

Bariatric Surgery Ratings 2013 Methodology

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Introduction

Bariatric surgery is weight-loss surgery that can help morbidly obese people achieve significant weight loss. Other benefits include resolution of diseases associated with obesity, including type 2 diabetes, and a lower risk of heart disease.

To help consumers evaluate and compare hospital performance in bariatric surgery, Healthgrades analyzed patient outcome data for all patients (all-payer data, inpatient only) provided by 18 individual states for years 2009 through 2011. Ratings were based on Healthgrades risk-adjustment methodology, and the Healthgrades ratings are available on the Internet at www.healthgrades.com.

The purpose of risk adjustment is to obtain fair statistical comparisons among 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.

Data Source

Healthgrades purchased the initial patient-level data for all states that made their data available. The data represent three years of discharges (2009 – 2011). These data were chosen because they represent virtually all discharges for the associated states; however, patient volumes may differ due to data masking by state agencies to protect patient privacy. The 18 all-payer states evaluated were as follows:

- Arizona
- California
- Colorado
- Florida
- Iowa
- Maryland
- Massachusetts
- Nevada
- New Jersey
- New York
- Oregon
- Pennsylvania
- Rhode Island
- Texas
- Utah
- Virginia
- Washington
- Wisconsin

Determining Bariatric Surgery Ratings

Fair and valid comparisons between hospital providers can be made only to the extent that the risk-adjustment methodology considers important differences in patient demographic and clinical characteristics. The risk-adjustment methodology used by Healthgrades defines risk factors as those clinical and demographic variables that influence patient outcomes in significant and systematic ways.

Risk factors may include age, gender, specific procedure performed, and comorbid conditions such as hypertension, chronic renal failure, heart failure, and diabetes. The methodology is disease-specific and outcome-specific. This means that individual risk models are constructed and tailored for each clinical condition or procedure using multivariate logistic regression.

For multivariate logistic regression-based ratings (see below), Healthgrades conducted a series of data quality checks to preserve the integrity of the ratings. Based on the results of these checks, we excluded a limited number of cases because they were inappropriate for inclusion in the database or miscoded.

Examples of excluded patient records were:

- Patients who left the hospital against medical advice or who were transferred to another acute care hospital.
- Patients who were still in the hospital when the claim was filed.
- Patients with an invalid gender.
- Patients with an invalid age.

Multivariate Logistic Regression-Based Ratings

The initial analysis of the data utilized 18 states of all-payer data from 2009 through 2011. Bariatric surgery patients were identified by their ICD-9 principal procedure of a bariatric surgical procedure and a principal diagnosis of obesity/morbid obesity (see *Appendix A*). Patients under the age of 18 were excluded.

For this population, potential risk factors and the outcome measure (complications) were then defined.

- 1 Potential risk factors were defined as all clinically relevant diagnoses occurring in more than 0.5 percent of the patients. In addition, patient demographic factors such as age and gender and the specific procedure performed on the patient were also considered. Some diagnosis codes were merged together (e.g., primary and secondary pulmonary hypertension) to minimize the impact of coding variations.
- 2 Complications were identified through a review of peer-reviewed research and input from clinical and coding experts.

In some cases, an ICD-9 code can be either a risk or a complication. In these cases, a code is differentiated by the presence or absence of a 900 post-operative complication code. For example, in the case where a patient record contains "427.31 Atrial Fibrillation," that code is considered a risk if it occurs by itself and a complication if there is a corresponding "997.1 Cardiac Complications NEC" code also present in the patient record. Outcomes were binary, with documented major complications either present or not. Mortality is considered a major complication. *Appendix B* lists the major complications for bariatric surgery.

Developing Healthgrades Bariatric Surgery Ratings

Developing the Healthgrades Bariatric Surgery ratings involved four steps.

- 1 First, the predicted value (predicted complications) was obtained using a logistic regression model discussed in the next section.
- 2 Second, the predicted value was compared with the actual or observed number of complications. Only hospitals with at least 30 cases across three years of data and at least five cases in the most current year were included.
- 3 Third, 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.
- 4 Fourth, a hospital's performance was categorized into one of three performance categories based upon the outcome of the statistical test.

The following performance categories were used:

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

Statistical Models

Using the list of potential risk factors described above, we used logistic regression to determine to what extent each one was correlated with the quality measure (complications). A risk factor stayed in the model if it had an odds ratio greater than one (except clinically relevant procedures, cohort defining principal diagnoses, and some protective factors as documented in the medical literature were allowed to have an odds ratio less than one) and was also statistically significant ($p < 0.05$).

