 35.14, 35.20, 35.21, 35.22, 35.23, 35.24, 35.25, 35.26, 35.27, 35.28

Exclusions

Procedure (Any position): 35.55, 35.96, 35.97, 36.31, 36.32, 36.33, 36.34, 37.51, 37.52, 37.53, 37.54, 37.62, 37.63, 38.12, 38.34, 38.44, 38.64, 39.71

Diagnosis (Any position): 414.06, 414.07, 441.00, 441.01, 441.02, 441.03, 441.2, 996.80, 996.81, 996.82, 996.83, 996.84, 996.85, 996.86, 996.87, 996.89, V42.0, V42.1, V42.4, V42.6, V42.7, V42.81, V42.82, V42.83, V42.84, V42.89, V42.9

Appendix C. Complications

Abdominal Aortic Aneurysm Repair - Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

008.45	INTESTINAL INFECTION DUE TO CLOSTRIDIUM DIFFICILE
041.04	BACTERIAL INFECTION DUE TO STREPTOCOCCUS, GROUP D [ENTEROCOCCUS]
041.11	METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS IN CONDITIONS CLASSIFIED ELSEWHERE AND OF UNSPECIFIED SITE
041.7	PSEUDOMONAS INFECTION IN CONDITIONS CLASSIFIED ELSEWHERE AND OF UNSPECIFIED SITE
286.6	DEFIBRATION SYNDROME
292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
348.1	ANOXIC BRAIN DAMAGE
410.01	ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
410.11	ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
410.21	ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
410.51	ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
410.61	ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
410.81	ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
410.91	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
423.3	CARDIAC TAMPONADE
427.41	VENTRICULAR FIBRILLATION
427.5	CARDIAC ARREST
431	INTRACEREBRAL HEMORRHAGE
433.01	OCCLUSION AND STENOSIS OF BASILAR ARTERY WITH CEREBRAL INFARCTION
433.11	OCCLUSION AND STENOSIS OF CAROTID ARTERY WITH CEREBRAL INFARCTION
433.21	OCCLUSION AND STENOSIS OF VERTEBRAL ARTERY WITH CEREBRAL INFARCTION
433.31	OCCLUSION AND STENOSIS OF MULTIPLE AND BILATERAL PRECEREBRAL ARTERIES WITH CEREBRAL INFARCTION
433.81	OCCLUSION AND STENOSIS OF OTHER SPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
433.91	OCCLUSION AND STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
434.01	CEREBRAL THROMBOSIS WITH CEREBRAL INFARCTION
434.11	CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION
434.91	UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITH CEREBRAL INFARCTION
449	SEPTIC ARTERIAL EMBOLISM
453.40	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED DEEP VESSELS OF LOWER EXTREMITY
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.42	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF DISTAL LOWER EXTREMITY
453.82	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VEINS OF UPPER EXTREMITIES
480.0	PNEUMONIA DUE TO ADENOVIRUS
480.1	PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
480.2	PNEUMONIA DUE TO PARAINFLUENZA VIRUS
480.3	PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
480.8	PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
484.1	PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE
507.0	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
512.1	IATROGENIC PNEUMOTHORAX
514	PULMONARY CONGESTION AND HYPOSTASIS
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
518.84	ACUTE AND CHRONIC RESPIRATORY FAILURE
729.73	NONTRAUMATIC COMPARTMENT SYNDROME OF ABDOMEN
780.01	COMA
785.50	SHOCK, UNSPECIFIED
785.51	CARDIOGENIC SHOCK
785.52	SEPTIC SHOCK
867.0	INJURY TO BLADDER AND URETHRA WITHOUT MENTION OF OPEN WOUND INTO CAVITY
957.1	INJURY TO OTHER SPECIFIED NERVE(S)
995.91	SEPSIS
995.92	SEVERE SEPSIS
996.1	MECHANICAL COMPLICATION OF OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT

996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
996.74	OTHER COMPLICATIONS DUE TO OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
997.00	NERVOUS SYSTEM COMPLICATION, UNSPECIFIED
997.01	CENTRAL NERVOUS SYSTEM COMPLICATION
997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.09	OTHER NERVOUS SYSTEM COMPLICATIONS
997.1	CARDIAC COMPLICATIONS
997.2	PERIPHERAL VASCULAR COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA
997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
997.91	COMPLICATIONS AFFECTING OTHER SPECIFIED BODY SYSTEMS, HYPERTENSION
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC
998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.2	ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE
998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.59	OTHER POSTOPERATIVE INFECTION
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER
999.32	BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
999.34	ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS
999.39	INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION

Abdominal Aortic Aneurysm Repair - Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.1 CARDIAC COMPLICATIONS, NOT ELSEWHERE CLASSIFIED

410.31	ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
410.41	ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
427.0	PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA
427.1	PAROXYSMAL VENTRICULAR TACHYCARDIA
427.31	ATRIAL FIBRILLATION
427.32	ATRIAL FLUTTER
428.0	CONGESTIVE HEART FAILURE, UNSPECIFIED
428.1	LEFT HEART FAILURE
428.21	ACUTE SYSTOLIC HEART FAILURE
428.23	ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
428.31	ACUTE DIASTOLIC HEART FAILURE
428.33	ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
428.41	ACUTE COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.43	ACUTE ON CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.9	HEART FAILURE, UNSPECIFIED

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

481	PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
482.0	PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
482.1	PNEUMONIA DUE TO PSEUDOMONAS
482.2	PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
482.30	PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
482.31	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
482.32	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
482.39	PNEUMONIA DUE TO OTHER STREPTOCOCCUS
482.40	PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
482.41	METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS

- 482.42 METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
- 482.49 OTHER STAPHYLOCOCCUS PNEUMONIA
- 482.81 PNEUMONIA DUE TO ANAEROBES
- 482.82 PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
- 482.83 PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
- 482.84 LEGIONNAIRES' DISEASE
- 482.89 PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
- 482.9 BACTERIAL PNEUMONIA, UNSPECIFIED
- 483.0 PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
- 483.1 PNEUMONIA DUE TO CHLAMYDIA
- 483.8 PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
- 484.3 PNEUMONIA IN WHOOPING COUGH
- 484.6 PNEUMONIA IN ASPERGILLOSIS
- 484.7 PNEUMONIA IN OTHER SYSTEMIC MYCOSES
- 485 BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED
- 486 PNEUMONIA, ORGANISM UNSPECIFIED
- 518.81 ACUTE RESPIRATORY FAILURE

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

- 560.1 PARALYTIC ILEUS

Must occur with 997.5 URINARY COMPLICATIONS

- 584.5 ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
- 584.8 ACUTE KIDNEY FAILURE WITH OTHER SPECIFIED PATHOLOGICAL LESION IN KIDNEY
- 584.9 ACUTE KIDNEY FAILURE, UNSPECIFIED

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

- 038.0 STREPTOCOCCAL SEPTICEMIA
- 038.10 STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
- 038.11 METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA
- 038.12 METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA
- 038.19 OTHER STAPHYLOCOCCAL SEPTICEMIA
- 038.2 PNEUMOCOCCAL SEPTICEMIA
- 038.3 SEPTICEMIA DUE TO ANAEROBES
- 038.40 SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISM, UNSPECIFIED
- 038.41 SEPTICEMIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
- 038.42 SEPTICEMIA DUE TO ESCHERICHIA COLI [E. COLI]
- 038.43 SEPTICEMIA DUE TO PSEUDOMONAS
- 038.44 SEPTICEMIA DUE TO SERRATIA
- 038.49 OTHER SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISMS
- 038.8 OTHER SPECIFIED SEPTICEMIAS
- 038.9 UNSPECIFIED SEPTICEMIA
- 785.59 OTHER SHOCK WITHOUT MENTION OF TRAUMA

Appendectomy - Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

041.00	BACTERIAL INFECTION DUE TO UNSPECIFIED STREPTOCOCCUS
041.9	BACTERIAL INFECTION, UNSPECIFIED, IN CONDITIONS CLASSIFIED ELSEWHERE AND OF UNSPECIFIED SITE
286.6	DEFIBRATION SYNDROME
292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
293.1	SUBACUTE DELIRIUM
298.9	UNSPECIFIED PSYCHOSIS
31.1	TEMPORARY TRACHEOSTOMY
31.29	OTHER PERMANENT TRACHEOSTOMY
348.30	ENCEPHALOPATHY, UNSPECIFIED
348.31	METABOLIC ENCEPHALOPATHY
348.39	OTHER ENCEPHALOPATHY
349.82	TOXIC ENCEPHALOPATHY
38.95	VENOUS CATHETERIZATION FOR RENAL DIALYSIS
39.95	HEMODIALYSIS
410.70	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, EPISODE OF CARE UNSPECIFIED
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
423.3	CARDIAC TAMPONADE
426.4	RIGHT BUNDLE BRANCH BLOCK
427.41	VENTRICULAR FIBRILLATION
427.5	CARDIAC ARREST
428.23	ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
428.33	ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
431	INTRACEREBRAL HEMORRHAGE
433.01	OCCLUSION AND STENOSIS OF BASILAR ARTERY WITH CEREBRAL INFARCTION
433.11	OCCLUSION AND STENOSIS OF CAROTID ARTERY WITH CEREBRAL INFARCTION
433.21	OCCLUSION AND STENOSIS OF VERTEBRAL ARTERY WITH CEREBRAL INFARCTION
433.31	OCCLUSION AND STENOSIS OF MULTIPLE AND BILATERAL PRECEREBRAL ARTERIES WITH CEREBRAL INFARCTION
433.81	OCCLUSION AND STENOSIS OF OTHER SPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
433.91	OCCLUSION AND STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
434.00	CEREBRAL THROMBOSIS WITHOUT MENTION OF CEREBRAL INFARCTION
434.01	CEREBRAL THROMBOSIS WITH CEREBRAL INFARCTION
434.10	CEREBRAL EMBOLISM WITHOUT MENTION OF CEREBRAL INFARCTION
434.11	CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION
434.90	UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITHOUT MENTION OF CEREBRAL INFARCTION
434.91	UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITH CEREBRAL INFARCTION
444.22	ARTERIAL EMBOLISM AND THROMBOSIS OF LOWER EXTREMITY
449	SEPTIC ARTERIAL EMBOLISM
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.8	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF OTHER SPECIFIED VEINS
453.82	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VEINS OF UPPER EXTREMITIES
453.83	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UPPER EXTREMITIES, UNSPECIFIED
453.84	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF AXILLARY VEINS
453.85	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF SUBCLAVIAN VEINS
453.86	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF INTERNAL JUGULAR VEINS
453.87	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF OTHER THORACIC VEINS
453.89	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF OTHER SPECIFIED VEINS
458.29	OTHER IATROGENIC HYPOTENSION
459.0	HEMORRHAGE, UNSPECIFIED
480.0	PNEUMONIA DUE TO ADENOVIRUS
480.1	PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
480.2	PNEUMONIA DUE TO PARAINFLUENZA VIRUS
480.3	PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
480.8	PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
484.1	PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE
495.9	UNSPECIFIED ALLERGIC ALVEOLITIS AND PNEUMONITIS
512.1	IATROGENIC PNEUMOTHORAX
518.0	PULMONARY COLLAPSE
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
518.81	ACUTE RESPIRATORY FAILURE

518.84	ACUTE AND CHRONIC RESPIRATORY FAILURE
519.09	OTHER TRACHEOSTOMY COMPLICATIONS
54.12	REOPENING OF RECENT LAPAROTOMY SITE
54.61	RECLOSURE OF POSTOPERATIVE DISRUPTION OF ABDOMINAL WALL
567.29	OTHER SUPPURATIVE PERITONITIS
567.38	OTHER RETROPERITONEAL ABSCESS
567.89	OTHER SPECIFIED PERITONITIS
567.9	UNSPECIFIED PERITONITIS
570	ACUTE AND SUBACUTE NECROSIS OF LIVER
578.9	HEMORRHAGE OF GASTROINTESTINAL TRACT, UNSPECIFIED
707.25	PRESSURE ULCER, UNSTAGEABLE
780.2	SYNCOPE AND COLLAPSE
785.4	GANGRENE
785.50	SHOCK, UNSPECIFIED
785.51	CARDIOGENIC SHOCK
799.01	ASPHYXIA
799.1	RESPIRATORY ARREST
863.29	INJURY TO OTHER SITE OF SMALL INTESTINE WITHOUT OPEN WOUND INTO CAVITY
864.02	LACERATION OF LIVER, MINOR, WITHOUT MENTION OF OPEN WOUND INTO CAVITY
864.09	OTHER INJURY TO LIVER WITHOUT MENTION OF OPEN WOUND INTO CAVITY
867.1	INJURY TO BLADDER AND URETHRA WITH OPEN WOUND INTO CAVITY
933.1	FOREIGN BODY IN LARYNX
934.0	FOREIGN BODY IN TRACHEA
934.1	FOREIGN BODY IN MAIN BRONCHUS
934.9	FOREIGN BODY IN RESPIRATORY TREE, UNSPECIFIED
935.1	FOREIGN BODY IN ESOPHAGUS
947.3	BURN OF GASTROINTESTINAL TRACT
996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
996.76	OTHER COMPLICATIONS DUE TO GENITOURINARY DEVICE, IMPLANT, AND GRAFT
997.01	CENTRAL NERVOUS SYSTEM COMPLICATION
997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.09	OTHER NERVOUS SYSTEM COMPLICATIONS
997.1	CARDIAC COMPLICATIONS
997.2	PERIPHERAL VASCULAR COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA
997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
997.79	VASCULAR COMPLICATIONS OF OTHER VESSELS
997.91	COMPLICATIONS AFFECTING OTHER SPECIFIED BODY SYSTEMS, HYPERTENSION
997.99	OTHER COMPLICATIONS AFFECTING OTHER SPECIFIED BODY SYSTEMS
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC
998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.12	HEMATOMA COMPLICATING A PROCEDURE
998.2	ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE
998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.4	FOREIGN BODY ACCIDENTALLY LEFT DURING A PROCEDURE
998.51	INFECTED POSTOPERATIVE SEROMA
998.59	OTHER POSTOPERATIVE INFECTION
998.6	PERSISTENT POSTOPERATIVE FISTULA
998.7	ACUTE REACTION TO FOREIGN SUBSTANCE ACCIDENTALLY LEFT DURING A PROCEDURE
998.89	OTHER SPECIFIED COMPLICATIONS OF PROCEDURES
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER
999.32	BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
999.34	ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS
999.39	INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION
999.80	TRANSFUSION REACTION, UNSPECIFIED
999.83	HEMOLYTIC TRANSFUSION REACTION, INCOMPATIBILITY UNSPECIFIED
999.84	ACUTE HEMOLYTIC TRANSFUSION REACTION, INCOMPATIBILITY UNSPECIFIED
999.85	DELAYED HEMOLYTIC TRANSFUSION REACTION, INCOMPATIBILITY UNSPECIFIED

- E878.6 REMOVAL OF OTHER ORGAN (PARTIAL) (TOTAL) CAUSING ABNORMAL PATIENT REACTION, OR LATER
COMPLICATION, WITHOUT MENTION OF MISADVENTURE AT TIME OF OPERATION
E935.2 OTHER OPIATES AND RELATED NARCOTICS CAUSING ADVERSE EFFECTS IN THERAPEUTIC USE

Appendectomy - Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.1 CARDIAC COMPLICATIONS, NOT ELSEWHERE CLASSIFIED

- 410.01 ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
410.11 ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
410.21 ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
410.31 ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
410.41 ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
410.51 ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
410.61 ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
410.71 ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
410.81 ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
410.91 ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
427.0 PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA
427.1 PAROXYSMAL VENTRICULAR TACHYCARDIA
427.31 ATRIAL FIBRILLATION
428.0 CONGESTIVE HEART FAILURE, UNSPECIFIED
428.1 LEFT HEART FAILURE
428.21 ACUTE SYSTOLIC HEART FAILURE
428.31 ACUTE DIASTOLIC HEART FAILURE
428.41 ACUTE COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.43 ACUTE ON CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

