

Gastric Bypass Surgery Costs

Description of Requested Data: Gastric bypass and other weight loss surgery costs for active military over the past ten years.

Interpretation: "Gastric bypass and other weight loss surgery" to be "bariatric surgery"

Recommend definitions of bariatric surgery be similar to the Centers for Medicare and Medicaid Services (CMS). See attached document, change request 5477, subject: Clarification of Bariatric Surgery Billing Requirements Issued in CR 5013, dated 27 April 2007.

Documentation of Process to identify costs associated with Bariatric Surgery for Active Duty and Guard personnel, FY01-FY10.

1. Identified Active Duty / Guard personnel in branch of service Army, Navy, Air Force, or Marines who had one of the procedures listed below in any procedure field, FY01-FY10:

Inpatient institutional (hospital) ICD-9-CM procedure (para 5477.1.2) (SIDR and TED-I):

- 44.38 Laparoscopic gastroenterostomy
- 44.39 Other gastroenterostomy
- 44.95 Laparoscopic gastric restrictive procedure
- 43.89 Other partial gastrectomy, other
- 45.51 Isolation of segment of small intestine
- 45.91 Small-to-small intestinal anastomosis
- 44.31 High gastric bypass
- 44.68 Laparoscopic gastroplasty¹

Non-institutional (professional services) HCPCS/CPT (para 5477.1.1) (SADR and TED-NI)

- 43770 Laparoscopy, surgical, gastric restrictive procedure; placement of adjustable gastric restrictive device (eg, gastric band and subcutaneous port components)
- 43644 Laparoscopy, surgical, gastric restrictive procedure; with gastric bypass and Roux-en-Y gastroenterostomy (Roux limb 150 cm or less)
- 43645 Laparoscopy, surgical, gastric restrictive procedure; with gastric bypass and small intestine reconstruction to limit absorption
- 43845 Gastric restrictive procedure with partial gastrectomy, pylorus-preserving duodenoileostomy and ileoileostomy (50 to 100 cm common channel) to limit absorption (biliopancreatic diversion w duodenal switch)
- 43846 Gastric restrictive procedure, with gastric bypass for morbid obesity; with short limb (150 cm or less) Roux-en-Y gastroenterostomy

¹ For this FOIA, also include the following ICD-9-CM procedure as it is for weight loss associated with morbid obesity when associated with the diagnosis 278.01 Morbid obesity

43847 Gastric restrictive procedure, with gastric bypass for morbid obesity; with small intestine reconstruction to limit absorption

43842 Gastric restrictive procedure, without gastric bypass, for morbid obesity; vertical-banded gastroplasty²

43843 Gastric restrictive procedure, without gastric bypass, for morbid obesity; other than vertical-banded gastroplasty²

For SIDR and TED-I, included an additional condition in step 1's code to ensure the surgery was for weight loss (see step 2 below). This was not done for SADR and TED-NI until step2.sas because the program for step 1 was already running on the massive amounts of data.

Program/Log: sidr1.sas/log, sadr1.sas/log, tedi1.sas/log, tedni1.sas/log, tedni1a.sas/log

2. From the encounter data extracted in step 1, reviewed the diagnosis codes reported in the data to ensure all records were captured based on "weight loss" (as opposed to intestinal blockage, diverticula, etc.). Kept only records with one of the diagnosis codes below:

278.00 Obesity, Unspecified

278.01 Morbid obesity (see para 5477.1.3. and 5477.1.4)

V85.4 Body Mass Index, 40 and over, adult³

Secondary diagnosis: CMS requires at least one co-morbidity related to obesity, do not include this requirement for this FOIA. The co-morbidity would be a medical indication for the procedure. The FOIA does not specify medical necessity.

This resulted in 149 individuals to be studied.

Program/Log: step2.sas/log

Excel: Step 2 EDIPNs with Proc FYFM Proc Format.xlsx

3. Based on the records identified in step 2, created the unique listing of EDIPN and extracted all FY01-FY10 encounters for those individuals, regardless of what there were seen for (handled in step 4). This data was used to identify pre and post-procedure cost.