Complications were *not* counted as risk factors as they were considered a result of care received during the admission. Risk factors are those diagnoses that are the most highly correlated with the outcomes studied (complications). The most highly correlated risk factors are not necessarily those with the highest volume. (See *Appendix C* for the Top Five Diagnosis/Procedure Risk Factors.)

The statistical model was checked for validity and finalized. The final model was highly significant, with a C-statistic of 0.675. This model was then used to estimate the probability of a complication for each patient in the cohort. Patients were then aggregated for each hospital to obtain the predicted number of complications for each hospital. Statistical significance tests were performed to identify, by hospital, whether the actual and predicted rates were significantly different.

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.

Please note that a high ranking 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.

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

Bariatric Surgery

Inclusions

Principal Procedures: 43.7, 43.89, 44.31, 44.38, 44.39, 44.68, 44.69 or 44.95;
OR 45.51 as the principal procedure and both 43.89 and 45.91 as secondary procedures
OR 45.91 as the principal procedure and both 43.89 and 45.51 as secondary procedures
Principal Diagnoses: 278.00, 278.01

Exclusions

Procedures: 44.5, 44.94, 44.96, 44.97

Diagnoses: (Primary or Secondary): 042, 141.9, 150.0, 150.1, 150.2, 150.3, 150.4, 150.5, 150.8, 150.9, 151.0, 151.1, 151.2, 151.3, 151.4, 151.5, 151.6, 151.8, 151.9, 152.0, 152.1, 152.2, 152.3, 152.8, 152.9, 153.0, 153.1, 153.2, 153.3, 153.4, 153.5, 153.6, 153.7, 153.8, 153.9, 154.0, 154.1, 154.2, 154.3, 154.8, 155.0, 155.1, 155.2, 156.0, 156.1, 156.2, 156.8, 156.9, 157.0, 157.1, 157.2, 157.3, 157.4, 157.8, 157.9, 158.0, 158.8, 158.9, 159.0, 159.1, 159.8, 159.9, 161.9, 162.9, 171.5, 171.8, 195.0, 195.2, 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, 199.0, 200.00, 200.03, 200.08, 202.00, 202.01, 202.03, 202.05, 202.80, 202.83, 203.00, 203.02, 203.12, 203.80, 203.82, 204.02, 204.12, 204.22, 204.82, 204.92, 205.02, 205.10, 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, 211.1, 211.2, 211.3, 211.5, 211.6, 211.8, 211.9, 214.3, 215.5, 228.04, 228.1, 230.2, 230.7, 230.9, 235.2, 235.4, 235.5, 238.1, 239.0, 239.2, 239.8, 530.83, 530.84, 530.86, 530.87, 531.00, 531.01, 531.10, 531.11, 531.20, 531.21, 531.31, 531.40, 531.41, 531.50, 531.51, 531.60, 531.61, 531.71, 531.91, 532.00, 532.01, 532.10, 532.11, 532.20, 532.21, 532.31, 532.40, 532.41, 532.50, 532.51, 532.60, 532.61, 532.71, 532.91, 533.00, 533.01, 533.10, 533.11, 533.20, 533.21, 533.31, 533.40, 533.41, 533.50, 533.51, 533.60, 533.61, 533.71, 533.91, 534.00, 534.01, 534.10, 534.11, 534.20, 534.21, 534.31, 534.40, 534.41, 534.50, 534.51, 534.60, 534.61, 534.71, 534.91, 535.0, 535.00, 535.01, 535.1, 535.10, 535.11, 535.20, 535.21, 535.30, 535.31, 535.40, 535.41, 535.50, 535.51, 535.60, 535.61, 536.0, 536.1, 536.2, 536.40, 536.41, 536.42, 536.49, 536.8, 536.9, 537.0, 537.1, 537.2, 537.3, 537.4, 537.5, 537.6, 537.81, 537.82, 537.83, 537.84, 537.89, 537.9, 555.0, 555.1, 555.2, 555.9, 558.1, 558.2, 558.3, 558.9, 562.02, 562.03, 564.81, 564.89, 564.9, 569.5, 569.81, 569.82, 569.83, 569.84, 569.85, 569.86, 569.89, 569.9, 751.0, 751.1, 751.2, 751.3, 751.4, 751.5, 751.60, 751.61, 751.62, 751.69, 751.7, 751.8, 751.9, 996.8, 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

Appendix B. Bariatric Surgery Complications

Independent complications are conditions that are clearly hospital-acquired or by the coding definition are defined as post-operative. For 2008 or later these conditions were not counted as complications if the POA indicator was "Yes" or "Clinically Undetermined."