- 481 PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
482.0 PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
482.1 PNEUMONIA DUE TO PSEUDOMONAS
482.2 PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
482.30 PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
482.31 PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
482.32 PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
482.39 PNEUMONIA DUE TO OTHER STREPTOCOCCUS
482.40 PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
482.41 METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.42 METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.49 OTHER STAPHYLOCOCCUS PNEUMONIA
482.81 PNEUMONIA DUE TO ANAEROBES
482.82 PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
482.83 PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
482.84 LEGIONNAIRES' DISEASE
482.89 PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
482.9 BACTERIAL PNEUMONIA, UNSPECIFIED
483.0 PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
483.1 PNEUMONIA DUE TO CHLAMYDIA
483.8 PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
484.3 PNEUMONIA IN WHOOPING COUGH
484.6 PNEUMONIA IN ASPERGILLOSIS
484.7 PNEUMONIA IN OTHER SYSTEMIC MYCOSES
485 BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED
486 PNEUMONIA, ORGANISM UNSPECIFIED
507.0 PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
799.02 HYPOXEMIA

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS or 998.59 OTHER POSTOPERATIVE INFECTION

- 995.92 SEVERE SEPSIS

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

560.1 PARALYTIC ILEUS
560.81 INTESTINAL OR PERITONEAL ADHESIONS WITH OBSTRUCTION (POSTOPERATIVE) (POSTINFECTION)

**Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS
or 998.2 ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE**

569.83 PERFORATION OF INTESTINE

Must occur with 997.5 URINARY COMPLICATIONS

584.5 ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
599.0 URINARY TRACT INFECTION, SITE NOT SPECIFIED
788.20 RETENTION OF URINE, UNSPECIFIED
788.29 OTHER SPECIFIED RETENTION OF URINE

Must occur with 998.0 POSTOPERATIVE SHOCK

458.8 OTHER SPECIFIED HYPOTENSION
458.9 HYPOTENSION, UNSPECIFIED

**Must occur with 998.11 HEMORRHAGE COMPLICATING A PROCEDURE or 998.2 ACCIDENTAL PUNCTURE OR
LACERATION DURING A PROCEDURE**

568.81 HEMOPERITONEUM (NONTRAUMATIC)

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

038.0 STREPTOCOCCAL SEPTICEMIA
038.12 METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA
682.2 CELLULITIS AND ABSCESS OF TRUNK
785.52 SEPTIC SHOCK
790.7 BACTEREMIA

Must occur with 998.51 INFECTED POSTOPERATIVE SEROMA or 998.59 OTHER POSTOPERATIVE INFECTION

041.4 ESCHERICHIA COLI [E. COLI] INFECTION IN CONDITIONS CLASSIFIED ELSEWHERE AND OF UNSPECIFIED SITE

Back and Neck Surgery (Without Spinal Fusion) – Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

038.0	STREPTOCOCCAL SEPTICEMIA
038.10	STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
038.11	METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.12	METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.19	OTHER STAPHYLOCOCCAL SEPTICEMIA
038.2	PNEUMOCOCCAL SEPTICEMIA
038.3	SEPTICEMIA DUE TO ANAEROBES
038.40	SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISM, UNSPECIFIED
038.41	SEPTICEMIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
038.42	SEPTICEMIA DUE TO ESCHERICHIA COLI [E. COLI]
038.43	SEPTICEMIA DUE TO PSEUDOMONAS
038.44	SEPTICEMIA DUE TO SERRATIA
038.49	OTHER SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISMS
038.8	OTHER SPECIFIED SEPTICEMIAS
038.9	UNSPECIFIED SEPTICEMIA
286.6	DEFIBRATION SYNDROME
292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
410.01	ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
410.11	ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
410.21	ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
410.31	ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
410.41	ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
410.51	ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
410.61	ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
410.81	ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
410.91	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
423.3	CARDIAC TAMPONADE
427.41	VENTRICULAR FIBRILLATION
427.5	CARDIAC ARREST
431	INTRACEREBRAL HEMORRHAGE
433.01	OCCLUSION AND STENOSIS OF BASILAR ARTERY WITH CEREBRAL INFARCTION
433.11	OCCLUSION AND STENOSIS OF CAROTID ARTERY WITH CEREBRAL INFARCTION
433.21	OCCLUSION AND STENOSIS OF VERTEBRAL ARTERY WITH CEREBRAL INFARCTION
433.31	OCCLUSION AND STENOSIS OF MULTIPLE AND BILATERAL PRECEREBRAL ARTERIES WITH CEREBRAL INFARCTION
433.81	OCCLUSION AND STENOSIS OF OTHER SPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
433.91	OCCLUSION AND STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
434.01	CEREBRAL THROMBOSIS WITH CEREBRAL INFARCTION
449	SEPTIC ARTERIAL EMBOLISM
453.40	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED DEEP VESSELS OF LOWER EXTREMITY
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.42	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF DISTAL LOWER EXTREMITY
453.82	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VEINS OF UPPER EXTREMITIES
480.0	PNEUMONIA DUE TO ADENOVIRUS
480.1	PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
480.2	PNEUMONIA DUE TO PARAINFLUENZA VIRUS
480.3	PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
480.8	PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
481	PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
482.0	PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
482.1	PNEUMONIA DUE TO PSEUDOMONAS
482.2	PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
482.30	PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
482.31	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
482.32	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
482.39	PNEUMONIA DUE TO OTHER STREPTOCOCCUS
482.40	PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
482.41	METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS

482.42	METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.49	OTHER STAPHYLOCOCCUS PNEUMONIA
482.81	PNEUMONIA DUE TO ANAEROBES
482.82	PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
482.83	PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
482.84	LEGIONNAIRES' DISEASE
482.89	PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
482.9	BACTERIAL PNEUMONIA, UNSPECIFIED
483.0	PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
483.1	PNEUMONIA DUE TO CHLAMYDIA
483.8	PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
484.1	PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE
484.3	PNEUMONIA IN WHOOPING COUGH
484.6	PNEUMONIA IN ASPERGILLOSIS
484.7	PNEUMONIA IN OTHER SYSTEMIC MYCOSES
486	PNEUMONIA, ORGANISM UNSPECIFIED
507.0	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
512.1	IATROGENIC PNEUMOTHORAX
514	PULMONARY CONGESTION AND HYPOSTASIS
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
518.81	ACUTE RESPIRATORY FAILURE
584.5	ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
584.8	ACUTE KIDNEY FAILURE WITH OTHER SPECIFIED PATHOLOGICAL LESION IN KIDNEY
584.9	ACUTE KIDNEY FAILURE, UNSPECIFIED
707.0	PRESSURE ULCER
707.00	PRESSURE ULCER, UNSPECIFIED SITE
707.01	PRESSURE ULCER, ELBOW
707.02	PRESSURE ULCER, UPPER BACK
707.03	PRESSURE ULCER, LOWER BACK
707.04	PRESSURE ULCER, HIP
707.05	PRESSURE ULCER, BUTTOCK
707.06	PRESSURE ULCER, ANKLE
707.07	PRESSURE ULCER, HEEL
707.09	PRESSURE ULCER, OTHER SITE
785.50	SHOCK, UNSPECIFIED
785.51	CARDIOGENIC SHOCK
785.52	SEPTIC SHOCK
785.59	OTHER SHOCK WITHOUT MENTION OF TRAUMA
799.1	RESPIRATORY ARREST
867.0	INJURY TO BLADDER AND URETHRA WITHOUT MENTION OF OPEN WOUND INTO CAVITY
995.91	SEPSIS
995.92	SEVERE SEPSIS
996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.09	OTHER NERVOUS SYSTEM COMPLICATIONS
997.1	CARDIAC COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA
997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC
998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.59	OTHER POSTOPERATIVE INFECTION
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER
999.32	BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
999.34	ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS
999.39	INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION

Back and Neck Surgery (Without Spinal Fusion) – Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.02 IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE

- 434.11 CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION
- 434.91 UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITH CEREBRAL INFARCTION

Must occur with 997.1 CARDIAC COMPLICATIONS

- 427.0 PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA
- 427.1 PAROXYSMAL VENTRICULAR TACHYCARDIA
- 427.31 ATRIAL FIBRILLATION
- 427.32 ATRIAL FLUTTER
- 428.0 CONGESTIVE HEART FAILURE, UNSPECIFIED
- 428.1 LEFT HEART FAILURE
- 428.21 ACUTE SYSTOLIC HEART FAILURE
- 428.23 ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
- 428.31 ACUTE DIASTOLIC HEART FAILURE
- 428.33 ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
- 428.41 ACUTE COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
- 428.43 ACUTE ON CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
- 428.9 HEART FAILURE, UNSPECIFIED

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

- 485 BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED
- 511.9 UNSPECIFIED PLEURAL EFFUSION
- 518.84 ACUTE AND CHRONIC RESPIRATORY FAILURE

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

- 560.1 PARALYTIC ILEUS

Must occur with 997.5 URINARY COMPLICATIONS

- 593.9 UNSPECIFIED DISORDER OF KIDNEY AND URETER

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

- 008.45 INTESTINAL INFECTION DUE TO CLOSTRIDIUM DIFFICILE

Must not occur with v15.88 PERSONAL HISTORY OF FALL, PRESENTING HAZARDS TO HEALTH or v42.4 BONE REPLACED BY TRANSPLANT or v43.64 HIP JOINT REPLACED BY OTHER MEANS or v43.65 KNEE JOINT REPLACED BY OTHER MEANS or v45.4 ARTHRODESIS STATUS or v54.01 ENCOUNTER FOR REMOVAL OF INTERNAL FIXATION DEVICE or v54.02 ENCOUNTER FOR LENGTHENING/ADJUSTMENT OF GROWTH ROD or v54.09 OTHER AFTERCARE INVOLVING INTERNAL FIXATION DEVICE

- 996.40 UNSPECIFIED MECHANICAL COMPLICATION OF INTERNAL ORTHOPEDIC DEVICE, IMPLANT, AND GRAFT
- 996.49 OTHER MECHANICAL COMPLICATION OF OTHER INTERNAL ORTHOPEDIC DEVICE, IMPLANT, AND GRAFT
- 996.78 OTHER COMPLICATIONS DUE TO OTHER INTERNAL ORTHOPEDIC DEVICE, IMPLANT, AND GRAFT

Carotid Surgery – Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

008.45	INTESTINAL INFECTION DUE TO CLOSTRIDIUM DIFFICILE
041.04	BACTERIAL INFECTION DUE TO STREPTOCOCCUS, GROUP D [ENTEROCOCCUS]
041.11	METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS IN CONDITIONS CLASSIFIED ELSEWHERE AND OF UNSPECIFIED SITE
041.7	PSEUDOMONAS INFECTION IN CONDITIONS CLASSIFIED ELSEWHERE AND OF UNSPECIFIED SITE
286.6	DEFIBRATION SYNDROME
292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
348.1	ANOXIC BRAIN DAMAGE
410.01	ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
410.11	ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
410.21	ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
410.51	ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
410.61	ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
410.81	ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
410.91	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
423.3	CARDIAC TAMPONADE
427.41	VENTRICULAR FIBRILLATION
427.5	CARDIAC ARREST
434.01	CEREBRAL THROMBOSIS WITH CEREBRAL INFARCTION
449	SEPTIC ARTERIAL EMBOLISM
453.40	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED DEEP VESSELS OF LOWER EXTREMITY
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.42	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF DISTAL LOWER EXTREMITY
453.82	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VEINS OF UPPER EXTREMITIES
480.0	PNEUMONIA DUE TO ADENOVIRUS
480.1	PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
480.2	PNEUMONIA DUE TO PARAINFLUENZA VIRUS
480.3	PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
480.8	PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
481	PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
482.0	PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
482.1	PNEUMONIA DUE TO PSEUDOMONAS
482.2	PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
482.30	PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
482.31	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
482.32	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
482.39	PNEUMONIA DUE TO OTHER STREPTOCOCCUS
482.40	PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
482.41	METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.42	METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.49	OTHER STAPHYLOCOCCUS PNEUMONIA
482.81	PNEUMONIA DUE TO ANAEROBES
482.82	PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
482.83	PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
482.84	LEGIONNAIRES' DISEASE
482.89	PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
482.9	BACTERIAL PNEUMONIA, UNSPECIFIED
483.0	PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
483.1	PNEUMONIA DUE TO CHLAMYDIA
483.8	PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
484.1	PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE
484.3	PNEUMONIA IN WHOOPING COUGH
484.6	PNEUMONIA IN ASPERGILLOSIS
484.7	PNEUMONIA IN OTHER SYSTEMIC MYCOSES
486	PNEUMONIA, ORGANISM UNSPECIFIED
507.0	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
512.1	IATROGENIC PNEUMOTHORAX

514	PULMONARY CONGESTION AND HYPOSTASIS
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
518.81	ACUTE RESPIRATORY FAILURE
518.84	ACUTE AND CHRONIC RESPIRATORY FAILURE
780.01	COMA
785.50	SHOCK, UNSPECIFIED
785.51	CARDIOGENIC SHOCK
785.52	SEPTIC SHOCK
785.59	OTHER SHOCK WITHOUT MENTION OF TRAUMA
867.0	INJURY TO BLADDER AND URETHRA WITHOUT MENTION OF OPEN WOUND INTO CAVITY
951.7	INJURY TO HYPOGLOSSAL NERVE
957.1	INJURY TO OTHER SPECIFIED NERVE(S)
995.91	SEPSIS
995.92	SEVERE SEPSIS
996.1	MECHANICAL COMPLICATION OF OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
996.74	OTHER COMPLICATIONS DUE TO OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
997.00	NERVOUS SYSTEM COMPLICATION, UNSPECIFIED
997.01	CENTRAL NERVOUS SYSTEM COMPLICATION
997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.09	OTHER NERVOUS SYSTEM COMPLICATIONS
997.1	CARDIAC COMPLICATIONS
997.2	PERIPHERAL VASCULAR COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA
997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
997.91	COMPLICATIONS AFFECTING OTHER SPECIFIED BODY SYSTEMS, HYPERTENSION
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC
998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.2	ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE
998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.59	OTHER POSTOPERATIVE INFECTION
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER
999.32	BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
999.34	ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS
999.39	INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION

Carotid Surgery – Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.02 IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE

433.01	OCCCLUSION AND STENOSIS OF BASILAR ARTERY WITH CEREBRAL INFARCTION
433.11	OCCCLUSION AND STENOSIS OF CAROTID ARTERY WITH CEREBRAL INFARCTION
433.21	OCCCLUSION AND STENOSIS OF VERTEBRAL ARTERY WITH CEREBRAL INFARCTION
433.31	OCCCLUSION AND STENOSIS OF MULTIPLE AND BILATERAL PRECEREBRAL ARTERIES WITH CEREBRAL INFARCTION
433.81	OCCCLUSION AND STENOSIS OF OTHER SPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
433.91	OCCCLUSION AND STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
434.11	CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION
434.91	UNSPECIFIED CEREBRAL ARTERY OCCCLUSION WITH CEREBRAL INFARCTION

Must occur with 997.1 CARDIAC COMPLICATIONS

410.31	ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
410.41	ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
427.0	PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA

- 427.1 PAROXYSMAL VENTRICULAR TACHYCARDIA
- 427.31 ATRIAL FIBRILLATION
- 427.32 ATRIAL FLUTTER
- 428.0 CONGESTIVE HEART FAILURE, UNSPECIFIED
- 428.1 LEFT HEART FAILURE
- 428.21 ACUTE SYSTOLIC HEART FAILURE
- 428.23 ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
- 428.31 ACUTE DIASTOLIC HEART FAILURE
- 428.33 ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
- 428.41 ACUTE COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
- 428.43 ACUTE ON CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
- 428.9 HEART FAILURE, UNSPECIFIED

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

- 485 BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

- 560.1 PARALYTIC ILEUS

Must occur with 997.5 URINARY COMPLICATIONS

- 584.5 ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
- 584.8 ACUTE KIDNEY FAILURE WITH OTHER SPECIFIED PATHOLOGICAL LESION IN KIDNEY
- 584.9 ACUTE KIDNEY FAILURE, UNSPECIFIED

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

- 038.0 STREPTOCOCCAL SEPTICEMIA
- 038.10 STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
- 038.11 METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA
- 038.12 METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA
- 038.19 OTHER STAPHYLOCOCCAL SEPTICEMIA
- 038.2 PNEUMOCOCCAL SEPTICEMIA
- 038.3 SEPTICEMIA DUE TO ANAEROBES
- 038.40 SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISM, UNSPECIFIED
- 038.41 SEPTICEMIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
- 038.42 SEPTICEMIA DUE TO ESCHERICHIA COLI [E. COLI]
- 038.43 SEPTICEMIA DUE TO PSEUDOMONAS
- 038.44 SEPTICEMIA DUE TO SERRATIA
- 038.49 OTHER SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISMS
- 038.8 OTHER SPECIFIED SEPTICEMIAS
- 038.9 UNSPECIFIED SEPTICEMIA

