

Warranty for Bariatric Surgery

In developing this warranty for bariatric surgery the Accountable Payment Model (APM) subgroup of the Dr. Robert Bree Collaborative relied most heavily on three similar initiatives creating a warranty for total knee replacement (TKR) and total hip replacement (THR), lumbar fusion, and coronary artery bypass surgery. It is our opinion that bariatric surgery, coronary artery bypass surgery, lumbar fusion, and total joint replacement shared sufficient similarities with respect to readmission to the hospital for avoidable complications that the model is transferrable.

The warranty for TKR and THR was based on a study of complications of these surgeries commissioned by the Centers for Medicare and Medicaid Services (CMS) and subsequently adopted by the High Value Healthcare Collaborative (HVHC), a group of 18 major medical systems from across the country founded by the Dartmouth Institute. To see these reports, please visit: www.breecollaborative.org/topic-areas/apm/

The primary intent of the bariatric surgical warranty is to set a high priority on patient safety. It is also intended to balance financial gain for providers and institutions performing bariatric surgery with financial accountability for complications attributable to these procedures. In this warranty the intent is to distribute financial risk across professional and facility components in proportion to the revenue generated by the procedure.

This warranty, like the Bariatric Surgical Bundle, excludes revision to a previous bariatric surgery, pregnancy, intent to become pregnant within a year of surgery, active drug and/or alcohol abuse, active life-limiting illness that would preclude benefit from weight loss, cognitive, motivational, or emotional conditions that would preclude understanding and participating in the care plan, or other factors as determined by the multidisciplinary team

Definitions related to a warranty for Bariatric Surgery

- Diagnostic codes exclude urgent and emergent surgery
- Age limits.
- Definition of complications excluded from additional reimbursement.
- Definition of warranty period.

Diagnostic codes

- ▶ E66 Overweight and obesity
 - ▶ E66.0 Obesity due to excess calories
 - ▶ E66.01 Morbid (severe) obesity due to excess calories
 - ▶ E66.09 Other obesity due to excess calories
 - ▶ E66.1 Drug-induced obesity
 - ▶ E66.2 Morbid (severe) obesity with alveolar hypoventilation
 - ▶ E66.8 Other obesity

Procedure Codes

Below is a list of CPT codes used to populate the bariatric MBSAQIP database.

LAPAROSCOPIC PROCEDURES	
43644	Laparoscopy, surgical, gastric restrictive procedure; with gastric bypass and small intestine reconstruction to limit absorption
43645	Laparoscopy, surgical, gastric restrictive procedure; with gastric bypass and small intestine reconstruction to limit absorption
43659	Unlisted laparoscopy procedure, stomach (for Removal & replacement of both gastric band and subcutaneous port components; or other unlisted bariatric surgical procedures)
43770	Laparoscopy, surgical, gastric restrictive procedure; placement of adjustable gastric restrictive device (e.g., gastric band and subcutaneous port components)
43771	Laparoscopy, surgical, gastric restrictive procedure; revision of adjustable gastric restrictive device component only
43772	Laparoscopy, surgical, gastric restrictive procedure; removal of adjustable gastric restrictive device component only
43773	Laparoscopy, surgical, gastric restrictive procedure; removal and replacement of adjustable gastric restrictive device component only
43774	Laparoscopy, surgical, gastric restrictive procedure; removal of adjustable gastric restrictive device and subcutaneous port components
43775	Laparoscopy, surgical, longitudinal gastrectomy (i.e. sleeve gastrectomy)
43999	Unlisted procedure, stomach
OPEN PROCEDURES	
43842	Gastric restrictive procedure, without gastric bypass, for morbid obesity; vertical-banded gastroplasty
43843	Gastric restrictive procedure, without gastric bypass, for morbid obesity; other than vertical-banded gastroplasty
43845	Gastric restrictive procedure with partial gastrectomy, pylorus-preserving duodenoileostomy and ileoileostomy (50 to 100 cm common channel) to limit absorption (biliopancreatic diversion with duodenal switch)
43846	Gastric restrictive procedure, with gastric bypass for morbid obesity; with short limb (150 cm or less) Roux-en-Y gastroenterostomy
43847	Gastric restrictive procedure, with gastric bypass for morbid obesity; with small intestine reconstruction to limit absorption
43848	Revision, open, of gastric restrictive procedure for morbid obesity, other than adjustable gastric restrictive device (separate procedure)
43850	Revision of gastroduodenal anastomosis (gastroduodenostomy) with reconstruction; without vagotomy
43855	Revision of gastroduodenal anastomosis (gastroduodenostomy) with reconstruction; with vagotomy
43860	Revision of gastrojejunal anastomosis (gastrojejunostomy) with reconstruction, with or without partial gastrectomy or intestine resection; without vagotomy
43865	Revision of gastrojejunal anastomosis (gastrojejunostomy) with reconstruction, with or without partial gastrectomy or intestine resection; with vagotomy