Bariatric Surgery – Independent Complications

038.0	STREPTOCOCCAL SEPTICEMIA	434.00	CEREB THROMB W/O INFARCT
038.10	STAPH SEPTICEMIA NOS	434.01	CEREB THROMB W INFARCT
038.11	MSSA SEPTICEMIA	434.10	CEREBRAL EMBOL S INFARCT
038.12	MRSA SEPTICEMIA	434.11	CEREBRAL EMBOL W INFARCT
038.19	STAPH SEPTICEMIA NEC	434.90	CEREB ART OCCL S INFARCT
038.2	PNEUMOCOCCAL SEPTICEMIA	434.91	CEREB ART OCCL W INFARCT
038.3	ANAEROBIC SEPTICEMIA	444.22	LOWER EXTREMITY EMBOLISM
038.40	GRAM-NEG SEPTICEMIA NOS	449	SEPTIC ARTERIAL EMBOLISM
038.41	H. INFLUENZAE SEPTICEMIA	453.41	ACUTE DVT PROXIMAL LEG
038.42	E. COLI SEPTICEMIA	453.8	AC VEN THROMB OTH VEIN
038.43	PSEUDOMONAS SEPTICEMIA	453.82	AC DVT UPPER EXTREMITY
038.44	SERRATIA SEPTICEMIA	453.83	AC VEN THROMB UE NOS
038.49	GRAM-NEG SEPTICEMIA NEC	453.84	AC VEN THROMB AX VEIN
038.8	SEPTICEMIA NEC	453.85	AC VEN THROMB SCL VEIN
038.9	SEPTICEMIA NOS	453.86	AC VEN THROMB INT JV
041.00	STREP INFECTION NOS	453.87	AC VEN THROMB THOR NEC
041.4	E. COLI INFECTION	453.89	AC VEN THROMB NEC
041.9	BACTERIAL INFECTION NOS	458.29	IATROGEN HYPOTENSION NEC
286.6	DEFIBRATION SYNDROME	459.0	HEMORRHAGE NOS
292.12	DRG IND PSYCH W HALLUCIN	480.0	ADENOVIRAL PNEUMONIA
292.81	DRUG INDUCED DELIRIUM	480.1	RSV PNEUMONIA
293.0	DELIRIUM D/T CCE	480.2	PARAINFLUENZA VIR PNEUM
293.1	SUBACUTE DELIRIUM	480.3	SARS PNEUMONIA
298.9	PSYCHOSIS NOS	480.8	VIRAL PNEUMONIA NEC
342.90	UNSPEC HEMIPLEG-SIDE NOS	481	PNEUMOCOCCAL PNEUMONIA
348.30	ENCEPHALOPATHY NOS	482.0	K. PNEUMONIAE PNEUMONIA
348.31	METABOLIC ENCEPHALOPATHY	482.1	PSEUDOMONAL PNEUMONIA
348.39	ENCEPHALOPATHY NEC	482.2	H. INFLUENZAE PNEUMONIA
349.82	TOXIC ENCEPHALOPATHY	482.30	STREP PNEUMONIA NOS
354.3	RADIAL NERVE LESION	482.31	GROUP A STREP PNEUMONIA
410.01	ANTEROLAT AMI-INITIAL	482.32	GROUP B STREP PNEUMONIA
410.11	ANT AMI NEC-INITIAL	482.39	STREP PNEUMONIA NEC
410.21	INFEROLAT AMI-INITIAL	482.40	STAPH PNEUMONIA NOS
410.31	INFEROPOST AMI-INITIAL	482.41	MSSA PNEUMONIA
410.41	INF AMI NEC-INITIAL	482.42	MRSA PNEUMONIA
410.51	LAT AMI NEC-INITIAL	482.49	STAPH PNEUMONIA NEC
410.61	POSTERIOR AMI-INITIAL	482.81	PNEUMONIA D/T ANAEROBES
410.70	SUBEND INFARCT-EPIS NOS	482.82	E. COLI PNEUMONIA
410.71	SUBEND INFARCT-INITIAL	482.83	GRAM-NEG PNEUMONIA NEC
410.81	AMI NEC-INITIAL EPISODE	482.84	LEGIONNAIRES' DISEASE
410.91	AMI NOS-INITIAL EPISODE	482.89	BACTERIAL PNEUMONIA NEC
415.11	IATRO PULM EMBOL/INFARCT	482.9	BACTERIAL PNEUMONIA NOS
415.12	SEPTIC PULMON EMBOLISM	483.0	M. PNEUMONIAE PNEUMONIA
423.3	CARDIAC TAMPONADE	483.1	CHLAMYDIAL PNEUMONIA
426.4	RT BUNDLE BRANCH BLOCK	483.8	PNEUMONIA D/T ORG NEC
427.41	VENTRICULAR FIBRILLATION	484.1	PNEUMONIA IN CMV DISEASE
427.5	CARDIAC ARREST	484.3	PNEUMONIA IN WHOOP COUGH
431	INTRACEREBRAL HEMORRHAGE	485	BRONCHOPNEUMONIA ORG NOS
433.01	BASIL ART OCCL W INFARCT	486	PNEUMONIA ORGANISM NOS
433.11	CAROTID OCCL W INFARCT	495.9	ALL ALVEOLITIS/PNEUM NOS
433.21	VERT ART OCCL W INFARCT	507.0	FOOD/VOMIT PNEUMONITIS
433.31	MULT PREC OCCL W INFARCT	512.1	IATROGENIC PNEUMOTHORAX
433.81	PREC OCCL NEC W INFARCT	518.7	TRALI
433.91	PREC OCCL NOS W INFARCT	518.81	AC RESPIRATORY FAILURE