Defibrillator Procedures – Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

038.12	METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA
286.6	DEFIBRATION SYNDROME
292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
429.5	RUPTURE OF CHORDAE TENDINEAE
431	INTRACEREBRAL HEMORRHAGE
433.01	OCCLUSION AND STENOSIS OF BASILAR ARTERY WITH CEREBRAL INFARCTION
433.11	OCCLUSION AND STENOSIS OF CAROTID ARTERY WITH CEREBRAL INFARCTION
433.21	OCCLUSION AND STENOSIS OF VERTEBRAL ARTERY WITH CEREBRAL INFARCTION
433.31	OCCLUSION AND STENOSIS OF MULTIPLE AND BILATERAL PRECEREBRAL ARTERIES WITH CEREBRAL INFARCTION
433.81	OCCLUSION AND STENOSIS OF OTHER SPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
433.91	OCCLUSION AND STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
434.01	CEREBRAL THROMBOSIS WITH CEREBRAL INFARCTION
435.1	VERTEBRAL ARTERY SYNDROME
435.2	SUBCLAVIAN STEAL SYNDROME
435.3	VERTEBROBASILAR ARTERY SYNDROME
435.8	OTHER SPECIFIED TRANSIENT CEREBRAL ISCHEMIAS
444.09	OTHER ARTERIAL EMBOLISM AND THROMBOSIS OF ABDOMINAL AORTA
444.1	EMBOLISM AND THROMBOSIS OF THORACIC AORTA
444.21	ARTERIAL EMBOLISM AND THROMBOSIS OF UPPER EXTREMITY
444.22	ARTERIAL EMBOLISM AND THROMBOSIS OF LOWER EXTREMITY
444.81	EMBOLISM AND THROMBOSIS OF ILIAC ARTERY
444.89	EMBOLISM AND THROMBOSIS OF OTHER ARTERY
444.9	EMBOLISM AND THROMBOSIS OF UNSPECIFIED ARTERY
449	SEPTIC ARTERIAL EMBOLISM
453.40	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED DEEP VESSELS OF LOWER EXTREMITY
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.42	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF DISTAL LOWER EXTREMITY
453.82	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VEINS OF UPPER EXTREMITIES
512.1	IATROGENIC PNEUMOTHORAX
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
707.0	PRESSURE ULCER
707.00	PRESSURE ULCER, UNSPECIFIED SITE
707.01	PRESSURE ULCER, ELBOW
707.02	PRESSURE ULCER, UPPER BACK
707.03	PRESSURE ULCER, LOWER BACK
707.04	PRESSURE ULCER, HIP
707.05	PRESSURE ULCER, BUTTOCK
707.06	PRESSURE ULCER, ANKLE
707.07	PRESSURE ULCER, HEEL
707.09	PRESSURE ULCER, OTHER SITE
785.50	SHOCK, UNSPECIFIED
785.52	SEPTIC SHOCK
785.59	OTHER SHOCK WITHOUT MENTION OF TRAUMA
799.1	RESPIRATORY ARREST
867.0	INJURY TO BLADDER AND URETHRA WITHOUT MENTION OF OPEN WOUND INTO CAVITY
995.29	UNSPECIFIED ADVERSE EFFECT OF OTHER DRUG, MEDICINAL AND BIOLOGICAL SUBSTANCE
995.91	SEPSIS
995.92	SEVERE SEPSIS
996.01	MECHANICAL COMPLICATION DUE TO CARDIAC PACEMAKER (ELECTRODE)
996.04	MECHANICAL COMPLICATION DUE TO AUTOMATIC IMPLANTABLE CARDIAC DEFIBRILLATOR
996.09	OTHER MECHANICAL COMPLICATION OF CARDIAC DEVICE, IMPLANT, AND GRAFT
996.1	MECHANICAL COMPLICATION OF OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
996.61	INFECTION AND INFLAMMATORY REACTION DUE TO CARDIAC DEVICE, IMPLANT, AND GRAFT
996.62	INFECTION AND INFLAMMATORY REACTION DUE TO OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
996.72	OTHER COMPLICATIONS DUE TO OTHER CARDIAC DEVICE, IMPLANT, AND GRAFT
996.74	OTHER COMPLICATIONS DUE TO OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
996.76	OTHER COMPLICATIONS DUE TO GENITOURINARY DEVICE, IMPLANT, AND GRAFT
997.01	CENTRAL NERVOUS SYSTEM COMPLICATION

997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.09	OTHER NERVOUS SYSTEM COMPLICATIONS
997.1	CARDIAC COMPLICATIONS
997.2	PERIPHERAL VASCULAR COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA
997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
997.79	VASCULAR COMPLICATIONS OF OTHER VESSELS
997.99	OTHER COMPLICATIONS AFFECTING OTHER SPECIFIED BODY SYSTEMS
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC
998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.12	HEMATOMA COMPLICATING A PROCEDURE
998.2	ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE
998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.59	OTHER POSTOPERATIVE INFECTION
998.81	EMPHYSEMA (SUBCUTANEOUS) (SURGICAL) RESULTING FROM PROCEDURE
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER
999.32	BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
999.34	ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS
999.39	INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION

Defibrillator Procedures – Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.02 IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE

434.11	CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION
434.91	UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITH CEREBRAL INFARCTION

Must occur with 997.1 CARDIAC COMPLICATIONS

410.01	ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
410.11	ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
410.21	ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
410.31	ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
410.41	ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
410.51	ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
410.61	ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
410.81	ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
410.91	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
420.0	ACUTE PERICARDITIS IN DISEASES CLASSIFIED ELSEWHERE
420.9	OTHER AND UNSPECIFIED ACUTE PERICARDITIS
420.90	ACUTE PERICARDITIS, UNSPECIFIED
420.99	OTHER ACUTE PERICARDITIS
423.3	CARDIAC TAMPONADE
426.0	ATRIOVENTRICULAR BLOCK, COMPLETE
426.13	OTHER SECOND DEGREE ATRIOVENTRICULAR BLOCK
426.4	RIGHT BUNDLE BRANCH BLOCK
427.5	CARDIAC ARREST

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
480.0	PNEUMONIA DUE TO ADENOVIRUS
480.1	PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
480.2	PNEUMONIA DUE TO PARAINFLUENZA VIRUS

480.3 PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
480.8 PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
481 PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
482.0 PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
482.1 PNEUMONIA DUE TO PSEUDOMONAS
482.2 PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
482.30 PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
482.31 PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
482.32 PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
482.39 PNEUMONIA DUE TO OTHER STREPTOCOCCUS
482.40 PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
482.41 METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.42 METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.49 OTHER STAPHYLOCOCCUS PNEUMONIA
482.81 PNEUMONIA DUE TO ANAEROBES
482.82 PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
482.83 PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
482.84 LEGIONNAIRES' DISEASE
482.89 PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
482.9 BACTERIAL PNEUMONIA, UNSPECIFIED
483.0 PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
483.1 PNEUMONIA DUE TO CHLAMYDIA
483.8 PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
484.1 PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE
484.3 PNEUMONIA IN WHOOPING COUGH
484.6 PNEUMONIA IN ASPERGILLOSIS
484.7 PNEUMONIA IN OTHER SYSTEMIC MYCOSES
485 BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED
486 PNEUMONIA, ORGANISM UNSPECIFIED
507.0 PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
518.81 ACUTE RESPIRATORY FAILURE
518.84 ACUTE AND CHRONIC RESPIRATORY FAILURE

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

560.1 PARALYTIC ILEUS

Must occur with 997.5 URINARY COMPLICATIONS

584.5 ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
584.8 ACUTE KIDNEY FAILURE WITH OTHER SPECIFIED PATHOLOGICAL LESION IN KIDNEY
584.9 ACUTE KIDNEY FAILURE, UNSPECIFIED

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

008.45 INTESTINAL INFECTION DUE TO CLOSTRIDIUM DIFFICILE
038.0 STREPTOCOCCAL SEPTICEMIA
038.10 STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
038.11 METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.19 OTHER STAPHYLOCOCCAL SEPTICEMIA
038.2 PNEUMOCOCCAL SEPTICEMIA
038.3 SEPTICEMIA DUE TO ANAEROBES
038.40 SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISM, UNSPECIFIED
038.41 SEPTICEMIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
038.42 SEPTICEMIA DUE TO ESCHERICHIA COLI [E. COLI]
038.43 SEPTICEMIA DUE TO PSEUDOMONAS
038.44 SEPTICEMIA DUE TO SERRATIA
038.49 OTHER SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISMS
038.8 OTHER SPECIFIED SEPTICEMIAS
038.9 UNSPECIFIED SEPTICEMIA

Gallbladder Removal Surgery (Cholecystectomy) – Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

286.6	DEFIBRATION SYNDROME
292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
423.3	CARDIAC TAMPONADE
427.5	CARDIAC ARREST
431	INTRACEREBRAL HEMORRHAGE
433.01	OCCLUSION AND STENOSIS OF BASILAR ARTERY WITH CEREBRAL INFARCTION
433.11	OCCLUSION AND STENOSIS OF CAROTID ARTERY WITH CEREBRAL INFARCTION
433.21	OCCLUSION AND STENOSIS OF VERTEBRAL ARTERY WITH CEREBRAL INFARCTION
433.31	OCCLUSION AND STENOSIS OF MULTIPLE AND BILATERAL PRECEREBRAL ARTERIES WITH CEREBRAL INFARCTION
433.81	OCCLUSION AND STENOSIS OF OTHER SPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
433.91	OCCLUSION AND STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
434.01	CEREBRAL THROMBOSIS WITH CEREBRAL INFARCTION
434.11	CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION
434.91	UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITH CEREBRAL INFARCTION
449	SEPTIC ARTERIAL EMBOLISM
453.40	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED DEEP VESSELS OF LOWER EXTREMITY
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.42	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF DISTAL LOWER EXTREMITY
453.82	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VEINS OF UPPER EXTREMITIES
458.29	OTHER IATROGENIC HYPOTENSION
480.0	PNEUMONIA DUE TO ADENOVIRUS
480.1	PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
480.2	PNEUMONIA DUE TO PARAINFLUENZA VIRUS
480.3	PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
480.8	PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
484.1	PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE
512.1	IATROGENIC PNEUMOTHORAX
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
518.81	ACUTE RESPIRATORY FAILURE
518.84	ACUTE AND CHRONIC RESPIRATORY FAILURE
54.12	REOPENING OF RECENT LAPAROTOMY SITE
54.61	RECLOSURE OF POSTOPERATIVE DISRUPTION OF ABDOMINAL WALL
567.21	PERITONITIS (ACUTE) GENERALIZED
567.22	PERITONEAL ABSCESS
567.29	OTHER SUPPURATIVE PERITONITIS
785.59	OTHER SHOCK WITHOUT MENTION OF TRAUMA
867.0	INJURY TO BLADDER AND URETHRA WITHOUT MENTION OF OPEN WOUND INTO CAVITY
996.62	INFECTION AND INFLAMMATORY REACTION DUE TO OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
996.76	OTHER COMPLICATIONS DUE TO GENITOURINARY DEVICE, IMPLANT, AND GRAFT
997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.1	CARDIAC COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA
997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC
998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.12	HEMATOMA COMPLICATING A PROCEDURE
998.2	ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE

998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.4	FOREIGN BODY ACCIDENTALLY LEFT DURING A PROCEDURE
998.59	OTHER POSTOPERATIVE INFECTION
998.6	PERSISTENT POSTOPERATIVE FISTULA
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER
999.32	BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
999.34	ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS
999.39	INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION

Gallbladder Removal Surgery (Cholecystectomy) – Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.1 CARDIAC COMPLICATIONS

410.01	ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
410.11	ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
410.21	ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
410.31	ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
410.41	ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
410.51	ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
410.61	ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
410.81	ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
410.91	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
427.0	PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA
427.1	PAROXYSMAL VENTRICULAR TACHYCARDIA
427.31	ATRIAL FIBRILLATION
427.32	ATRIAL FLUTTER
427.41	VENTRICULAR FIBRILLATION
428.0	CONGESTIVE HEART FAILURE, UNSPECIFIED
428.1	LEFT HEART FAILURE
428.21	ACUTE SYSTOLIC HEART FAILURE
428.23	ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
428.31	ACUTE DIASTOLIC HEART FAILURE
428.33	ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
428.41	ACUTE COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.43	ACUTE ON CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.9	HEART FAILURE, UNSPECIFIED

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

481	PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
482.0	PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
482.1	PNEUMONIA DUE TO PSEUDOMONAS
482.2	PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
482.30	PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
482.31	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
482.32	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
482.39	PNEUMONIA DUE TO OTHER STREPTOCOCCUS
482.40	PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
482.41	METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.42	METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.49	OTHER STAPHYLOCOCCUS PNEUMONIA
482.81	PNEUMONIA DUE TO ANAEROBES
482.82	PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
482.83	PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
482.84	LEGIONNAIRES' DISEASE
482.89	PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
482.9	BACTERIAL PNEUMONIA, UNSPECIFIED
483.0	PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
483.1	PNEUMONIA DUE TO CHLAMYDIA
483.8	PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
484.3	PNEUMONIA IN WHOOPING COUGH
484.6	PNEUMONIA IN ASPERGILLOSIS

- 484.7 PNEUMONIA IN OTHER SYSTEMIC MYCOSES
- 485 BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED
- 486 PNEUMONIA, ORGANISM UNSPECIFIED
- 507.0 PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

- 560.1 PARALYTIC ILEUS

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS or 998.2 ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE

- 569.83 PERFORATION OF INTESTINE

Must occur with 997.5 URINARY COMPLICATIONS

- 584.5 ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
- 584.8 ACUTE KIDNEY FAILURE WITH OTHER SPECIFIED PATHOLOGICAL LESION IN KIDNEY
- 584.9 ACUTE KIDNEY FAILURE, UNSPECIFIED

Must occur with 998.11 HEMORRHAGE COMPLICATING A PROCEDURE or 998.2 ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE

- 568.81 HEMOPERITONEUM (NONTRAUMATIC)

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

- 008.45 INTESTINAL INFECTION DUE TO CLOSTRIDIUM DIFFICILE
- 038.0 STREPTOCOCCAL SEPTICEMIA
- 038.10 STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
- 038.11 METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA
- 038.12 METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA
- 038.19 OTHER STAPHYLOCOCCAL SEPTICEMIA
- 038.2 PNEUMOCOCCAL SEPTICEMIA
- 038.3 SEPTICEMIA DUE TO ANAEROBES
- 038.40 SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISM, UNSPECIFIED
- 038.41 SEPTICEMIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
- 038.42 SEPTICEMIA DUE TO ESCHERICHIA COLI [E. COLI]
- 038.43 SEPTICEMIA DUE TO PSEUDOMONAS
- 038.44 SEPTICEMIA DUE TO SERRATIA
- 038.49 OTHER SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISMS
- 038.8 OTHER SPECIFIED SEPTICEMIAS
- 038.9 UNSPECIFIED SEPTICEMIA
- 567.89 OTHER SPECIFIED PERITONITIS
- 567.9 UNSPECIFIED PERITONITIS
- 682.2 CELLULITIS AND ABSCESS OF TRUNK
- 785.52 SEPTIC SHOCK
- 790.7 BACTEREMIA
- 995.91 SEPSIS
- 995.92 SEVERE SEPSIS

Hip Fracture Treatment – Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

286.6	DEFIBRATION SYNDROME
292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
423.3	CARDIAC TAMPONADE
427.41	VENTRICULAR FIBRILLATION
427.5	CARDIAC ARREST
431	INTRACEREBRAL HEMORRHAGE
433.01	OCCLUSION AND STENOSIS OF BASILAR ARTERY WITH CEREBRAL INFARCTION
433.11	OCCLUSION AND STENOSIS OF CAROTID ARTERY WITH CEREBRAL INFARCTION
433.21	OCCLUSION AND STENOSIS OF VERTEBRAL ARTERY WITH CEREBRAL INFARCTION
433.31	OCCLUSION AND STENOSIS OF MULTIPLE AND BILATERAL PRECEREBRAL ARTERIES WITH CEREBRAL INFARCTION
433.81	OCCLUSION AND STENOSIS OF OTHER SPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
433.91	OCCLUSION AND STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
434.01	CEREBRAL THROMBOSIS WITH CEREBRAL INFARCTION
449	SEPTIC ARTERIAL EMBOLISM
453.40	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED DEEP VESSELS OF LOWER EXTREMITY
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.42	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF DISTAL LOWER EXTREMITY
453.82	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VEINS OF UPPER EXTREMITIES
512.1	IATROGENIC PNEUMOTHORAX
514	PULMONARY CONGESTION AND HYPOSTASIS
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
707.0	PRESSURE ULCER
707.00	PRESSURE ULCER, UNSPECIFIED SITE
707.01	PRESSURE ULCER, ELBOW
707.02	PRESSURE ULCER, UPPER BACK
707.03	PRESSURE ULCER, LOWER BACK
707.04	PRESSURE ULCER, HIP
707.05	PRESSURE ULCER, BUTTOCK
707.06	PRESSURE ULCER, ANKLE
707.07	PRESSURE ULCER, HEEL
707.09	PRESSURE ULCER, OTHER SITE
785.50	SHOCK, UNSPECIFIED
785.51	CARDIOGENIC SHOCK
785.59	OTHER SHOCK WITHOUT MENTION OF TRAUMA
867.0	INJURY TO BLADDER AND URETHRA WITHOUT MENTION OF OPEN WOUND INTO CAVITY
996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.09	OTHER NERVOUS SYSTEM COMPLICATIONS
997.1	CARDIAC COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA
997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC
998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.2	ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE
998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.59	OTHER POSTOPERATIVE INFECTION
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER

- 999.32 BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
- 999.34 ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS
- 999.39 INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION

Hip Fracture Treatment – Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.02 IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE

- 434.11 CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION
- 434.91 UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITH CEREBRAL INFARCTION

Must occur with 997.1 CARDIAC COMPLICATIONS

- 410.01 ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
- 410.11 ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
- 410.21 ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
- 410.31 ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
- 410.41 ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
- 410.51 ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
- 410.61 ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
- 410.71 ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
- 410.81 ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
- 410.91 ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
- 427.0 PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA
- 427.1 PAROXYSMAL VENTRICULAR TACHYCARDIA
- 427.31 ATRIAL FIBRILLATION
- 427.32 ATRIAL FLUTTER
- 428.0 CONGESTIVE HEART FAILURE, UNSPECIFIED
- 428.1 LEFT HEART FAILURE
- 428.21 ACUTE SYSTOLIC HEART FAILURE
- 428.23 ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
- 428.31 ACUTE DIASTOLIC HEART FAILURE
- 428.33 ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
- 428.41 ACUTE COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
- 428.43 ACUTE ON CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
- 428.9 HEART FAILURE, UNSPECIFIED

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

- 480.0 PNEUMONIA DUE TO ADENOVIRUS
- 480.1 PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
- 480.2 PNEUMONIA DUE TO PARAINFLUENZA VIRUS
- 480.3 PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
- 480.8 PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
- 481 PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
- 482.0 PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
- 482.1 PNEUMONIA DUE TO PSEUDOMONAS
- 482.2 PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
- 482.30 PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
- 482.31 PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
- 482.32 PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
- 482.39 PNEUMONIA DUE TO OTHER STREPTOCOCCUS
- 482.40 PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
- 482.41 METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
- 482.42 METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
- 482.49 OTHER STAPHYLOCOCCUS PNEUMONIA
- 482.81 PNEUMONIA DUE TO ANAEROBES
- 482.82 PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
- 482.83 PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
- 482.84 LEGIONNAIRES' DISEASE
- 482.89 PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
- 482.9 BACTERIAL PNEUMONIA, UNSPECIFIED
- 483.0 PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
- 483.1 PNEUMONIA DUE TO CHLAMYDIA
- 483.8 PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
- 484.1 PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE

- 484.3 PNEUMONIA IN WHOOPING COUGH
- 484.6 PNEUMONIA IN ASPERGILLOSIS
- 484.7 PNEUMONIA IN OTHER SYSTEMIC MYCOSES
- 485 BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED
- 486 PNEUMONIA, ORGANISM UNSPECIFIED
- 507.0 PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
- 511.9 UNSPECIFIED PLEURAL EFFUSION
- 518.81 ACUTE RESPIRATORY FAILURE
- 518.84 ACUTE AND CHRONIC RESPIRATORY FAILURE
- 799.1 RESPIRATORY ARREST

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

- 560.1 PARALYTIC ILEUS

Must occur with 997.5 URINARY COMPLICATIONS

- 584.5 ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
- 584.8 ACUTE KIDNEY FAILURE WITH OTHER SPECIFIED PATHOLOGICAL LESION IN KIDNEY
- 584.9 ACUTE KIDNEY FAILURE, UNSPECIFIED
- 593.9 UNSPECIFIED DISORDER OF KIDNEY AND URETER

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

- 008.45 INTESTINAL INFECTION DUE TO CLOSTRIDIUM DIFFICILE
- 038.0 STREPTOCOCCAL SEPTICEMIA
- 038.10 STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
- 038.11 METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA
- 038.12 METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA
- 038.19 OTHER STAPHYLOCOCCAL SEPTICEMIA
- 038.2 PNEUMOCOCCAL SEPTICEMIA
- 038.3 SEPTICEMIA DUE TO ANAEROBES
- 038.40 SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISM, UNSPECIFIED
- 038.41 SEPTICEMIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
- 038.42 SEPTICEMIA DUE TO ESCHERICHIA COLI [E. COLI]
- 038.43 SEPTICEMIA DUE TO PSEUDOMONAS
- 038.44 SEPTICEMIA DUE TO SERRATIA
- 038.49 OTHER SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISMS
- 038.8 OTHER SPECIFIED SEPTICEMIAS
- 038.9 UNSPECIFIED SEPTICEMIA
- 785.52 SEPTIC SHOCK
- 995.91 SEPSIS
- 995.92 SEVERE SEPSIS

Must not occur with v42.4 BONE REPLACED BY TRANSPLANT or v43.64 HIP JOINT REPLACED BY OTHER MEANS or v43.65 KNEE JOINT REPLACED BY OTHER MEANS or v45.4 ARTHRODESIS STATUS or v54.01 ENCOUNTER FOR REMOVAL OF INTERNAL FIXATION DEVICE or v54.02 ENCOUNTER FOR LENGTHENING/ADJUSTMENT OF GROWTH ROD or v54.09 OTHER AFTERCARE INVOLVING INTERNAL FIXATION DEVICE

- 996.77 OTHER COMPLICATIONS DUE TO INTERNAL JOINT PROSTHESIS

Hip Replacement – Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

038.0	STREPTOCOCCAL SEPTICEMIA
038.10	STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
038.11	METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.12	METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.19	OTHER STAPHYLOCOCCAL SEPTICEMIA
038.2	PNEUMOCOCCAL SEPTICEMIA
038.3	SEPTICEMIA DUE TO ANAEROBES
038.40	SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISM, UNSPECIFIED
038.41	SEPTICEMIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
038.42	SEPTICEMIA DUE TO ESCHERICHIA COLI [E. COLI]
038.43	SEPTICEMIA DUE TO PSEUDOMONAS
038.44	SEPTICEMIA DUE TO SERRATIA
038.49	OTHER SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISMS
038.8	OTHER SPECIFIED SEPTICEMIAS
038.9	UNSPECIFIED SEPTICEMIA
286.6	DEFIBRATION SYNDROME
292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
410.01	ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
410.11	ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
410.21	ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
410.31	ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
410.41	ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
410.51	ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
410.61	ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
410.81	ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
410.91	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
423.3	CARDIAC TAMPONADE
427.41	VENTRICULAR FIBRILLATION
427.5	CARDIAC ARREST
431	INTRACEREBRAL HEMORRHAGE
433.01	OCCLUSION AND STENOSIS OF BASILAR ARTERY WITH CEREBRAL INFARCTION
433.11	OCCLUSION AND STENOSIS OF CAROTID ARTERY WITH CEREBRAL INFARCTION
433.21	OCCLUSION AND STENOSIS OF VERTEBRAL ARTERY WITH CEREBRAL INFARCTION
433.31	OCCLUSION AND STENOSIS OF MULTIPLE AND BILATERAL PRECEREBRAL ARTERIES WITH CEREBRAL INFARCTION
433.81	OCCLUSION AND STENOSIS OF OTHER SPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
433.91	OCCLUSION AND STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
434.01	CEREBRAL THROMBOSIS WITH CEREBRAL INFARCTION
449	SEPTIC ARTERIAL EMBOLISM
453.40	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED DEEP VESSELS OF LOWER EXTREMITY
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.42	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF DISTAL LOWER EXTREMITY
453.82	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VEINS OF UPPER EXTREMITIES
480.0	PNEUMONIA DUE TO ADENOVIRUS
480.1	PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
480.2	PNEUMONIA DUE TO PARAINFLUENZA VIRUS
480.3	PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
480.8	PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
481	PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
482.0	PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
482.1	PNEUMONIA DUE TO PSEUDOMONAS
482.2	PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
482.30	PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
482.31	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
482.32	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
482.39	PNEUMONIA DUE TO OTHER STREPTOCOCCUS
482.40	PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
482.41	METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS

482.42	METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.49	OTHER STAPHYLOCOCCUS PNEUMONIA
482.81	PNEUMONIA DUE TO ANAEROBES
482.82	PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
482.83	PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
482.84	LEGIONNAIRES' DISEASE
482.89	PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
482.9	BACTERIAL PNEUMONIA, UNSPECIFIED
483.0	PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
483.1	PNEUMONIA DUE TO CHLAMYDIA
483.8	PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
484.1	PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE
484.3	PNEUMONIA IN WHOOPING COUGH
484.6	PNEUMONIA IN ASPERGILLOSIS
484.7	PNEUMONIA IN OTHER SYSTEMIC MYCOSES
485	BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED
486	PNEUMONIA, ORGANISM UNSPECIFIED
507.0	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
512.1	IATROGENIC PNEUMOTHORAX
514	PULMONARY CONGESTION AND HYPOSTASIS
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
518.81	ACUTE RESPIRATORY FAILURE
584.5	ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
584.8	ACUTE KIDNEY FAILURE WITH OTHER SPECIFIED PATHOLOGICAL LESION IN KIDNEY
584.9	ACUTE KIDNEY FAILURE, UNSPECIFIED
707.0	PRESSURE ULCER
707.00	PRESSURE ULCER, UNSPECIFIED SITE
707.01	PRESSURE ULCER, ELBOW
707.02	PRESSURE ULCER, UPPER BACK
707.03	PRESSURE ULCER, LOWER BACK
707.04	PRESSURE ULCER, HIP
707.05	PRESSURE ULCER, BUTTOCK
707.06	PRESSURE ULCER, ANKLE
707.07	PRESSURE ULCER, HEEL
707.09	PRESSURE ULCER, OTHER SITE
785.50	SHOCK, UNSPECIFIED
785.51	CARDIOGENIC SHOCK
785.52	SEPTIC SHOCK
785.59	OTHER SHOCK WITHOUT MENTION OF TRAUMA
799.1	RESPIRATORY ARREST
867.0	INJURY TO BLADDER AND URETHRA WITHOUT MENTION OF OPEN WOUND INTO CAVITY
995.91	SEPSIS
995.92	SEVERE SEPSIS
996.42	DISLOCATION OF PROSTHETIC JOINT
996.44	PERI-PROSTHETIC FRACTURE AROUND PROSTHETIC JOINT
996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.09	OTHER NERVOUS SYSTEM COMPLICATIONS
997.1	CARDIAC COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA
997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC
998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.2	ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE
998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.59	OTHER POSTOPERATIVE INFECTION
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER
999.32	BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
999.34	ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS

999.39 INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION
999.8 OTHER AND UNSPECIFIED INFUSION AND TRANSFUSION REACTION

Hip Replacement – Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.02 IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE

434.11 CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION
434.91 UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITH CEREBRAL INFARCTION

Must occur with 997.1 CARDIAC COMPLICATIONS

427.0 PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA
427.1 PAROXYSMAL VENTRICULAR TACHYCARDIA
427.31 ATRIAL FIBRILLATION
427.32 ATRIAL FLUTTER
428.0 CONGESTIVE HEART FAILURE, UNSPECIFIED
428.1 LEFT HEART FAILURE
428.21 ACUTE SYSTOLIC HEART FAILURE
428.23 ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
428.31 ACUTE DIASTOLIC HEART FAILURE
428.33 ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
428.41 ACUTE COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.43 ACUTE ON CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.9 HEART FAILURE, UNSPECIFIED

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

511.9 UNSPECIFIED PLEURAL EFFUSION
518.84 ACUTE AND CHRONIC RESPIRATORY FAILURE

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

560.1 PARALYTIC ILEUS

Must occur with 997.5 URINARY COMPLICATIONS

593.9 UNSPECIFIED DISORDER OF KIDNEY AND URETER

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

008.45 INTESTINAL INFECTION DUE TO CLOSTRIDIUM DIFFICILE

Must not occur with v15.88 PERSONAL HISTORY OF FALL, PRESENTING HAZARDS TO HEALTH or v42.4 BONE REPLACED BY TRANSPLANT or v43.64 HIP JOINT REPLACED BY OTHER MEANS or v43.65 KNEE JOINT REPLACED BY OTHER MEANS or v45.4 ARTHRODESIS STATUS or v54.01 ENCOUNTER FOR REMOVAL OF INTERNAL FIXATION DEVICE or v54.02 ENCOUNTER FOR LENGTHENING/ADJUSTMENT OF GROWTH ROD or v54.09 OTHER AFTERCARE INVOLVING INTERNAL FIXATION DEVICE

996.40 UNSPECIFIED MECHANICAL COMPLICATION OF INTERNAL ORTHOPEDIC DEVICE, IMPLANT, AND GRAFT
996.47 OTHER MECHANICAL COMPLICATION OF PROSTHETIC JOINT IMPLANT
996.49 OTHER MECHANICAL COMPLICATION OF OTHER INTERNAL ORTHOPEDIC DEVICE, IMPLANT, AND GRAFT
996.77 OTHER COMPLICATIONS DUE TO INTERNAL JOINT PROSTHESIS
996.78 OTHER COMPLICATIONS DUE TO OTHER INTERNAL ORTHOPEDIC DEVICE, IMPLANT, AND GRAFT

Pacemaker Procedures – Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
433.01	OCCLUSION AND STENOSIS OF BASILAR ARTERY WITH CEREBRAL INFARCTION
433.11	OCCLUSION AND STENOSIS OF CAROTID ARTERY WITH CEREBRAL INFARCTION
433.21	OCCLUSION AND STENOSIS OF VERTEBRAL ARTERY WITH CEREBRAL INFARCTION
433.31	OCCLUSION AND STENOSIS OF MULTIPLE AND BILATERAL PRECEREBRAL ARTERIES WITH CEREBRAL INFARCTION
433.81	OCCLUSION AND STENOSIS OF OTHER SPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
433.91	OCCLUSION AND STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
435.1	VERTEBRAL ARTERY SYNDROME
435.2	SUBCLAVIAN STEAL SYNDROME
435.3	VERTEBROBASILAR ARTERY SYNDROME
444.09	OTHER ARTERIAL EMBOLISM AND THROMBOSIS OF ABDOMINAL AORTA
444.1	EMBOLISM AND THROMBOSIS OF THORACIC AORTA
444.21	ARTERIAL EMBOLISM AND THROMBOSIS OF UPPER EXTREMITY
444.22	ARTERIAL EMBOLISM AND THROMBOSIS OF LOWER EXTREMITY
444.81	EMBOLISM AND THROMBOSIS OF ILIAC ARTERY
444.89	EMBOLISM AND THROMBOSIS OF OTHER ARTERY
444.9	EMBOLISM AND THROMBOSIS OF UNSPECIFIED ARTERY
449	SEPTIC ARTERIAL EMBOLISM
453.40	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED DEEP VESSELS OF LOWER EXTREMITY
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.42	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF DISTAL LOWER EXTREMITY
453.82	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VEINS OF UPPER EXTREMITIES
512.1	IATROGENIC PNEUMOTHORAX
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
707.0	PRESSURE ULCER
707.00	PRESSURE ULCER, UNSPECIFIED SITE
707.01	PRESSURE ULCER, ELBOW
707.02	PRESSURE ULCER, UPPER BACK
707.03	PRESSURE ULCER, LOWER BACK
707.04	PRESSURE ULCER, HIP
707.05	PRESSURE ULCER, BUTTOCK
707.06	PRESSURE ULCER, ANKLE
707.07	PRESSURE ULCER, HEEL
707.09	PRESSURE ULCER, OTHER SITE
785.50	SHOCK, UNSPECIFIED
785.52	SEPTIC SHOCK
785.59	OTHER SHOCK WITHOUT MENTION OF TRAUMA
799.1	RESPIRATORY ARREST
867.0	INJURY TO BLADDER AND URETHRA WITHOUT MENTION OF OPEN WOUND INTO CAVITY
995.29	UNSPECIFIED ADVERSE EFFECT OF OTHER DRUG, MEDICINAL AND BIOLOGICAL SUBSTANCE
995.91	SEPSIS
995.92	SEVERE SEPSIS
996.01	MECHANICAL COMPLICATION DUE TO CARDIAC PACEMAKER (ELECTRODE)
996.04	MECHANICAL COMPLICATION DUE TO AUTOMATIC IMPLANTABLE CARDIAC DEFIBRILLATOR
996.09	OTHER MECHANICAL COMPLICATION OF CARDIAC DEVICE, IMPLANT, AND GRAFT
996.1	MECHANICAL COMPLICATION OF OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
996.61	INFECTION AND INFLAMMATORY REACTION DUE TO CARDIAC DEVICE, IMPLANT, AND GRAFT
996.62	INFECTION AND INFLAMMATORY REACTION DUE TO OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
996.72	OTHER COMPLICATIONS DUE TO OTHER CARDIAC DEVICE, IMPLANT, AND GRAFT
996.74	OTHER COMPLICATIONS DUE TO OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
996.76	OTHER COMPLICATIONS DUE TO GENITOURINARY DEVICE, IMPLANT, AND GRAFT
997.01	CENTRAL NERVOUS SYSTEM COMPLICATION
997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.09	OTHER NERVOUS SYSTEM COMPLICATIONS
997.1	CARDIAC COMPLICATIONS
997.2	PERIPHERAL VASCULAR COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA

997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
997.79	VASCULAR COMPLICATIONS OF OTHER VESSELS
997.99	OTHER COMPLICATIONS AFFECTING OTHER SPECIFIED BODY SYSTEMS
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC
998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.12	HEMATOMA COMPLICATING A PROCEDURE
998.2	ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE
998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.59	OTHER POSTOPERATIVE INFECTION
998.81	EMPHYSEMA (SUBCUTANEOUS) (SURGICAL) RESULTING FROM PROCEDURE
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER
999.32	BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
999.34	ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS
999.39	INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION

Pacemaker Procedures – Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.02 IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE

431	INTRACEREBRAL HEMORRHAGE
434.01	CEREBRAL THROMBOSIS WITH CEREBRAL INFARCTION
434.11	CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION
434.91	UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITH CEREBRAL INFARCTION

Must occur with 997.1 CARDIAC COMPLICATIONS

286.6	DEFIBRINATION SYNDROME
410.01	ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
410.11	ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
410.21	ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
410.31	ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
410.41	ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
410.51	ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
410.61	ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
410.81	ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
410.91	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
420.0	ACUTE PERICARDITIS IN DISEASES CLASSIFIED ELSEWHERE
420.90	ACUTE PERICARDITIS, UNSPECIFIED
420.99	OTHER ACUTE PERICARDITIS
423.3	CARDIAC TAMPONADE
426.13	OTHER SECOND DEGREE ATRIOVENTRICULAR BLOCK
426.4	RIGHT BUNDLE BRANCH BLOCK
427.5	CARDIAC ARREST

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
480.0	PNEUMONIA DUE TO ADENOVIRUS
480.1	PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
480.2	PNEUMONIA DUE TO PARAINFLUENZA VIRUS
480.3	PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
480.8	PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
481	PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
482.0	PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
482.1	PNEUMONIA DUE TO PSEUDOMONAS

482.2 PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
482.30 PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
482.31 PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
482.32 PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
482.39 PNEUMONIA DUE TO OTHER STREPTOCOCCUS
482.40 PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
482.41 METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.42 METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.49 OTHER STAPHYLOCOCCUS PNEUMONIA
482.81 PNEUMONIA DUE TO ANAEROBES
482.82 PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
482.83 PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
482.84 LEGIONNAIRES' DISEASE
482.89 PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
482.9 BACTERIAL PNEUMONIA, UNSPECIFIED
483.0 PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
483.1 PNEUMONIA DUE TO CHLAMYDIA
483.8 PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
484.1 PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE
484.3 PNEUMONIA IN WHOOPING COUGH
484.6 PNEUMONIA IN ASPERGILLOSIS
484.7 PNEUMONIA IN OTHER SYSTEMIC MYCOSES
485 BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED
486 PNEUMONIA, ORGANISM UNSPECIFIED
507.0 PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
518.81 ACUTE RESPIRATORY FAILURE
518.84 ACUTE AND CHRONIC RESPIRATORY FAILURE

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

560.1 PARALYTIC ILEUS

Must occur with 997.5 URINARY COMPLICATIONS

584.5 ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
584.8 ACUTE KIDNEY FAILURE WITH OTHER SPECIFIED PATHOLOGICAL LESION IN KIDNEY
584.9 ACUTE KIDNEY FAILURE, UNSPECIFIED

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

038.0 STREPTOCOCCAL SEPTICEMIA
038.10 STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
038.11 METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.19 OTHER STAPHYLOCOCCAL SEPTICEMIA
038.2 PNEUMOCOCCAL SEPTICEMIA
038.3 SEPTICEMIA DUE TO ANAEROBES
038.40 SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISM, UNSPECIFIED
038.41 SEPTICEMIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
038.42 SEPTICEMIA DUE TO ESCHERICHIA COLI [E. COLI]
038.43 SEPTICEMIA DUE TO PSEUDOMONAS
038.44 SEPTICEMIA DUE TO SERRATIA
038.49 OTHER SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISMS
038.8 OTHER SPECIFIED SEPTICEMIAS
038.9 UNSPECIFIED SEPTICEMIA

Peripheral Vascular Bypass – Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

286.6	DEFIBRATION SYNDROME
292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
348.1	ANOXIC BRAIN DAMAGE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
423.3	CARDIAC TAMPONADE
427.41	VENTRICULAR FIBRILLATION
427.5	CARDIAC ARREST
431	INTRACEREBRAL HEMORRHAGE
433.01	OCCLUSION AND STENOSIS OF BASILAR ARTERY WITH CEREBRAL INFARCTION
433.11	OCCLUSION AND STENOSIS OF CAROTID ARTERY WITH CEREBRAL INFARCTION
433.21	OCCLUSION AND STENOSIS OF VERTEBRAL ARTERY WITH CEREBRAL INFARCTION
433.31	OCCLUSION AND STENOSIS OF MULTIPLE AND BILATERAL PRECEREBRAL ARTERIES WITH CEREBRAL INFARCTION
433.81	OCCLUSION AND STENOSIS OF OTHER SPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
433.91	OCCLUSION AND STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
434.01	CEREBRAL THROMBOSIS WITH CEREBRAL INFARCTION
434.11	CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION
434.91	UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITH CEREBRAL INFARCTION
449	SEPTIC ARTERIAL EMBOLISM
453.40	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED DEEP VESSELS OF LOWER EXTREMITY
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.42	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF DISTAL LOWER EXTREMITY
480.0	PNEUMONIA DUE TO ADENOVIRUS
480.1	PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
480.2	PNEUMONIA DUE TO PARAINFLUENZA VIRUS
480.3	PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
480.8	PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
484.1	PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE
512.1	IATROGENIC PNEUMOTHORAX
514	PULMONARY CONGESTION AND HYPOSTASIS
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
518.84	ACUTE AND CHRONIC RESPIRATORY FAILURE
780.01	COMA
785.50	SHOCK, UNSPECIFIED
785.51	CARDIOGENIC SHOCK
785.52	SEPTIC SHOCK
785.59	OTHER SHOCK WITHOUT MENTION OF TRAUMA
867.0	INJURY TO BLADDER AND URETHRA WITHOUT MENTION OF OPEN WOUND INTO CAVITY
957.1	INJURY TO OTHER SPECIFIED NERVE(S)
995.91	SEPSIS
996.1	MECHANICAL COMPLICATION OF OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
996.74	OTHER COMPLICATIONS DUE TO OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
997.00	NERVOUS SYSTEM COMPLICATION, UNSPECIFIED
997.01	CENTRAL NERVOUS SYSTEM COMPLICATION
997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.09	OTHER NERVOUS SYSTEM COMPLICATIONS
997.1	CARDIAC COMPLICATIONS
997.2	PERIPHERAL VASCULAR COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA
997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
997.91	COMPLICATIONS AFFECTING OTHER SPECIFIED BODY SYSTEMS, HYPERTENSION
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC

998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.2	ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE
998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.59	OTHER POSTOPERATIVE INFECTION
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER
999.32	BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
999.34	ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS
999.39	INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION

Peripheral Vascular Bypass – Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.1 CARDIAC COMPLICATIONS

410.01	ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
410.11	ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
410.21	ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
410.31	ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
410.41	ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
410.51	ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
410.61	ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
410.81	ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
410.91	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
427.0	PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA
427.1	PAROXYSMAL VENTRICULAR TACHYCARDIA
427.31	ATRIAL FIBRILLATION
427.32	ATRIAL FLUTTER
428.0	CONGESTIVE HEART FAILURE, UNSPECIFIED
428.1	LEFT HEART FAILURE
428.21	ACUTE SYSTOLIC HEART FAILURE
428.23	ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
428.31	ACUTE DIASTOLIC HEART FAILURE
428.33	ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
428.41	ACUTE COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.43	ACUTE ON CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.9	HEART FAILURE, UNSPECIFIED

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

481	PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
482.0	PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
482.1	PNEUMONIA DUE TO PSEUDOMONAS
482.2	PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
482.30	PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
482.31	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
482.32	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
482.39	PNEUMONIA DUE TO OTHER STREPTOCOCCUS
482.40	PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
482.41	METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.42	METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.49	OTHER STAPHYLOCOCCUS PNEUMONIA
482.81	PNEUMONIA DUE TO ANAEROBES
482.82	PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
482.83	PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
482.84	LEGIONNAIRES' DISEASE
482.89	PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
482.9	BACTERIAL PNEUMONIA, UNSPECIFIED
483.0	PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
483.1	PNEUMONIA DUE TO CHLAMYDIA
483.8	PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
484.3	PNEUMONIA IN WHOOPING COUGH

484.6 PNEUMONIA IN ASPERGILLOSIS
484.7 PNEUMONIA IN OTHER SYSTEMIC MYCOSES
485 BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED
486 PNEUMONIA, ORGANISM UNSPECIFIED
507.0 PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
518.81 ACUTE RESPIRATORY FAILURE

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

560.1 PARALYTIC ILEUS

Must occur with 997.5 URINARY COMPLICATIONS

584.5 ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
584.8 ACUTE KIDNEY FAILURE WITH OTHER SPECIFIED PATHOLOGICAL LESION IN KIDNEY
584.9 ACUTE KIDNEY FAILURE, UNSPECIFIED

Must occur with 998.51 INFECTED POSTOPERATIVE SEROMA or 998.59 OTHER POSTOPERATIVE INFECTION

041.04 BACTERIAL INFECTION DUE TO STREPTOCOCCUS, GROUP D [ENTEROCOCCUS]
041.11 METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS IN CONDITIONS CLASSIFIED ELSEWHERE AND OF UNSPECIFIED SITE
041.7 PSEUDOMONAS INFECTION IN CONDITIONS CLASSIFIED ELSEWHERE AND OF UNSPECIFIED SITE

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

008.45 INTESTINAL INFECTION DUE TO CLOSTRIDIUM DIFFICILE
038.0 STREPTOCOCCAL SEPTICEMIA
038.10 STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
038.11 METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.12 METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.19 OTHER STAPHYLOCOCCAL SEPTICEMIA
038.2 PNEUMOCOCCAL SEPTICEMIA
038.3 SEPTICEMIA DUE TO ANAEROBES
038.40 SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISM, UNSPECIFIED
038.41 SEPTICEMIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
038.42 SEPTICEMIA DUE TO ESCHERICHIA COLI [E. COLI]
038.43 SEPTICEMIA DUE TO PSEUDOMONAS
038.44 SEPTICEMIA DUE TO SERRATIA
038.49 OTHER SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISMS
038.8 OTHER SPECIFIED SEPTICEMIAS
038.9 UNSPECIFIED SEPTICEMIA
995.92 SEVERE SEPSIS

Prostate Removal Surgery – Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

041.04	BACTERIAL INFECTION DUE TO STREPTOCOCCUS, GROUP D [ENTEROCOCCUS]
041.11	METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS IN CONDITIONS CLASSIFIED ELSEWHERE AND OF UNSPECIFIED SITE
041.7	PSEUDOMONAS INFECTION IN CONDITIONS CLASSIFIED ELSEWHERE AND OF UNSPECIFIED SITE
286.6	DEFIBRATION SYNDROME
292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
410.01	ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
410.11	ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
410.21	ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
410.31	ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
410.41	ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
410.51	ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
410.61	ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
410.81	ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
410.91	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
423.3	CARDIAC TAMPONADE
427.5	CARDIAC ARREST
434.91	UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITH CEREBRAL INFARCTION
449	SEPTIC ARTERIAL EMBOLISM
453.40	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED DEEP VESSELS OF LOWER EXTREMITY
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.42	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF DISTAL LOWER EXTREMITY
453.82	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VEINS OF UPPER EXTREMITIES
458.29	OTHER IATROGENIC HYPOTENSION
480.0	PNEUMONIA DUE TO ADENOVIRUS
480.1	PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
480.2	PNEUMONIA DUE TO PARAINFLUENZA VIRUS
480.3	PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
480.8	PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
484.1	PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE
507.0	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
512.1	IATROGENIC PNEUMOTHORAX
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
518.81	ACUTE RESPIRATORY FAILURE
518.84	ACUTE AND CHRONIC RESPIRATORY FAILURE
54.12	REOPENING OF RECENT LAPAROTOMY SITE
54.61	RECLOSURE OF POSTOPERATIVE DISRUPTION OF ABDOMINAL WALL
567.21	PERITONITIS (ACUTE) GENERALIZED
567.22	PERITONEAL ABSCESS
567.29	OTHER SUPPURATIVE PERITONITIS
567.89	OTHER SPECIFIED PERITONITIS
567.9	UNSPECIFIED PERITONITIS
568.81	HEMOPERITONEUM (NONTRAUMATIC)
569.83	PERFORATION OF INTESTINE
729.73	NONTRAUMATIC COMPARTMENT SYNDROME OF ABDOMEN
785.50	SHOCK, UNSPECIFIED
785.51	CARDIOGENIC SHOCK
785.52	SEPTIC SHOCK
785.59	OTHER SHOCK WITHOUT MENTION OF TRAUMA
790.7	BACTEREMIA
867.0	INJURY TO BLADDER AND URETHRA WITHOUT MENTION OF OPEN WOUND INTO CAVITY
957.1	INJURY TO OTHER SPECIFIED NERVE(S)
996.62	INFECTION AND INFLAMMATORY REACTION DUE TO OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
996.76	OTHER COMPLICATIONS DUE TO GENITOURINARY DEVICE, IMPLANT, AND GRAFT
997.00	NERVOUS SYSTEM COMPLICATION, UNSPECIFIED
997.01	CENTRAL NERVOUS SYSTEM COMPLICATION

997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.09	OTHER NERVOUS SYSTEM COMPLICATIONS
997.1	CARDIAC COMPLICATIONS
997.2	PERIPHERAL VASCULAR COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA
997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
997.91	COMPLICATIONS AFFECTING OTHER SPECIFIED BODY SYSTEMS, HYPERTENSION
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC
998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.12	HEMATOMA COMPLICATING A PROCEDURE
998.2	ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE
998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.4	FOREIGN BODY ACCIDENTALLY LEFT DURING A PROCEDURE
998.59	OTHER POSTOPERATIVE INFECTION
998.6	PERSISTENT POSTOPERATIVE FISTULA
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER
999.32	BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
999.34	ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS
999.39	INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION

Prostate Removal Surgery – Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.02 IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE

434.11 CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION

Must occur with 997.1 CARDIAC COMPLICATIONS

427.0	PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA
427.1	PAROXYSMAL VENTRICULAR TACHYCARDIA
427.31	ATRIAL FIBRILLATION
427.32	ATRIAL FLUTTER
427.41	VENTRICULAR FIBRILLATION
428.0	CONGESTIVE HEART FAILURE, UNSPECIFIED
428.1	LEFT HEART FAILURE
428.21	ACUTE SYSTOLIC HEART FAILURE
428.23	ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
428.31	ACUTE DIASTOLIC HEART FAILURE
428.33	ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
428.41	ACUTE COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.43	ACUTE ON CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.9	HEART FAILURE, UNSPECIFIED