Program/Log: sidr3.sas/log, sadr3a-d.sas/log, tedi3.sas/log, tedni3a-d.sas/log

4. For SIDR and TED-I, data identified in step 3 were downloaded and subjectively reviewed as to whether the costs would be included. The decision points included when the encounter occurred relative to the bariatric procedure date, the diagnosis codes, and other procedure codes.

For TED-NI, all drugs were omitted (CPT 98800 and Diagnosis 799.89).

For SADR and TED-NI, only records with the following diagnosis codes or CPT codes were kept (and subjectively reviewed in the last step):

Diagnosis: 278.00 Obesity

278.01 Morbid Obesity

V45.86 Bariatric surgery status

V53.51 Other intestinal appliance

V45.3 Intestinal bypass or anastomosis status

V85.3 Body Mass Index (BMI) 30-39, adult

² For this FOIA, also include the following HCPCS/CPT as they are for weight loss associated with morbid obesity

³ There were only 1-2 records kept with only a BMI diagnosis coded.

V85.4 BMI 40 and over, adult
 V53.5 Other intestinal appliance
 787.0 Nausea and vomiting
 789.0 Abdominal pain
 530-538 Diseases of esophagus, stomach and duodenum
 996-999 Complications of surgical and medical care, NEC
 001-080 Infections
 270-279 Other metabolic and immunity disorders
 260-269 Nutritional deficiencies

CPT: 97802 - 97804 Medical Nutrition therapy
 90801 Psychiatric diagnostic interview

The SADR and TED-NI were then subjectively reviewed as to whether the costs would be included. The decision points included when the encounter occurred relative to the bariatric procedure date, the diagnosis codes, and other procedure codes. Pre-procedure encounters included mental health evaluations, applicable laboratory and radiology testing, nutrition counseling, and other items based on what was recorded. Sleep testing was not included. Post-procedure costs included infections, digestive complications, liposuction, abdominal pain, removal of excess skin and subcutaneous tissue, gastric band adjustments/removal, nutrition counseling, post procedure exams, and nutritional deficiencies.

Excel: Step 4 XXX Choose Pre Post Care.xlsx, where XXX = SIDR, SADR, TEDI, or TEDNI

5. The final results reports costs⁴ by FY and Sponsor Service (table below).

FY	Army	Navy	Marines	Air Force	Grand Total
2001	\$ 24,810	\$ 27,128		\$ 675	\$ 52,614
2002	\$ 26,033	\$ 46,805		\$ 34,003	\$ 106,841
2003	\$ 25,380	\$ 121,151	\$ 1,566	\$ 25,046	\$ 173,143
2004	\$ 122,315	\$ 202,557	\$ 23,628	\$ 11,358	\$ 359,859
2005	\$ 98,841	\$ 292,884	\$ 25,940	\$ 44,164	\$ 461,829
2006	\$ 99,130	\$ 188,762		\$ 34,603	\$ 322,495
2007	\$ 20,720	\$ 96,543		\$ 47,813	\$ 165,076
2008	\$ 154,547	\$ 7,553	\$ 166	\$ 42,182	\$ 204,448
2009	\$ 259,831	\$ 72,562	\$ 243	\$ 32,850	\$ 365,486
2010	\$ 144,517	\$ 26,265		\$ 21,507	\$ 192,289
Grand Total	\$ 976,124	\$ 1,082,211	\$ 51,543	\$ 294,201	\$ 2,404,078

Average Cost: \$2,404,078 / 149 = \$16,135⁵

Based on the website <http://www.yourbariatricsurgeryguide.com/cost/>, the average cost for the gastric bypass procedure ranges from \$18,000 to \$35,000, while the average cost for adjustable gastric banding with Lap-Band ranges from \$17,000 to \$30,000.

Note that pre-operative and post-operative care can occur in a different FY than the actual surgery.

Excel: FY01-FY10 AD GRD Bariatric Surgery Cost 27Apr2011.xlsx

⁴ SIDR and SADR costs are Full Costs; TED-I and TED-NI costs are Amount Paid.

⁵ Does NOT include the lab and rad from Direct Care (it does include it for purchased care, where applicable).