continued

Bariatric Surgery - Independent Complications (continued)

518.84	AC & CHR RESP FAILURE	997.1	SURG COMP-HEART
519.09	TRACHEOSTOMY COMP NEC	997.2	SURG COMP-PERIPH VASC
539.01	INF D/T GASTR BAND PX	997.3	SURG COMP-RESP NEC
539.09	GASTR BAND PX COMP NEC	997.31	VENT ASSOC PNEUMONIA
539.81	INF D/T BARIATRIC PX NEC	997.32	POSTPX ASP PNEUMONIA
539.89	COMP NEC D/T BAR PX NEC	997.39	OTH SURG COMP-RESP
560.0	INTUSSUSCEPTION	997.4	SURG COMP-DIGESTIVE
560.1	PARALYTIC ILEUS	997.49	SURG COMP NEC-DIGEST
560.2	INTESTINAL VOLVULUS	997.5	SURG COMP-URINARY NEC
560.30	IMPACTION INTESTINE NOS	997.79	VASC COMP-VESSEL NEC
560.39	INTESTINE IMPACTION NEC	997.91	SURG COMP-HYPERTENSION
560.89	INTESTINAL OBSTR NEC	997.99	SURG COMP OTH SYST NEC
560.9	INTESTINAL OBSTR NOS	998.0	POSTOPERATIVE SHOCK
567.29	OTH SUPPURAT PERITONITIS	998.00	POSTOP SHOCK NOS
567.38	OTH RETROPERIT ABSCESS	998.01	POSTOP CARDIOGENIC SHOCK
567.89	OTHER PERITONITIS	998.02	POSTOP SEPTIC SHOCK
567.9	PERITONITIS NOS	998.09	POSTOP SHOCK NEC
569.79	INTEST POUCH COMP NEC	998.11	HEMORRHAGE COMP PX
570	ACUTE LIVER NECROSIS	998.12	HEMATOMA COMPLICATING PX
578.9	GI HEMORRHAGE NOS	998.2	ACCIDENTAL OP LACERATION
584.5	AC KF W TUBULAR NEPHR	998.30	DISRUPTION WOUND NOS
584.8	ACUTE KIDNEY FAILURE NEC	998.31	DISRUPT INTERNAL OP WND
584.9	ACUTE KIDNEY FAILURE NOS	998.32	DISRUPT EXTERNAL OP WND
599.0	URINARY TRACT INF NOS	998.4	FB LEFT DURING PROCEDURE
707.25	UNSTAGEABLE PRESS ULCER	998.51	INFECTED POSTOP SEROMA
780.2	SYNCOPE & COLLAPSE	998.59	POSTOP INFECTION NEC
785.4	GANGRENE	998.6	PERSIST POSTOP FISTULA
785.50	SHOCK NOS	998.7	POSTOP FOREIGN SUBST RXN
785.51	CARDIOGENIC SHOCK	998.89	OTH SPEC POSTOP COMP NEC
788.20	RETENTION OF URINE NOS	999.31	INFECT NEC & NOS D/T WVC
788.29	RETENTION OF URINE NEC	999.32	BLOODSTREAM INF D/T CVC
799.01	ASPHYXIA	999.34	AC INF POST TRANSFUSION
799.1	RESPIRATORY ARREST	999.39	INFECT COMP MED CARE NEC
863.29	SMALL INTEST INJ NEC-CL	999.80	TRANSFUSION REACTION NOS
864.02	MINOR LIVER LAC-CLOSED	999.83	HTR INCOMPATIBILITY NOS
864.09	LIVER INJURY NEC-CLOSED	999.84	AHTR INCOMPATIBILITY NOS
865.02	SPLEEN CAPS TEAR-CLOSED	999.85	DHTR INCOMPATIBILITY NOS
867.1	BLAD/URETHRA INJURY-OPEN	E878.6	ABN RXN-ORGAN RMVL NEC
933.1	FB IN LARYNX	E935.2	ADVERSE EFFECT OPIATES
934.0	FB IN TRACHEA	31.1	TEMPORARY TRACHEOSTOMY
934.1	FB IN MAIN BRONCHUS	31.29	OTHER PERM TRACHEOSTOMY
934.9	FB IN RESP TREE NOS	38.95	VENOUS CATH FOR RD
935.1	FB IN ESOPHAGUS	39.95	HEMODIALYSIS
947.3	BURN OF GI TRACT	41.2	SPLENOTOMY
955.1	INJURY MEDIAN NERVE	41.43	PARTIAL SPLENECTOMY
959.09	FACE & NECK INJURY	41.5	TOTAL SPLENECTOMY
995.92	SEVERE SEPSIS	41.95	REPAIR OF SPLEEN
996.1	MECH COMP OTH VASC DEV	44.61	SUTURE GASTRIC LAC
996.64	INFECT D/T URETHRAL CATH	54.12	REOPEN RECENT LAP SITE
996.76	COMP NEC D/T GU DEVICE	54.61	RECLOSE POSTOP DISRUPT
997.01	CNS SURG COMP	54.91	PERC ABD DRAINAGE
997.02	IATROGEN CV INFARCT/HEM	54.92	RMVL FB PERITON CAVITY
997.09	NERV SYST SURG COMP NEC		