43886	Gastric restrictive procedure, open; revision of subcutaneous port component only
43887	Gastric restrictive procedure, open; removal of subcutaneous port component only
43888	Gastric restrictive procedure, open; removal and replacement of subcutaneous port component only

Age limits

>=18 years old (no upper limit)

Complications

Complications for warranty are intended to meet the following criteria:

- Represent significant complications attributable to the bariatric surgical procedure.
 - Are identifiable in administrative claims data
 - Are fair to hospitals and physicians
 - Are meaningful to patient outcomes
1. Surgical complications:
 - a. Mechanical complications related to non-healing of abdominal wound
 - b. Wound infection:
 - Incision and drainage
 - Revision
 - c. Surgical site bleeding requiring readmission for incision and drainage
 - d. Pulmonary embolism
 2. Medical complications:
 - a. Acute myocardial infarction
 - b. Pneumonia
 - c. Sepsis/septicemia

Warranty period and other terms

1. Warranty period is complication-specific:

7 days	30 days	90 days
<ul style="list-style-type: none"> • Acute myocardial infarction • Pneumonia • Sepsis/septicemia 	<ul style="list-style-type: none"> • Pulmonary embolism • Surgical site bleeding • Wound infection 	<ul style="list-style-type: none"> • Mechanical complications related to non-healing of abdominal wound

2. The warranty is valid only at the hospital performing the surgery. Therefore, patients experiencing complications are strongly encouraged to seek treatment at that hospital.

RECOMMENDED COMPLICATION CODES

ACUTE MYOCARDIAL INFARCTION (AMI)

<i>Complication ICD-10 Code</i>	<i>Description</i>
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
I21.29	ST elevation (STEMI) myocardial infarction involving other sites
I21.29	ST elevation (STEMI) myocardial infarction involving other sites
I21.29	ST elevation (STEMI) myocardial infarction involving other sites
I21.29	ST elevation (STEMI) myocardial infarction involving other sites
I21.4	Non-ST elevation (NSTEMI) myocardial infarction
I21.4	Non-ST elevation (NSTEMI) myocardial infarction
I21.29	ST elevation (STEMI) myocardial infarction involving other sites
I21.29	ST elevation (STEMI) myocardial infarction involving other sites
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site

PNEUMONIA

<i>Complication ICD-10 Code</i>	<i>Description</i>
J16.8	Pneumonia due to other specified infectious organisms
J16.0	Chlamydial pneumonia
J15.7	Pneumonia due to Mycoplasma pneumoniae
J15.9	Unspecified bacterial pneumonia
J15.8	Pneumonia due to other specified bacteria
A48.1	Legionnaires' disease
J15.6	Pneumonia due to other aerobic Gram-negative bacteria
J15.5	Pneumonia due to Escherichia coli
J15.8	Pneumonia due to other specified bacteria
J15.29	Pneumonia due to other staphylococcus
J15.212	Pneumonia due to Methicillin resistant Staphylococcus aureus
J15.211	Pneumonia due to Methicillin susceptible Staphylococcus aureus
J15.4	Pneumonia due to other streptococci
J15.3	Pneumonia due to streptococcus, group B
J15.4	Pneumonia due to other streptococci
J15.4	Pneumonia due to other streptococci
J14	Pneumonia due to Hemophilus influenzae
J15.1	Pneumonia due to Pseudomonas
J15.0	Pneumonia due to Klebsiella pneumoniae
J18.1	Lobar pneumonia, unspecified organism
J13	Pneumonia due to Streptococcus pneumoniae
J12.9	Viral pneumonia, unspecified
J12.89	Other viral pneumonia
J12.81	Pneumonia due to SARS-associated coronavirus
J12.2	Parainfluenza virus pneumonia
J12.1	Respiratory syncytial virus pneumonia
J12.0	Adenoviral pneumonia
J18.9	Pneumonia, unspecified organism
J18.0	Bronchopneumonia, unspecified organism
J11.00	Influenza due to unidentified influenza virus with unspecified type of pneumonia
J12.9	Viral pneumonia, unspecified
J69.0	Pneumonitis due to inhalation of food and vomit

