

Women’s Health Excellence Award™ 2014 Methodology

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Introduction

The Healthgrades Women’s Health Excellence Award™ recognizes the best-performing hospitals in women’s health, which includes care provided to women for common conditions and procedures treated in the hospital.

To help consumers evaluate and compare hospital performance in women’s health, Healthgrades analyzed female patient outcome data for virtually every hospital in the country. A list of award recipients is available on the Internet at www.Healthgrades.com.

The women’s health ratings used to determine award recipients were based upon Healthgrades risk-adjustment methodology for 15 procedures/diagnoses described below.

Data Source

Healthgrades used Medicare inpatient data from the MedPAR database (purchased from the Centers for Medicare and Medicaid Services) for years 2010 through 2012.

Cohort Definitions and Outcomes

For each of the 15 patient cohorts, Healthgrades developed a list of specific procedures and diagnoses that define the cohort and a list of cohort-specific exclusions for rare and/or clinically complex diagnoses and procedures that cannot be adequately risk adjusted (*Appendix A*).

For each of these cohorts, only hospitals with at least 30 female cases across three years of data and at least five female cases in the most current year were included.

For eight of the cohorts, the outcome measure is mortality. For seven of the cohorts, the outcome of measure is in-hospital complications. For the cohorts where in-hospital complications are the outcome of study, complications are defined by using clinical and coding experts. A list of in-hospital complications by cohort can be found in *Appendix B*.

Healthgrades analyzed the following 15 procedures/diagnoses (cohorts) for each hospital's female patients:

Mortality-Based Cohorts

- Chronic Obstructive Pulmonary Disease (COPD)
- Coronary Artery Bypass Graft (CABG) Surgery
- Coronary Interventional Procedures (PTCA/Angioplasty, Stent)
- Heart Attack
- Heart Failure
- Pneumonia
- Stroke
- Valve Surgery

Complication-Based Cohorts

- Spinal Fusion
- Back and Neck Surgery (Without Spinal Fusion)
- Carotid Surgery
- Hip Fracture Treatment
- Hip Replacement
- Peripheral Vascular Bypass
- Total Knee Replacement

Healthgrades Risk-Adjustment Methodology

Healthgrades risk-adjustment methodology considers important differences in patient demographic and clinical characteristics. The purpose of risk adjustment is to obtain fair statistical comparisons between disparate populations or groups. Significant differences in demographic and clinical risk factors are found among patients treated in different hospitals. Risk adjustment of the data is needed to make accurate and valid comparisons of clinical outcomes at different hospitals.

This methodology defines risk factors as those clinical and demographic variables that influence patient outcomes in significant and systematic ways. Risk factors may include age, specific procedure performed, and comorbid conditions such as hypertension, chronic renal failure, congestive heart failure, and diabetes. These risk factors are incorporated into multivariate logistic regression models to carry out the risk adjustment.

Eligibility for the 2014 Women's Health Excellence Award™

To receive a rating (z-score) in a cohort, a hospital must have had all of the following:

- A minimum of 30 female discharges over the three years, and at least five female discharges in the most recent year in the cohort.
- For stroke, a hospital must have transferred out less than 10% of stroke patients (female or male) to another acute care hospital over three years (2010–2012).

To be eligible to receive a Women's Health Excellence Award, a hospital must be:

- Rated (have a z-score) in stroke.
- Rated in at least eight of the fifteen cohorts listed above.

Statistical Models and Award Calculations

Healthgrades used the following steps to determine Women's Health Excellence Award recipients:

1. For each patient cohort, unique, female-only statistical models were developed using logistic regression. For most mortality cohorts, separate models were created for in-hospital mortality and in-hospital +30-day mortality.
2. Comorbid diagnoses (e.g., hypertension, chronic renal failure, anemia, diabetes), demographic characteristics (e.g., age), and specific procedures were classified as possible risk factors. Some diagnosis codes were merged together (e.g., primary and secondary pulmonary hypertension) to minimize the impact of coding differences.

Healthgrades used logistic regression to determine which of these factors were correlated and to what extent with mortality or complications. Those conditions or demographics with statistically significant odds ratios stayed in the model as final risk factors.

Potential risk factors with odds ratios less than one were removed from the model except in a few cases. See *Appendix C* for a list of the top five risk factors for each procedure or diagnosis. The top five risk factors are procedures/diagnoses that are the most highly correlated with the outcome. They are not necessarily those with the highest volume.

The statistical models were checked for validity and finalized. All of the models were highly significant. These cohort specific models were then used to estimate the probability of death or complication for each patient in the cohort.