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

481	PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
482.0	PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
482.1	PNEUMONIA DUE TO PSEUDOMONAS
482.2	PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
482.30	PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
482.31	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
482.32	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
482.39	PNEUMONIA DUE TO OTHER STREPTOCOCCUS
482.40	PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
482.41	METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS

482.42 METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.49 OTHER STAPHYLOCOCCUS PNEUMONIA
482.81 PNEUMONIA DUE TO ANAEROBES
482.82 PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
482.83 PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
482.84 LEGIONNAIRES' DISEASE
482.89 PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
482.9 BACTERIAL PNEUMONIA, UNSPECIFIED
483.0 PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
483.1 PNEUMONIA DUE TO CHLAMYDIA
483.8 PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
484.3 PNEUMONIA IN WHOOPING COUGH
484.6 PNEUMONIA IN ASPERGILLOSIS
484.7 PNEUMONIA IN OTHER SYSTEMIC MYCOSES
485 BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED
486 PNEUMONIA, ORGANISM UNSPECIFIED

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

560.1 PARALYTIC ILEUS

Must occur with 997.5 URINARY COMPLICATIONS

584.5 ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
584.8 ACUTE KIDNEY FAILURE WITH OTHER SPECIFIED PATHOLOGICAL LESION IN KIDNEY
584.9 ACUTE KIDNEY FAILURE, UNSPECIFIED

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

008.45 INTESTINAL INFECTION DUE TO CLOSTRIDIUM DIFFICILE
038.0 STREPTOCOCCAL SEPTICEMIA
038.10 STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
038.11 METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.12 METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.19 OTHER STAPHYLOCOCCAL SEPTICEMIA
038.2 PNEUMOCOCCAL SEPTICEMIA
038.3 SEPTICEMIA DUE TO ANAEROBES
038.40 SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISM, UNSPECIFIED
038.41 SEPTICEMIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
038.42 SEPTICEMIA DUE TO ESCHERICHIA COLI [E. COLI]
038.43 SEPTICEMIA DUE TO PSEUDOMONAS
038.44 SEPTICEMIA DUE TO SERRATIA
038.49 OTHER SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISMS
038.8 OTHER SPECIFIED SEPTICEMIAS
038.9 UNSPECIFIED SEPTICEMIA
682.2 CELLULITIS AND ABSCESS OF TRUNK
995.91 SEPSIS
995.92 SEVERE SEPSIS

Spinal Fusion – Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

038.0	STREPTOCOCCAL SEPTICEMIA
038.10	STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
038.11	METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.12	METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.19	OTHER STAPHYLOCOCCAL SEPTICEMIA
038.2	PNEUMOCOCCAL SEPTICEMIA
038.3	SEPTICEMIA DUE TO ANAEROBES
038.40	SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISM, UNSPECIFIED
038.41	SEPTICEMIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
038.42	SEPTICEMIA DUE TO ESCHERICHIA COLI [E. COLI]
038.43	SEPTICEMIA DUE TO PSEUDOMONAS
038.44	SEPTICEMIA DUE TO SERRATIA
038.49	OTHER SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISMS
038.8	OTHER SPECIFIED SEPTICEMIAS
038.9	UNSPECIFIED SEPTICEMIA
286.6	DEFIBRATION SYNDROME
292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
410.01	ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
410.11	ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
410.21	ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
410.31	ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
410.41	ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
410.51	ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
410.61	ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
410.81	ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
410.91	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
423.3	CARDIAC TAMPONADE
427.41	VENTRICULAR FIBRILLATION
427.5	CARDIAC ARREST
431	INTRACEREBRAL HEMORRHAGE
433.01	OCCLUSION AND STENOSIS OF BASILAR ARTERY WITH CEREBRAL INFARCTION
433.11	OCCLUSION AND STENOSIS OF CAROTID ARTERY WITH CEREBRAL INFARCTION
433.21	OCCLUSION AND STENOSIS OF VERTEBRAL ARTERY WITH CEREBRAL INFARCTION
433.31	OCCLUSION AND STENOSIS OF MULTIPLE AND BILATERAL PRECEREBRAL ARTERIES WITH CEREBRAL INFARCTION
433.81	OCCLUSION AND STENOSIS OF OTHER SPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
433.91	OCCLUSION AND STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
434.01	CEREBRAL THROMBOSIS WITH CEREBRAL INFARCTION
449	SEPTIC ARTERIAL EMBOLISM
453.40	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED DEEP VESSELS OF LOWER EXTREMITY
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.42	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF DISTAL LOWER EXTREMITY
453.82	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VEINS OF UPPER EXTREMITIES
480.0	PNEUMONIA DUE TO ADENOVIRUS
480.1	PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
480.2	PNEUMONIA DUE TO PARAINFLUENZA VIRUS
480.3	PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
480.8	PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
481	PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
482.0	PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
482.1	PNEUMONIA DUE TO PSEUDOMONAS
482.2	PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
482.30	PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
482.31	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
482.32	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
482.39	PNEUMONIA DUE TO OTHER STREPTOCOCCUS
482.40	PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
482.41	METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS

482.42	METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.49	OTHER STAPHYLOCOCCUS PNEUMONIA
482.81	PNEUMONIA DUE TO ANAEROBES
482.82	PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
482.83	PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
482.84	LEGIONNAIRES' DISEASE
482.89	PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
482.9	BACTERIAL PNEUMONIA, UNSPECIFIED
483.0	PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
483.1	PNEUMONIA DUE TO CHLAMYDIA
483.8	PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
484.1	PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE
484.3	PNEUMONIA IN WHOOPING COUGH
484.6	PNEUMONIA IN ASPERGILLOSIS
484.7	PNEUMONIA IN OTHER SYSTEMIC MYCOSES
486	PNEUMONIA, ORGANISM UNSPECIFIED
507.0	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
512.1	IATROGENIC PNEUMOTHORAX
514	PULMONARY CONGESTION AND HYPOSTASIS
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
518.81	ACUTE RESPIRATORY FAILURE
584.5	ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
584.8	ACUTE KIDNEY FAILURE WITH OTHER SPECIFIED PATHOLOGICAL LESION IN KIDNEY
584.9	ACUTE KIDNEY FAILURE, UNSPECIFIED
707.0	PRESSURE ULCER
707.00	PRESSURE ULCER, UNSPECIFIED SITE
707.01	PRESSURE ULCER, ELBOW
707.02	PRESSURE ULCER, UPPER BACK
707.03	PRESSURE ULCER, LOWER BACK
707.04	PRESSURE ULCER, HIP
707.05	PRESSURE ULCER, BUTTOCK
707.06	PRESSURE ULCER, ANKLE
707.07	PRESSURE ULCER, HEEL
707.09	PRESSURE ULCER, OTHER SITE
785.50	SHOCK, UNSPECIFIED
785.51	CARDIOGENIC SHOCK
785.52	SEPTIC SHOCK
785.59	OTHER SHOCK WITHOUT MENTION OF TRAUMA
799.1	RESPIRATORY ARREST
867.0	INJURY TO BLADDER AND URETHRA WITHOUT MENTION OF OPEN WOUND INTO CAVITY
995.91	SEPSIS
995.92	SEVERE SEPSIS
996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.09	OTHER NERVOUS SYSTEM COMPLICATIONS
997.1	CARDIAC COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA
997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC
998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.59	OTHER POSTOPERATIVE INFECTION
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER
999.32	BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
999.34	ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS
999.39	INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION

Spinal Fusion – Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.02 IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE

- 434.11 CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION
- 434.91 UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITH CEREBRAL INFARCTION

Must occur with 997.1 CARDIAC COMPLICATIONS

- 427.0 PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA
- 427.1 PAROXYSMAL VENTRICULAR TACHYCARDIA
- 427.31 ATRIAL FIBRILLATION
- 427.32 ATRIAL FLUTTER
- 428.0 CONGESTIVE HEART FAILURE, UNSPECIFIED
- 428.1 LEFT HEART FAILURE
- 428.21 ACUTE SYSTOLIC HEART FAILURE
- 428.23 ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
- 428.31 ACUTE DIASTOLIC HEART FAILURE
- 428.33 ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
- 428.41 ACUTE COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
- 428.43 ACUTE ON CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
- 428.9 HEART FAILURE, UNSPECIFIED

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

- 485 BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED
- 511.9 UNSPECIFIED PLEURAL EFFUSION
- 518.84 ACUTE AND CHRONIC RESPIRATORY FAILURE

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

- 560.1 PARALYTIC ILEUS

Must occur with 997.5 URINARY COMPLICATIONS

- 593.9 UNSPECIFIED DISORDER OF KIDNEY AND URETER

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

- 008.45 INTESTINAL INFECTION DUE TO CLOSTRIDIUM DIFFICILE

Must not occur with v15.88 PERSONAL HISTORY OF FALL, PRESENTING HAZARDS TO HEALTH or v42.4 BONE REPLACED BY TRANSPLANT or v43.64 HIP JOINT REPLACED BY OTHER MEANS or v43.65 KNEE JOINT REPLACED BY OTHER MEANS or v45.4 ARTHRODESIS STATUS or v54.01 ENCOUNTER FOR REMOVAL OF INTERNAL FIXATION DEVICE or v54.02 ENCOUNTER FOR LENGTHENING/ADJUSTMENT OF GROWTH ROD or v54.09 OTHER AFTERCARE INVOLVING INTERNAL FIXATION DEVICE

- 996.40 UNSPECIFIED MECHANICAL COMPLICATION OF INTERNAL ORTHOPEDIC DEVICE, IMPLANT, AND GRAFT
- 996.49 OTHER MECHANICAL COMPLICATION OF OTHER INTERNAL ORTHOPEDIC DEVICE, IMPLANT, AND GRAFT
- 996.78 OTHER COMPLICATIONS DUE TO OTHER INTERNAL ORTHOPEDIC DEVICE, IMPLANT, AND GRAFT

Total Knee Replacement – Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

038.0	STREPTOCOCCAL SEPTICEMIA
038.10	STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
038.11	METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.12	METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.19	OTHER STAPHYLOCOCCAL SEPTICEMIA
038.2	PNEUMOCOCCAL SEPTICEMIA
038.3	SEPTICEMIA DUE TO ANAEROBES
038.40	SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISM, UNSPECIFIED
038.41	SEPTICEMIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
038.42	SEPTICEMIA DUE TO ESCHERICHIA COLI [E. COLI]
038.43	SEPTICEMIA DUE TO PSEUDOMONAS
038.44	SEPTICEMIA DUE TO SERRATIA
038.49	OTHER SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISMS
038.8	OTHER SPECIFIED SEPTICEMIAS
038.9	UNSPECIFIED SEPTICEMIA
286.6	DEFIBRATION SYNDROME
292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
410.01	ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
410.11	ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
410.21	ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
410.31	ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
410.41	ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
410.51	ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
410.61	ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
410.81	ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
410.91	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
423.3	CARDIAC TAMPONADE
427.41	VENTRICULAR FIBRILLATION
427.5	CARDIAC ARREST
428.31	ACUTE DIASTOLIC HEART FAILURE
428.33	ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
431	INTRACEREBRAL HEMORRHAGE
433.01	OCCLUSION AND STENOSIS OF BASILAR ARTERY WITH CEREBRAL INFARCTION
433.11	OCCLUSION AND STENOSIS OF CAROTID ARTERY WITH CEREBRAL INFARCTION
433.21	OCCLUSION AND STENOSIS OF VERTEBRAL ARTERY WITH CEREBRAL INFARCTION
433.31	OCCLUSION AND STENOSIS OF MULTIPLE AND BILATERAL PRECEREBRAL ARTERIES WITH CEREBRAL INFARCTION
433.81	OCCLUSION AND STENOSIS OF OTHER SPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
433.91	OCCLUSION AND STENOSIS OF UNSPECIFIED PRECEREBRAL ARTERY WITH CEREBRAL INFARCTION
434.01	CEREBRAL THROMBOSIS WITH CEREBRAL INFARCTION
449	SEPTIC ARTERIAL EMBOLISM
453.40	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED DEEP VESSELS OF LOWER EXTREMITY
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.42	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF DISTAL LOWER EXTREMITY
453.82	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VEINS OF UPPER EXTREMITIES
480.0	PNEUMONIA DUE TO ADENOVIRUS
480.1	PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
480.2	PNEUMONIA DUE TO PARAINFLUENZA VIRUS
480.3	PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
480.8	PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
481	PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
482.0	PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
482.1	PNEUMONIA DUE TO PSEUDOMONAS
482.2	PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
482.30	PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
482.31	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
482.32	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
482.39	PNEUMONIA DUE TO OTHER STREPTOCOCCUS

482.40	PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
482.41	METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.42	METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.49	OTHER STAPHYLOCOCCUS PNEUMONIA
482.81	PNEUMONIA DUE TO ANAEROBES
482.82	PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
482.83	PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
482.84	LEGIONNAIRES' DISEASE
482.89	PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
482.9	BACTERIAL PNEUMONIA, UNSPECIFIED
483.0	PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
483.1	PNEUMONIA DUE TO CHLAMYDIA
483.8	PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
484.1	PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE
484.3	PNEUMONIA IN WHOOPING COUGH
484.6	PNEUMONIA IN ASPERGILLOSIS
484.7	PNEUMONIA IN OTHER SYSTEMIC MYCOSES
485	BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED
486	PNEUMONIA, ORGANISM UNSPECIFIED
507.0	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
512.1	IATROGENIC PNEUMOTHORAX
514	PULMONARY CONGESTION AND HYPOSTASIS
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
518.81	ACUTE RESPIRATORY FAILURE
584.5	ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
584.8	ACUTE KIDNEY FAILURE WITH OTHER SPECIFIED PATHOLOGICAL LESION IN KIDNEY
584.9	ACUTE KIDNEY FAILURE, UNSPECIFIED
707.0	PRESSURE ULCER
707.00	PRESSURE ULCER, UNSPECIFIED SITE
707.01	PRESSURE ULCER, ELBOW
707.02	PRESSURE ULCER, UPPER BACK
707.03	PRESSURE ULCER, LOWER BACK
707.04	PRESSURE ULCER, HIP
707.05	PRESSURE ULCER, BUTTOCK
707.06	PRESSURE ULCER, ANKLE
707.07	PRESSURE ULCER, HEEL
707.09	PRESSURE ULCER, OTHER SITE
785.50	SHOCK, UNSPECIFIED
785.51	CARDIOGENIC SHOCK
785.52	SEPTIC SHOCK
785.59	OTHER SHOCK WITHOUT MENTION OF TRAUMA
799.1	RESPIRATORY ARREST
867.0	INJURY TO BLADDER AND URETHRA WITHOUT MENTION OF OPEN WOUND INTO CAVITY
995.91	SEPSIS
995.92	SEVERE SEPSIS
996.42	DISLOCATION OF PROSTHETIC JOINT
996.44	PERI-PROSTHETIC FRACTURE AROUND PROSTHETIC JOINT
996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.09	OTHER NERVOUS SYSTEM COMPLICATIONS
997.1	CARDIAC COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA
997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC
998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.2	ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE
998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.59	OTHER POSTOPERATIVE INFECTION
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER

- 999.32 BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
- 999.34 ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS
- 999.39 INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION
- 999.8 OTHER AND UNSPECIFIED INFUSION AND TRANSFUSION REACTION

Total Knee Replacement – Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.02 IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE

- 434.11 CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION
- 434.91 UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITH CEREBRAL INFARCTION

Must occur with 997.1 CARDIAC COMPLICATIONS

- 427.0 PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA
- 427.1 PAROXYSMAL VENTRICULAR TACHYCARDIA
- 427.31 ATRIAL FIBRILLATION
- 427.32 ATRIAL FLUTTER
- 428.0 CONGESTIVE HEART FAILURE, UNSPECIFIED
- 428.1 LEFT HEART FAILURE
- 428.21 ACUTE SYSTOLIC HEART FAILURE
- 428.23 ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
- 428.41 ACUTE COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
- 428.43 ACUTE ON CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
- 428.9 HEART FAILURE, UNSPECIFIED