Bariatric 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 post-operative complication code present in the patient record.

Must occur with 997.1 CARDIAC COMPLICATIONS, NOT ELSEWHERE CLASSIFIED

427.0	PSVT
427.1	PVT
427.31	ATRIAL FIBRILLATION
428.0	CHF NOS
428.1	LEFT HEART FAILURE
428.21	ACUTE SYSTOLIC HF
428.31	ACUTE DIASTOLIC HF
428.41	AC SYS & DIASTOLIC HF

Must occur with 997.3 RESPIRATORY COMPLICATIONS or 997.39 OTHER RESPIRATORY COMPLICATIONS

415.19	PULMON EMBOL/INFARCT NEC
484.6	PNEUM IN ASPERGILLOSIS
484.7	PNEUM IN SYST MYCOSESNEC
518.0	PULMONARY COLLAPSE
799.02	HYPOXEMIA

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

682.2	TRUNK CELLULITIS
785.52	SEPTIC SHOCK
790.7	BACTEREMIA

Must occur with 998.0 POSTOPERATIVE SHOCK

458.8	HYPOTENSION NEC
458.9	HYPOTENSION NOS

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

568.81	HEMOPERITONEUM
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Must occur with 998.59 OTHER POSTOPERATIVE INFECTION

568.81	HEMOPERITONEUM
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Appendix C. Top Five Risk Factors

ICD-9	
Diagnosis or Procedure Code	Description
Proc 44.69	OTHER REPAIR OF STOMACH
Proc 44.19	OTHER GASTROSTOMY
Diag 260, 261, 262, 263.0, 263.1, 263.2, 263.8, 263.9	MALNUTRITION
Proc 518.0	PULMONARY COLLAPSE
Diag 276.8	HYPOPOTASSEMIA

Appendix D. Methodology Enhancements for 2013 Ratings Models

Prior to the 2013 Ratings Model, Healthgrades included only the procedures that would be reimbursed by Medicare. For 2013, however, Healthgrades discontinued this policy because a) most patients undergoing bariatric surgery are not covered by Medicare and b) there are is a larger percentage of self-pay patients in this cohort than in most other all-payer based cohorts.

Healthgrades reviewed the coding guidelines published by the American Society for Metabolic and Bariatric Surgery (ASBMS) in February 2013 (<http://asmbs.org/2013/03/insurance-committee-update-march-2013/>). As a result of this review, the following changes were made:

- Added:
 - 44.69 Other Repair Of Stomach
 - 43.7 Partial Gastrectomy with Anastomosis to Jejunum
- Changed requirements for 43.89 Open and Other Partial Gastrectomy. We no longer require 2 additional procedure codes (45.51 and 45.91) to be present in the record. This code corresponds to Laparoscopic Sleeve Gastrectomy