3. Patients were aggregated for each hospital to obtain the predicted outcome for each hospital.
4. For each hospital, cohort, and outcome, the observed and predicted numbers were summed and a z-score was calculated. Thus, the complication-based cohorts had a single z-score but most mortality-based cohorts had two z-scores (in-hospital and in-hospital +30 days).
5. The overall performance score for each hospital was calculated using volume-weighted z-scores averaged across all complications, in-hospital mortality, and 30-day mortality based cohorts. Volume weights represent the proportion of patients within a given cohort and outcome measure. The proportion is calculated as the ratio of patients in a cohort and outcome measure over total patients across all cohorts and outcome measures. The patients used for in-hospital mortality and 30-day mortality are treated as independent for the volume weighting calculation.

As each mortality cohort is composed of two outcomes measures, in-hospital mortality and 30-day mortality, and complication cohorts have only one outcome measure, the individual influence of mortality and complication outcomes on the overall performance score is 2 to 1.

Within the mortality cohorts a higher emphasis is placed on 30-day mortality (0.6) compared to in-hospital mortality (0.4) because the 30-day mortality outcome measure is considered a more significant quality indicator and this quality measure will impact hospital reimbursements in the near future.

The final contribution of each cohort to the overall score will vary based on the mix of cohorts at any given hospital.

6. Hospitals were then listed in descending order by their overall performance score.
7. The top 10% of hospitals were designated the 2014 Women's Health Excellence Award™ recipients.

Limitations of the Data Analysis

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

- Cases may have been coded incorrectly or incompletely by the hospital.
- Healthgrades conditions and procedures models can only account for risk factors that are coded into the billing data. Therefore, 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.
- Although Healthgrades has taken steps to carefully compile these data, no techniques are infallible; therefore, some information may be missing, outdated or incorrect.
- 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 a high z-score or rating for a particular hospital is not a recommendation or endorsement by Health Grades, Inc. of a particular hospital; it means that the data associated with a particular hospital has met the foregoing qualifications. Only individual patients can decide whether a particular hospital is suited for their unique needs.

Also note that if more than one hospital reported under a single provider ID, Healthgrades analyzed patient outcome 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 Cohorts and Related ICD-9-CM Codes

Excluded from each cohort were patients who have had any organ transplant or a complication thereof.

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

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

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

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

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

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

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 B. Women's Health Complications

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

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 DEFIBRINATION 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
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Must occur with 997.5 URINARY COMPLICATIONS

593.9	UNSPECIFIED DISORDER OF KIDNEY AND URETER
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Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

008.45	INTESTINAL INFECTION DUE TO CLOSTRIDIUM DIFFICILE
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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

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	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
434.01	CEREBRAL THROMBOSIS WITH CEREBRAL INFARCTION
434.11	CEREBRAL EMBOLISM WITH CEREBRAL INFARCTION
434.91	UNSPECIFIED CEREBRAL ARTERY OCCCLUSION 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

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 DEFIBRINATION 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
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Must occur with 997.5 URINARY COMPLICATIONS

593.9	UNSPECIFIED DISORDER OF KIDNEY AND URETER
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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

Appendix C. Top Five Risk Factors by Procedure or Diagnosis

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
Diag 348.30, 348.31, 348.39, 349.82	ENCEPHALOPATHY
Diag 344.00	QUADRIPLEGIA, UNSPECIFIED
Proc 81.05	DORSAL AND DORSOLUMBAR FUSION OF THE POSTERIOR COLUMN, POSTERIOR TECHNIQUE
Back and Neck Surgery (Without Spinal Fusion)	
Proc 99.04	TRANSFUSION OF PACKED CELLS
Diag 260, 261, 262, 263.0, 263.1, 263.2, 263.8, 263.9	MALNUTRITION
Proc 03.53	REPAIR OF VERTEBRAL FRACTURE
Diag 324.1	INTRASPINAL ABSCESS
Diag 348.30, 348.31, 348.39, 349.82	ENCEPHALOPATHY
Carotid Surgery	
Proc 39.74	ENDOVASCULAR REMOVAL OF OBSTRUCTION FROM HEAD AND NECK VESSEL(S)
Diag 428.31, 428.33	ACUTE DIASTOLIC HEART FAILURE
Diag 428.21, 428.23	ACUTE SYSTOLIC HEART FAILURE
Diag 585.4	CHRONIC KIDNEY DISEASE, STAGE IV (SEVERE)
Diag 491.0, 491.1, 491.20, 491.21, 491.22, 491.8, 491.9	CHRONIC BRONCHITIS
Chronic Obstructive Pulmonary Disease (COPD)	
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 507.0	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
Diag 518.81	ACUTE RESPIRATORY FAILURE
Diag 410.71	ACUTE MYOCARDIAL INFARCTION, SUBENDOCARDIAL INFARCTION, INITIAL EPISODE OF CARE
Diag 518.84	ACUTE AND CHRONIC RESPIRATORY FAILURE
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 585.4	CHRONIC KIDNEY DISEASE, STAGE IV (SEVERE)
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 410.31, 410.41	INFERIOR WALL AMI
Diag 427.5	CARDIAC ARREST