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

- 511.9 UNSPECIFIED PLEURAL EFFUSION
- 518.84 ACUTE AND CHRONIC RESPIRATORY FAILURE

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

- 560.1 PARALYTIC ILEUS

Must occur with 997.5 URINARY COMPLICATIONS

- 593.9 UNSPECIFIED DISORDER OF KIDNEY AND URETER

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

- 008.45 INTESTINAL INFECTION DUE TO CLOSTRIDIUM DIFFICILE

Must not occur with v15.88 PERSONAL HISTORY OF FALL, PRESENTING HAZARDS TO HEALTH or v42.4 BONE REPLACED BY TRANSPLANT or v43.64 HIP JOINT REPLACED BY OTHER MEANS or v43.65 KNEE JOINT REPLACED BY OTHER MEANS or v45.4 ARTHRODESIS STATUS or v54.01 ENCOUNTER FOR REMOVAL OF INTERNAL FIXATION DEVICE or v54.02 ENCOUNTER FOR LENGTHENING/ADJUSTMENT OF GROWTH ROD or v54.09 OTHER AFTERCARE INVOLVING INTERNAL FIXATION DEVICE

- 996.40 UNSPECIFIED MECHANICAL COMPLICATION OF INTERNAL ORTHOPEDIC DEVICE, IMPLANT, AND GRAFT
- 996.47 OTHER MECHANICAL COMPLICATION OF PROSTHETIC JOINT IMPLANT
- 996.49 OTHER MECHANICAL COMPLICATION OF OTHER INTERNAL ORTHOPEDIC DEVICE, IMPLANT, AND GRAFT
- 996.78 OTHER COMPLICATIONS DUE TO OTHER INTERNAL ORTHOPEDIC DEVICE, IMPLANT, AND GRAFT

Must not occur with v42.4 BONE REPLACED BY TRANSPLANT or v43.64 HIP JOINT REPLACED BY OTHER MEANS or v43.65 KNEE JOINT REPLACED BY OTHER MEANS or v45.4 ARTHRODESIS STATUS or v54.01 ENCOUNTER FOR REMOVAL OF INTERNAL FIXATION DEVICE or v54.02 ENCOUNTER FOR LENGTHENING/ADJUSTMENT OF GROWTH ROD or v54.09 OTHER AFTERCARE INVOLVING INTERNAL FIXATION DEVICE

- 996.77 OTHER COMPLICATIONS DUE TO INTERNAL JOINT PROSTHESIS

Transurethral Prostate Resection Surgery – Independent Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as postoperative. These conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

041.04	BACTERIAL INFECTION DUE TO STREPTOCOCCUS, GROUP D [ENTEROCOCCUS]
041.11	METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS IN CONDITIONS CLASSIFIED ELSEWHERE AND OF UNSPECIFIED SITE
041.7	PSEUDOMONAS INFECTION IN CONDITIONS CLASSIFIED ELSEWHERE AND OF UNSPECIFIED SITE
286.6	DEFIBRATION SYNDROME
292.12	DRUG INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
292.81	DRUG INDUCED DELIRIUM
293.0	DELIRIUM DUE TO CONDITIONS CLASSIFIED ELSEWHERE
410.01	ACUTE MYOCARDIAL INFARCTION, OF ANTEROLATERAL WALL, INITIAL EPISODE OF CARE
410.11	ACUTE MYOCARDIAL INFARCTION, OF OTHER ANTERIOR WALL, INITIAL EPISODE OF CARE
410.21	ACUTE MYOCARDIAL INFARCTION, OF INFEROLATERAL WALL, INITIAL EPISODE OF CARE
410.31	ACUTE MYOCARDIAL INFARCTION, OF INFEROPOSTERIOR WALL, INITIAL EPISODE OF CARE
410.41	ACUTE MYOCARDIAL INFARCTION, OF OTHER INFERIOR WALL, INITIAL EPISODE OF CARE
410.51	ACUTE MYOCARDIAL INFARCTION, OF OTHER LATERAL WALL, INITIAL EPISODE OF CARE
410.61	ACUTE MYOCARDIAL INFARCTION, TRUE POSTERIOR WALL INFARCTION, INITIAL EPISODE OF CARE
410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
410.81	ACUTE MYOCARDIAL INFARCTION, OF OTHER SPECIFIED SITES, INITIAL EPISODE OF CARE
410.91	ACUTE MYOCARDIAL INFARCTION, UNSPECIFIED SITE, INITIAL EPISODE OF CARE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.12	SEPTIC PULMONARY EMBOLISM
415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
423.3	CARDIAC TAMPONADE
427.5	CARDIAC ARREST
434.91	UNSPECIFIED CEREBRAL ARTERY OCCLUSION WITH CEREBRAL INFARCTION
449	SEPTIC ARTERIAL EMBOLISM
453.40	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED DEEP VESSELS OF LOWER EXTREMITY
453.41	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF PROXIMAL LOWER EXTREMITY
453.42	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VESSELS OF DISTAL LOWER EXTREMITY
453.82	ACUTE VENOUS EMBOLISM AND THROMBOSIS OF DEEP VEINS OF UPPER EXTREMITIES
458.29	OTHER IATROGENIC HYPOTENSION
480.0	PNEUMONIA DUE TO ADENOVIRUS
480.1	PNEUMONIA DUE TO RESPIRATORY SYNCYTIAL VIRUS
480.2	PNEUMONIA DUE TO PARAINFLUENZA VIRUS
480.3	PNEUMONIA DUE TO SARS-ASSOCIATED CORONAVIRUS
480.8	PNEUMONIA DUE TO OTHER VIRUS NOT ELSEWHERE CLASSIFIED
484.1	PNEUMONIA IN CYTOMEGALIC INCLUSION DISEASE
507.0	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
512.1	IATROGENIC PNEUMOTHORAX
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY [TRALI]
518.81	ACUTE RESPIRATORY FAILURE
518.84	ACUTE AND CHRONIC RESPIRATORY FAILURE
54.12	REOPENING OF RECENT LAPAROTOMY SITE
54.61	RECLOSURE OF POSTOPERATIVE DISRUPTION OF ABDOMINAL WALL
567.21	PERITONITIS (ACUTE) GENERALIZED
567.22	PERITONEAL ABSCESS
567.29	OTHER SUPPURATIVE PERITONITIS
567.89	OTHER SPECIFIED PERITONITIS
567.9	UNSPECIFIED PERITONITIS
568.81	HEMOPERITONEUM (NONTRAUMATIC)
569.83	PERFORATION OF INTESTINE
729.73	NONTRAUMATIC COMPARTMENT SYNDROME OF ABDOMEN
785.50	SHOCK, UNSPECIFIED
785.51	CARDIOGENIC SHOCK
785.52	SEPTIC SHOCK
785.59	OTHER SHOCK WITHOUT MENTION OF TRAUMA
790.7	BACTEREMIA
867.0	INJURY TO BLADDER AND URETHRA WITHOUT MENTION OF OPEN WOUND INTO CAVITY
957.1	INJURY TO OTHER SPECIFIED NERVE(S)
996.62	INFECTION AND INFLAMMATORY REACTION DUE TO OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
996.64	INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER
996.76	OTHER COMPLICATIONS DUE TO GENITOURINARY DEVICE, IMPLANT, AND GRAFT
997.00	NERVOUS SYSTEM COMPLICATION, UNSPECIFIED
997.01	CENTRAL NERVOUS SYSTEM COMPLICATION

997.02	IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE
997.09	OTHER NERVOUS SYSTEM COMPLICATIONS
997.1	CARDIAC COMPLICATIONS
997.2	PERIPHERAL VASCULAR COMPLICATIONS
997.3	RESPIRATORY COMPLICATIONS
997.31	VENTILATOR ASSOCIATED PNEUMONIA
997.32	POSTPROCEDURAL ASPIRATION PNEUMONIA
997.39	OTHER RESPIRATORY COMPLICATIONS
997.4	DIGESTIVE SYSTEM COMPLICATION
997.49	OTHER DIGESTIVE SYSTEM COMPLICATIONS
997.5	URINARY COMPLICATIONS
997.91	COMPLICATIONS AFFECTING OTHER SPECIFIED BODY SYSTEMS, HYPERTENSION
998.0	POSTOPERATIVE SHOCK
998.00	POSTOPERATIVE SHOCK, UNSPECIFIED
998.01	POSTOPERATIVE SHOCK, CARDIOGENIC
998.02	POSTOPERATIVE SHOCK, SEPTIC
998.09	POSTOPERATIVE SHOCK, OTHER
998.11	HEMORRHAGE COMPLICATING A PROCEDURE
998.12	HEMATOMA COMPLICATING A PROCEDURE
998.2	ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE
998.30	DISRUPTION OF WOUND, UNSPECIFIED
998.31	DISRUPTION OF INTERNAL OPERATION (SURGICAL) WOUND
998.32	DISRUPTION OF EXTERNAL OPERATION (SURGICAL) WOUND
998.4	FOREIGN BODY ACCIDENTALLY LEFT DURING A PROCEDURE
998.59	OTHER POSTOPERATIVE INFECTION
998.6	PERSISTENT POSTOPERATIVE FISTULA
999.31	OTHER AND UNSPECIFIED INFECTION DUE TO CENTRAL VENOUS CATHETER
999.32	BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER
999.34	ACUTE INFECTION FOLLOWING TRANSFUSION, INFUSION, OR INJECTION OF BLOOD AND BLOOD PRODUCTS
999.39	INFECTION FOLLOWING OTHER INFUSION, INJECTION, TRANSFUSION, OR VACCINATION

Transurethral Prostate Resection Surgery – Dependent Complications

Dependent complications are conditions that must either have the POA indicator set to "No," or if the POA indicator is set to "Unknown" or is missing, there must also be the listed 900 postoperative complication code present in the patient record.

Must occur with 997.02 IATROGENIC CEREBROVASCULAR INFARCTION OR HEMORRHAGE

434.11 CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION

Must occur with 997.1 CARDIAC COMPLICATIONS

427.0	PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA
427.1	PAROXYSMAL VENTRICULAR TACHYCARDIA
427.31	ATRIAL FIBRILLATION
427.32	ATRIAL FLUTTER
427.41	VENTRICULAR FIBRILLATION
428.0	CONGESTIVE HEART FAILURE, UNSPECIFIED
428.1	LEFT HEART FAILURE
428.21	ACUTE SYSTOLIC HEART FAILURE
428.23	ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
428.31	ACUTE DIASTOLIC HEART FAILURE
428.33	ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
428.41	ACUTE COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.43	ACUTE ON CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.9	HEART FAILURE, UNSPECIFIED

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

481	PNEUMOCOCCAL PNEUMONIA [STREPTOCOCCUS PNEUMONIAE PNEUMONIA]
482.0	PNEUMONIA DUE TO KLEBSIELLA PNEUMONIAE
482.1	PNEUMONIA DUE TO PSEUDOMONAS
482.2	PNEUMONIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
482.30	PNEUMONIA DUE TO UNSPECIFIED STREPTOCOCCUS
482.31	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP A
482.32	PNEUMONIA DUE TO STREPTOCOCCUS, GROUP B
482.39	PNEUMONIA DUE TO OTHER STREPTOCOCCUS
482.40	PNEUMONIA DUE TO STAPHYLOCOCCUS, UNSPECIFIED
482.41	METHICILLIN SUSCEPTIBLE PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS

482.42 METHICILLIN RESISTANT PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS
482.49 OTHER STAPHYLOCOCCUS PNEUMONIA
482.81 PNEUMONIA DUE TO ANAEROBES
482.82 PNEUMONIA DUE TO ESCHERICHIA COLI [E. COLI]
482.83 PNEUMONIA DUE TO OTHER GRAM-NEGATIVE BACTERIA
482.84 LEGIONNAIRES' DISEASE
482.89 PNEUMONIA DUE TO OTHER SPECIFIED BACTERIA
482.9 BACTERIAL PNEUMONIA, UNSPECIFIED
483.0 PNEUMONIA DUE TO MYCOPLASMA PNEUMONIAE
483.1 PNEUMONIA DUE TO CHLAMYDIA
483.8 PNEUMONIA DUE TO OTHER SPECIFIED ORGANISM
484.3 PNEUMONIA IN WHOOPING COUGH
484.6 PNEUMONIA IN ASPERGILLOSIS
484.7 PNEUMONIA IN OTHER SYSTEMIC MYCOSES
485 BRONCHOPNEUMONIA, ORGANISM UNSPECIFIED
486 PNEUMONIA, ORGANISM UNSPECIFIED

Must occur with 997.4 DIGESTIVE SYSTEM COMPLICATION or 997.49 OTHER DIGESTIVE SYSTEM COMPLICATIONS

560.1 PARALYTIC ILEUS

Must occur with 997.5 URINARY COMPLICATIONS

584.5 ACUTE KIDNEY FAILURE WITH LESION OF TUBULAR NECROSIS
584.8 ACUTE KIDNEY FAILURE WITH OTHER SPECIFIED PATHOLOGICAL LESION IN KIDNEY
584.9 ACUTE KIDNEY FAILURE, UNSPECIFIED

Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

008.45 INTESTINAL INFECTION DUE TO CLOSTRIDIUM DIFFICILE
038.0 STREPTOCOCCAL SEPTICEMIA
038.10 STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
038.11 METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.12 METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA
038.19 OTHER STAPHYLOCOCCAL SEPTICEMIA
038.2 PNEUMOCOCCAL SEPTICEMIA
038.3 SEPTICEMIA DUE TO ANAEROBES
038.40 SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISM, UNSPECIFIED
038.41 SEPTICEMIA DUE TO HEMOPHILUS INFLUENZAE [H. INFLUENZAE]
038.42 SEPTICEMIA DUE TO ESCHERICHIA COLI [E. COLI]
038.43 SEPTICEMIA DUE TO PSEUDOMONAS
038.44 SEPTICEMIA DUE TO SERRATIA
038.49 OTHER SEPTICEMIA DUE TO GRAM-NEGATIVE ORGANISMS
038.8 OTHER SPECIFIED SEPTICEMIAS
038.9 UNSPECIFIED SEPTICEMIA
682.2 CELLULITIS AND ABSCESS OF TRUNK
995.91 SEPSIS
995.92 SEVERE SEPSIS

Appendix D. Top Five Risk Factors by Procedure or Diagnosis

Abdominal Aorta Aneurysm Repair	
Proc 38.44	RESECTION OF ABDOMINAL AORTA WITH REPLACEMENT
Proc 38.34	RESECTION OF AORTA WITH ANASTOMOSIS
Diag 428.31, 428.33	ACUTE DIASTOLIC HEART FAILURE
Diag 260, 261, 262, 263.0, 263.1, 263.2, 263.8, 263.9	MALNUTRITION
Diag 557.9	UNSPECIFIED VASCULAR INSUFFICIENCY OF INTESTINE
Appendectomy	
Proc 47.09	OTHER APPEDECTOMY
Diag 584.5, 584.8, 584.9	ACUTE RENAL FAILURE
Proc 47.01	LAPAROSCOPIC APPEDECTOMY
Diag 038.0, 038.10, 038.11, 038.19, 038.2, 038.3, 038.40, 038.41, 038.42, 038.43, 038.44, 038.49, 038.8, 038.9	SEPSIS
Diag 540.1	ACUTE APPENDICITIS WITH PERITONEAL ABSCESS
Back and Neck Surgery (Without Spinal Fusion)	
Proc 03.53	REPAIR OF VERTEBRAL FRACTURE
Proc 99.04	TRANSFUSION OF PACKED CELLS
Diag 324.1	INTRASPINAL ABSCESS
Proc 03.59	OTHER REPAIR AND PLASTIC OPERATIONS ON SPINAL CORD STRUCTURES
Diag 260, 261, 262, 263.0, 263.1, 263.2, 263.8, 263.9	MALNUTRITION
Bowel Obstruction	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Diag 585.6	END STAGE RENAL DISEASE
Diag 518.81	ACUTE RESPIRATORY FAILURE
Diag 038.0, 038.10, 038.11, 038.19, 038.2, 038.3, 038.40, 038.41, 038.42, 038.43, 038.44, 038.49, 038.8, 038.9	SEPSIS
Proc 46.10	COLOSTOMY, NOT OTHERWISE SPECIFIED
Carotid Surgery	
Proc 39.74	ENDOVASCULAR REMOVAL OF OBSTRUCTION FROM HEAD AND NECK VESSEL(S)
Diag 585.4	CHRONIC KIDNEY DISEASE, STAGE IV (SEVERE)
Diag 428.31, 428.33	ACUTE DIASTOLIC HEART FAILURE
Diag 428.21, 428.23	ACUTE SYSTOLIC HEART FAILURE
Diag 491.0, 491.1, 491.20, 491.21, 491.22, 491.8, 491.9	CHRONIC BRONCHITIS
Chronic Obstructive Pulmonary Disease (COPD)	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Diag 038.0, 038.10, 038.11, 038.19, 038.2, 038.3, 038.40, 038.41, 038.42, 038.43, 038.44, 038.49, 038.8, 038.9	SEPSIS
Diag 518.81	ACUTE RESPIRATORY FAILURE
Diag 507.0	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
Diag 410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
Colorectal Surgeries	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Diag 585.6	END STAGE RENAL DISEASE
Proc 45.82	OPEN TOTAL INTRA-ABDOMINAL COLECTOMY
Proc 45.83	OTHER AND UNSPECIFIED TOTAL INTRA-ABDOMINAL COLECTOMY
Proc 46.20	ILEOSTOMY, NOT OTHERWISE SPECIFIED