SEPSIS/SEPTICEMIA

<i>Complications ICD-10 Code</i>	<i>Description</i>
R78.81	Bacteremia
R57.8	Other shock
R57.1	Hypovolemic shock
R65.21	Severe sepsis with septic shock
A41.9	Sepsis, unspecified organism
A41.89	Other specified sepsis
A41.59	Other Gram-negative sepsis
A41.53	Sepsis due to Serratia
A41.52	Sepsis due to Pseudomonas
A41.51	Sepsis due to Escherichia coli [E. coli]
A41.3	Sepsis due to Hemophilus influenzae
A41.50	Gram-negative sepsis, unspecified
A41.4	Sepsis due to anaerobes
A40.3	Sepsis due to Streptococcus pneumoniae
A41.1	Sepsis due to other specified staphylococcus
A41.02	Sepsis due to Methicillin resistant Staphylococcus aureus
A41.01	Sepsis due to Methicillin susceptible Staphylococcus aureus
A41.2	Sepsis due to unspecified staphylococcus
A40.9	Streptococcal sepsis, unspecified
T81.4XXA	Infection following a procedure, initial encounter
K68.11	Postprocedural retroperitoneal abscess
R65.20	Severe sepsis without septic shock
A41.9	Sepsis, unspecified organism

PULMONARY EMBOLISM (PE)

<i>Complication ICD-10 Code</i>	<i>Description</i>
I26.90	Septic pulmonary embolism without acute cor pulmonale
I26.99	Other pulmonary embolism without acute cor pulmonale
T80.0XXA	Air embolism following infusion, transfusion and therapeutic injection, initial encounter
T81.718A	Complication of other artery following a procedure, not elsewhere classified, initial encounter
T81.72XA	Complication of vein following a procedure, not elsewhere classified, initial encounter
T82.817A	Embolism of cardiac prosthetic devices, implants and grafts, initial encounter
T82.818A	Embolism of vascular prosthetic devices, implants and grafts, initial encounter
I26.99	Other pulmonary embolism without acute cor pulmonale

SURGICAL SITE BLEEDING

<i>Complication ICD-10 Code</i>	<i>Description</i>
K9161	Intraoperative hemorrhage and hematoma of a digestive system organ or structure complicating a digestive system procedure
K91840	Post procedural hemorrhage and hematoma of a digestive system organ or structure following a digestive system procedure
T888XXA	Other specified complications of surgical and medical care, not elsewhere classified, initial encounter
K9171	Accidental puncture and laceration of a digestive system organ or structure during a digestive system procedure

WOUND INFECTION

<i>Complication ICD-10 Code</i>	<i>Description</i>
T84.60XA	Infection and inflammatory reaction due to internal fixation device of unspecified site, initial encounter
T84.7XXA	Infection and inflammatory reaction due to other internal orthopedic prosthetic devices, implants and grafts, initial encounter
T81.30XA	Disruption of wound, unspecified, initial encounter
T81.32XA	Disruption of internal operation (surgical) wound, not elsewhere classified, initial encounter
T81.31XA	Disruption of external operation (surgical) wound, not elsewhere classified, initial encounter
T81.33XA	Disruption of traumatic injury wound repair, initial encounter
T81.4XXA	Infection following a procedure, initial encounter
K68.11	Postprocedural retroperitoneal abscess
T81.4XXA	Infection following a procedure, initial encounter
T81.83XA	Persistent postprocedural fistula, initial encounter
T81.89XA	Other complications of procedures, not elsewhere classified, initial encounter

MECHANICAL COMPLICATIONS

<i>Complication ICD-10 Code</i>	<i>Description</i>
T81.30XA	Disruption of wound, unspecified, initial encounter
T81.32XA	Disruption of internal operation (surgical) wound, not elsewhere classified, initial encounter