Heart Attack	
Diag 348.1	ANOXIC BRAIN DAMAGE
Proc 37.61	IMPLANT OF PULSATION BALLOON
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 585.6	END STAGE RENAL DISEASE
Heart Failure	
Diag 410.01, 410.11, 410.21, 410.51, 410.61, 410.81, 410.91	ANTERIOR/LATERAL WALL AMI
Diag 507.0	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMITUS
Diag 585.6	END STAGE RENAL DISEASE
Diag 518.81	ACUTE RESPIRATORY FAILURE
Proc 36.15	SINGLE INTERNAL MAMMARY-CORONARY ARTERY BYPASS
Hip Fracture Treatment	
Proc 43.11	PERCUTANEOUS [ENDOSCOPIC] GASTROSTOMY [PEG]
Diag 428.21, 428.23	ACUTE SYSTOLIC HEART 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
Diag 428.31, 428.33	ACUTE DIASTOLIC HEART FAILURE
Diag 276.2	ACIDOSIS
Hip Replacement	
Diag 276.50, 276.51, 276.52	DEHYDRATION
Diag 250.02	DIABETES MELLITUS WITHOUT MENTION OF COMPLICATION, TYPE II OR UNSPECIFIED TYPE, UNCONTROLLED
Diag 403.10, 403.90	NON-MALIGNANT RENAL DISEASE W/O FAILURE
Diag 416.0, 416.1, 416.8, 416.9	PULMONARY HYPERTENSION
Diag 428.30, 428.32	CHRONIC DIASTOLIC HEART FAILURE
Peripheral Vascular Bypass	
Diag 428.21, 428.23	ACUTE SYSTOLIC HEART FAILURE
Diag 260, 261, 262, 263.0, 263.1, 263.2, 263.8, 263.9	MALNUTRITION
Diag 444.0	EMBOLISM AND THROMBOSIS OF ABDOMINAL AORTA
Diag 585.4	CHRONIC KIDNEY DISEASE, STAGE IV (SEVERE)
Diag 428.31, 428.33	ACUTE DIASTOLIC HEART FAILURE
Pneumonia	
Diag 518.81	ACUTE RESPIRATORY FAILURE
Diag 162.9	MALIGNANT NEOPLASM OF BRONCHUS AND LUNG, UNSPECIFIED
Diag 995.92	SEVERE SEPSIS
Diag 518.82	OTHER PULMONARY INSUFFICIENCY, NOT ELSEWHERE CLASSIFIED
Proc 99.04	TRANSFUSION OF PACKED CELLS
Stroke	
Diag 780.01	COMA
Diag 518.81	ACUTE RESPIRATORY FAILURE
Diag 348.4	COMPRESSION OF BRAIN
Diag 410.01, 410.11, 410.21, 410.51, 410.61, 410.81, 410.91	ANTERIOR/LATERAL WALL AMI
Diag 038.12	METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA

Total Knee Replacement	
Diag 276.50, 276.51, 276.52	DEHYDRATION
Diag 403.10, 403.90	NON-MALIGNANT RENAL DISEASE W/O FAILURE
Diag 416.0, 416.1, 416.8, 416.9	PULMONARY HYPERTENSION
Diag 276.7	HYPERPOTASSEMIA
Diag 428.30, 428.32	CHRONIC DIASTOLIC HEART FAILURE
Valve Surgery	
Proc 37.61	IMPLANT OF PULSATION BALLOON
Diag 585.6	END STAGE RENAL DISEASE
Diag 427.5	CARDIAC ARREST
Proc 35.27	OPEN AND OTHER REPLACEMENT OF TRICUSPID VALVE WITH TISSUE GRAFT
Diag 996.61	INFECTION AND INFLAMMATORY REACTION DUE TO CARDIAC DEVICE, IMPLANT, AND GRAFT