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Appendix D. Top Five Risk Factors by Procedure or Diagnosis

Coronary Artery Bypass Graft (CABG) Surgery	
Proc 37.61	IMPLANT OF PULSATION BALLOON
Diag 585.6	END STAGE RENAL DISEASE
Diag 427.5	CARDIAC ARREST
Proc 37.33	EXCISION OR DESTRUCTION OF OTHER LESION OR TISSUE OF HEART, OPEN APPROACH
Diag 260, 261, 262, 263.0, 263.1, 263.2, 263.8, 263.9	MALNUTRITION
Coronary Interventional Procedures (Angioplasty/Stent)	
Proc 37.61	IMPLANT OF PULSATION BALLOON
Diag 410.01, 410.11, 410.21, 410.51, 410.61, 410.81, 410.91	ANTERIOR/LATERAL WALL AMI
Diag 585.6	END STAGE RENAL DISEASE
Diag 427.5	CARDIAC ARREST
Diag 410.31, 410.41	INFERIOR WALL AMI
Defibrillator Procedures	
Proc 37.97	REPLACEMENT OF AUTOMATIC CARDIVERTER/DEFIBRILLATOR LEAD(S) ONLY
Proc 37.61	IMPLANT OF PULSATION BALLOON
Proc 00.52	IMPLANTATION OR REPLACEMENT OF TRANSVENOUS LEAD [ELECTRODE] INTO LEFT VENTRICULAR CORONARY VENOUS SYSTEM
Proc 37.74	INSERTION OR REPLACEMENT OF EPICARDIAL LEAD [ELECTRODE] INTO EPICARDIUM
Proc 99.04	TRANSFUSION OF PACKED CELLS
Diabetic Emergencies	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Proc 99.15	PARENTERAL INFUSION OF CONCENTRATED NUTRITIONAL SUBSTANCES
Diag 518.81	ACUTE RESPIRATORY FAILURE
Proc 33.24	CLOSED [ENDOSCOPIC] BIOPSY OF BRONCHUS
Diag 250.30	DIABETES WITH OTHER COMA, TYPE II OR UNSPECIFIED TYPE, NOT STATED AS UNCONTROLLED
Esophageal/Stomach Surgeries	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Proc 99.15	PARENTERAL INFUSION OF CONCENTRATED NUTRITIONAL SUBSTANCES
Diag 518.81	ACUTE RESPIRATORY FAILURE
Proc 33.24	CLOSED [ENDOSCOPIC] BIOPSY OF BRONCHUS
Diag 250.30	DIABETES WITH OTHER COMA, TYPE II OR UNSPECIFIED TYPE, NOT STATED AS UNCONTROLLED
Gallbladder Removal Surgery (Cholecystectomy)	
Proc 51.21	OTHER PARTIAL CHOLECYSTECTOMY
Proc 51.22	CHOLECYSTECTOMY
Diag 585.4	CHRONIC KIDNEY DISEASE, STAGE IV (SEVERE)
Proc 51.87	ENDOSCOPIC INSERTION OF STENT (TUBE) INTO BILE DUCT
Diag 260, 261, 262, 263.0, 263.1, 263.2, 263.8, 263.9	MALNUTRITION
Gastrointestinal Bleed	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Proc 45.82	OPEN TOTAL INTRA-ABDOMINAL COLECTOMY
Diag 532.60	CHRONIC OR UNSPECIFIED DUODENAL ULCER WITH HEMORRHAGE AND PERFORATION, WITHOUT MENTION OF OBSTRUCTION
Diag 518.81	ACUTE RESPIRATORY FAILURE
Diag 585.6	END STAGE RENAL DISEASE

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Heart Attack	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Diag 348.1	ANOXIC BRAIN DAMAGE
Proc 37.61	IMPLANT OF PULSATION BALLOON
Diag 427.5	CARDIAC ARREST
Diag 585.6	END STAGE RENAL DISEASE
Heart Failure	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Diag 410.01, 410.11, 410.21, 410.51, 410.61, 410.81, 410.91	ANTERIOR/LATERAL WALL AMI
Diag 585.6	END STAGE RENAL DISEASE
Diag 507.0	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
Diag 484.6, 484.7	FUNGAL PNEUMONIA
Hip Fracture Treatment	
Proc 96.71	CONTINUOUS INVASIVE MECHANICAL VENTILATION FOR LESS THAN 96 CONSECUTIVE HOURS
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Proc 43.11	PERCUTANEOUS [ENDOSCOPIC] GASTROSTOMY [PEG]
Diag 038.0, 038.10, 038.11, 038.19, 038.2, 038.3, 038.40, 038.41, 038.42, 038.43, 038.44, 038.49, 038.8, 038.9	SEPSIS
Diag 428.31, 428.33	ACUTE DIASTOLIC HEART FAILURE
Hip Replacement	
Diag 276.50, 276.51, 276.52	DEHYDRATION
Diag 403.10, 403.90	NON-MALIGNANT RENAL DISEASE W/O FAILURE
Diag 250.02	DIABETES MELLITUS WITHOUT MENTION OF COMPLICATION, TYPE II OR UNSPECIFIED TYPE, UNCONTROLLED
Diag 416.0, 416.1, 416.8, 416.9	PULMONARY HYPERTENSION
Diag 491.0, 491.1, 491.20, 491.21, 491.22, 491.8, 491.9	CHRONIC BRONCHITIS
Neurosurgery	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Proc 02.31	VENTRICULAR SHUNT TO STRUCTURE IN HEAD AND NECK
Proc 02.2	VENTRICULOSTOMY
Diag 585.6	END STAGE RENAL DISEASE
Proc 00.17	INFUSION OF VASOPRESSOR AGENT
Pacemaker Procedures	
Proc 37.75	REVISION OF LEAD [ELECTRODE]
Proc 37.74	INSERTION OR REPLACEMENT OF EPICARDIAL LEAD [ELECTRODE] INTO EPICARDIUM
Proc 37.72	INITIAL INSERTION OF TRANSVENOUS LEAD [ELECTRODES] INTO ATRIUM AND VENTRICLE
Proc 00.50	IMPLANTATION OF CARDIAC RESYNCHRONIZATION PACEMAKER WITHOUT MENTION OF DEFIBRILLATION, TOTAL SYSTEM [CRT-P]
Proc 37.76	REPLACEMENT OF TRANSVENOUS ATRIAL AND/OR VENTRICULAR LEAD(S) [ELECTRODE(S)]
Pancreatitis	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Diag 518.81	ACUTE RESPIRATORY FAILURE
Diag 789.59	OTHER ASCITES
Diag 507.0	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
Diag 578.9	HEMORRHAGE OF GASTROINTESTINAL TRACT, UNSPECIFIED

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Peripheral Vascular Bypass	
Diag 585.4	CHRONIC KIDNEY DISEASE, STAGE IV (SEVERE)
Diag 260, 261, 262, 263.0, 263.1, 263.2, 263.8, 263.9	MALNUTRITION
Diag 428.31, 428.33	ACUTE DIASTOLIC HEART FAILURE
Diag 428.21, 428.23	ACUTE SYSTOLIC HEART FAILURE
Diag 444.0	EMBOLISM AND THROMBOSIS OF ABDOMINAL AORTA
Pneumonia	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Diag 518.81	ACUTE RESPIRATORY FAILURE
Diag 162.9	MALIGNANT NEOPLASM OF BRONCHUS AND LUNG, UNSPECIFIED
Proc 99.04	TRANSFUSION OF PACKED CELLS
Diag 995.92	SEVERE SEPSIS
Prostate Removal Surgery	
Diag 287.5	THROMBOCYTOPENIA, UNSPECIFIED
Proc 60.3	SUPRAPUBIC PROSTATECTOMY
Diag 414.8, 414.9	CHRONIC ISCHEMIC HEART DISEASE
Diag 276.1	HYPOSMOLALITY AND/OR HYPONATREMIA
Diag V85.4, V85.41, V85.42, V85.43, V85.44, V85.45, 278.01	BODY MASS INDEX 40 AND OVER
Pulmonary Embolism	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Diag 427.5	CARDIAC ARREST
Diag 348.1	ANOXIC BRAIN DAMAGE
Proc 96.07	INSERTION OF OTHER (NASO-)GASTRIC TUBE
Diag 785.50	SHOCK, UNSPECIFIED
Respiratory Failure	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Diag 348.1	ANOXIC BRAIN DAMAGE
Diag 427.5	CARDIAC ARREST
Diag 780.01	COMA
Diag 410.01, 410.11, 410.21, 410.51, 410.61, 410.81, 410.91	ANTERIOR/LATERAL WALL AMI
Sepsis	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Diag 427.5	CARDIAC ARREST
Diag 410.01, 410.11, 410.21, 410.51, 410.61, 410.81, 410.91	ANTERIOR/LATERAL WALL AMI
Diag 780.01	COMA
Diag 557.0	ACUTE VASCULAR INSUFFICIENCY OF INTESTINE
Small Intestine Surgeries	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Diag 585.6	END STAGE RENAL DISEASE
Proc 46.71, 46.72	Other Repair of Small Intestine
Proc 45.72	OPEN AND OTHER CECECTOMY
Diag 162.9	MALIGNANT NEOPLASM OF BRONCHUS AND LUNG, UNSPECIFIED

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Spinal Fusion	
Proc 81.04	DORSAL AND DORSOLUMBAR FUSION OF THE ANTERIOR COLUMN, ANTERIOR TECHNIQUE
Diag 260, 261, 262, 263.0, 263.1, 263.2, 263.8, 263.9	MALNUTRITION
Proc 81.05	DORSAL AND DORSOLUMBAR FUSION OF THE POSTERIOR COLUMN, POSTERIOR TECHNIQUE
Proc 99.04	TRANSFUSION OF PACKED CELLS
Diag 348.30, 348.31, 348.39, 349.82	ENCEPHALOPATHY
Stroke	
Diag V66.7	ENCOUNTER FOR PALLIATIVE CARE
Diag 780.01	COMA
Diag 518.81	ACUTE RESPIRATORY FAILURE
Diag 410.01, 410.11, 410.21, 410.51, 410.61, 410.81, 410.91	ANTERIOR/LATERAL WALL AMI
Diag 348.4	COMPRESSION OF BRAIN
Total Knee Replacement	
Diag 416.0, 416.1, 416.8, 416.9	PULMONARY HYPERTENSION
Diag 403.10, 403.90	NON-MALIGNANT RENAL DISEASE W/O FAILURE
Diag 276.7	HYPERPOTASSEMIA
Proc	Bi-lateral Knee Replacement
Diag 250.02	DIABETES MELLITUS WITHOUT MENTION OF COMPLICATION, TYPE II OR UNSPECIFIED TYPE, UNCONTROLLED
Transurethral Prostate Resection Surgery	
Diag 260, 261, 262, 263.0, 263.1, 263.2, 263.8, 263.9	MALNUTRITION
Diag 403.11, 403.91	NON-MALIGNANT RENAL DISEASE WITH FAILURE
Diag 491.0, 491.1, 491.20, 491.21, 491.22, 491.8, 491.9	CHRONIC BRONCHITIS
Diag 428.21, 428.23	ACUTE SYSTOLIC HEART FAILURE
Diag 086.0, 425.0, 425.1, 425.11, 425.18, 425.2, 425.3, 425.4, 425.5, 425.7, 425.8, 425.9	CARDIOMYOPATHY
Valve Surgery	
Proc 37.61	IMPLANT OF PULSATION BALLOON
Proc 35.26	OPEN AND OTHER REPLACEMENT OF PULMONARY VALVE
Diag 585.6	END STAGE RENAL DISEASE
Diag 427.5	CARDIAC ARREST
Proc 35.25	OPEN AND OTHER REPLACEMENT OF PULMONARY VALVE WITH TISSUE GRAFT

Appendix E. Methodology Enhancements for 2014 Ratings Models

Healthgrades made the following improvements to cohorts for the 2014 award year:

- Healthgrades no longer reports ratings based on 180-day post-admission mortality outcome. Healthgrades made this change in order to place more emphasis on the outcomes that are important to consumers (in-hospital mortality) and that are the focus of national quality improvement efforts (mortality within 30-days of hospital admission).
- Gastrointestinal Surgeries and Procedures – This previous cohort has been replaced with three new cohorts: 1) Esophageal/Stomach Surgeries; 2) Small Intestine Surgeries; and 3) Colorectal Surgeries.
- Prostatectomy – This previous cohort has been divided into two cohorts: 1) Prostate Removal Surgery and 2) Transurethral Prostate Resection Surgery.
- Electrophysiology (Cardiac Service Line) – 2014 is the pilot year for ratings on two new cohorts: 1) Pacemaker Procedures and 2) Defibrillator Procedures.
- Abdominal Aortic Aneurysm Repair – Healthgrades excluded patients with ruptured abdominal aortic aneurysms (ICD-9 441.3 – ABDOMINAL ANEURYSM, RUPTURED) from this cohort. In addition, the outcome for this cohort was changed from mortality to complications.
- All Orthopedic Cohorts – Specific DRG's have been added as inclusion codes to delineate only elective cases and not trauma. These specific DRG's replace the use of e-codes to identify multi-system trauma cases as exclusions. Patients who do have multi-system injuries will instead be identified by a DRG such as "extensive OR procedure unrelated to principal diagnosis" and would not be included in Healthgrades orthopedic cohorts.
- Palliative care excluded from all medical mortality cohorts – Previously, the ICD-9 code V66.7 – ENCOUNTER FOR PALLIATIVE CARE, was an exclusion in the following cohorts: Heart Attack, Heart Failure, COPD, Pneumonia, Stroke, Neurosurgery, Hip Fracture Repair, Bowel Obstruction, GI Bleed, Pulmonary Embolism, Diabetic Emergencies, Sepsis, and Respiratory Failure. This code was removed as one of the exclusion criteria for 2014.
- Urinary Tract Infection (UTI) and Urinary Retention are no longer considered complications in Healthgrades complications-based cohorts.
- UTI because of catheter issues (996.64 – INFECTION AND INFLAMMATORY REACTION DUE TO INDWELLING URINARY CATHETER), has been added as a complication in Healthgrades complications-based cohorts.
- Dural tear (ICD-9 code 349.31 – ACCIDENTAL PUNCTURE OR LACERATION OF DURA DURING A PROCEDURE) is no longer considered to be a complication in Back and Neck Surgeries (Without Spinal Fusion) and Spinal Fusion cohorts.

Appendix F. Hospital Ratings Removal Policy

Effective Date: August 16, 2013

Healthgrades evaluates the performance of the nation's nearly 5,000 hospitals using several data sources including data submitted by hospitals to the Centers for Medicare and Medicaid Services (CMS), all-payer data submitted by hospitals to their states, and HCAHPS data.

Regardless of the data set utilized, Healthgrades methodology is applied to every hospital in the same manner.

On rare occasions, Healthgrades identifies new information that impacts its assessment of a hospital. Healthgrades policy is to remove certain hospitals' performance and/or awards from its website in the following situations:

- A revocation of a hospital's Medicare license by CMS;
- Federal conviction of a hospital for Medicare fraud;
- Egregious issues with the integrity of data submitted by a hospital to CMS or to the state in which the hospital resides.

In these rare circumstances, the hospital's CEO will be notified in writing of the reason for removal. Removal is at the discretion of Healthgrades based on the impact from erroneous data and/or presumed fraudulent activities.

Under **no circumstances** will Healthgrades accept data directly from a hospital, nor will Healthgrades manipulate or change a hospital's performance category or data in any way. It is the hospital's responsibility to resubmit the data to CMS or to its state. To re-post specific performance information, Healthgrades must receive corrected data directly from CMS or from the state during its annual ratings update.

Ordering Hospitals for Awards

Using the Healthgrades star performance categories and associated z-scores, hospitals are ordered by z-score nationally to determine Specialty Excellence Awards™ recipients on an annual basis. In the case that a hospital's ratings are removed, it is Healthgrades policy NOT to re-order hospitals. No hospital shall move up or down in the ordered list at the time when a hospital's ratings are removed.