2017.1 Procedures Criteria

PATIENT:	Name	DOB	ID#	GROUP#
	Facility		Service Date	
PROVIDER:	Name		Fax#	Phone#
	Signature		Date	NPI/ID#

ICD-10:
CPT®:

Subset: Bariatric Surgery (Adolescent)[1, 2, 3, 4, 5, 6, 7, 8]
Requested Service: Adjustable Gastric Banding (Adolescent)
Age:[9, 10] Age ≥ 13 and < 18

INSTRUCTIONS: Answer the following questions[11]

☐ **Clinically severe obesity**

1. BMI ≥ 35 kg/m^2[12, 13]

☐ Yes

☐ No

- If option Yes selected, then go to question 2
- No other options lead to the requested service

2. Comorbidity, Choose all that apply:[14]

☐ A) Type 2 diabetes mellitus (DM)[15, 16]

☐ B) Hypertension (HTN)[17]

☐ C) Obstructive sleep apnea[18]

☐ D) Non-alcoholic fatty liver disease or non-alcoholic steatohepatitis[19]

☐ E) Pseudotumor cerebri[20]

☐ F) Other clinical information (add comment)

- If 1 or more options A, B, C, D or E selected and option F not selected, then go to question 3
- No other options lead to the requested service

3. Choose all that apply:[21, 22, 23]

☐ A) Documented history of participation in supervised weight loss program ≥ 6 months

☐ B) Unable to achieve or maintain weight loss

☐ C) Other clinical information (add comment)

3. Choose all that apply: ***(Continued...)***

- If the number of options selected is 2 and option C not selected, then go to question 4
- No other options lead to the requested service

4. Choose all that apply:[24]

- ☐ A) No active peptic ulcer disease (PUD) or gastritis OR PUD or gastritis evaluated and treated[25]
- ☐ B) Endocrine cause of obesity excluded[26]
- ☐ C) Tanner stage IV or V[27]
- ☐ D) Skeletal growth > 95% complete[28]
- ☐ E) Other clinical information (add comment)

- If the number of options selected is 4 and option E not selected, then go to question 5
- No other options lead to the requested service

5. Choose all that apply:

- ☐ A) No drug or alcohol misuse by history or drug and alcohol free period ≥ 1 year[29]
- ☐ B) No psychiatric disorder by history or psychiatric disorder managed[30]
- ☐ C) No smoking by history or smoke free period ≥ 6 weeks[31]
- ☐ D) Dietary consultation[32, 33]
- ☐ E) Patient and caregiver have understanding of surgical procedure, post procedure compliance, and follow-up care[34, 35]
- ☐ F) Other clinical information (add comment)

- If the number of options selected is 5 and option F not selected, then go to question 6
- No other options lead to the requested service

6. Procedure to be performed at bariatric surgery center[36]

- ☐ Yes
- ☐ No

- If option Yes selected, then the rule is satisfied; you may stop here ***(Outpatient)*** [1]
- No other options lead to the requested service

Notes

(1)
I/O Setting:
Roux-en-Y-gastric bypass (RYGB) - Inpatient
Sleeve gastrectomy - Inpatient
All others- Outpatient

(2)
This guideline includes the following procedures:
Adjustable gastric banding (AGB)
Roux-en-Y-gastric bypass (RYGB)
Sleeve gastrectomy

(3)
Severe clinical obesity is a growing health concern in adolescents and children and despite solid evidence supporting the use of bariatric surgery as a treatment for obesity in adults, the translation to widespread acceptance in adolescents has not yet occurred. The Teen Longitudinal Assessment of Bariatric Surgery (Teen LABS) study, a multi-center prospective study following 242 adolescents for 3 years after surgery, has contributed significantly to support the efficacy and durability of surgery in teens. Patients had a reported mean reduction in weight of 41kg at 3 years and 26% had a body mass index of less than 30 kg/m^2 and were no longer considered obese. Patients that underwent Roux-en-Y gastric bypass (RYGB) or sleeve gastrectomy had a reported mean weight loss of 28% and 26%, respectively (Inge et al., N Engl J Med 2015:). Another study of 51 adolescents in the Bariatric Outcomes Longitudinal Database (BOLD) undergoing sleeve gastrectomy reported 95% excess body weight lost (EBWL) at 6 months, 96% at 1 year, and 93% at 2 years after surgery (Messiah et al., Surg Obes Relat Dis 2012). The remission rate for hypertension was reported to be 100%, insulin resistance 96%, dyslipidemia 58%, and diabetes 50% with no mortality or readmissions in one study (Boza et al., Surg Obes Relat Dis 2012, 8: 133-7; discussion 7-9). Similar results were reported in a group of 108 patients over a two year period (Alqahtani et al., Ann Surg 2012, 256: 266-73). A more recent study showed improvement in these same parameters but to a lesser degree (Inge et al., N Engl J Med 2015:).
Results from BOLD reported nearly twice the weight loss in patients undergoing RYGB when compared with laparoscopic adjustable gastric band (AGB) at 1 year (Messiah et al., Surg Obes Relat Dis 2012). A randomized controlled study found 79% EBWL at two years in an AGB group of patients compared with 13% EBWL in a group that tried lifestyle changes only (O'Brien et al., JAMA 2010, 303: 519-26).
Additional studies have reported an inpatient morbidity rate of 0% and significantly lower 30-day readmission, lower cost, and shorter length of stay for adolescents when compared to adults who have had bariatric surgery (Kelleher et al., JAMA Pediatr 2013, 167: 126-32; Pallati et al., Surg Endosc 2012, 26: 3077-81).

(4)
Biliopancreatic diversion with duodenal switch is not currently offered to adolescents because the potential risks related to significant malabsorption outweigh the benefits.

(5)
Roux-en-Y gastric bypass (RYGB) is a combination restrictive and malabsorptive procedure in which a small gastric pouch is connected to a segment of the jejunum. RYGB is associated with significant and sustained weight loss. Within a very short period of time, many patients experience an endocrine response that results in improved glycemic control or remission of diabetes (Blackburn et al., Obesity (Silver Spring) 2009, 17: 842-62). A systematic review reported that RYGB resulted in higher rates of weight loss, diabetic control and remission, and improved hyperlipidemia and hypertension when compared with adjustable gastric banding (Puzziferri et al., JAMA 2014, 312: 934-42).
Postoperative complications include pulmonary embolism, anastomotic leaks, venous thromboembolism, wound infections, small bowel obstruction, and bleeding (Coblijn et al., Obes Surg 2014, 24: 299-309; Blackburn et al., Obesity (Silver Spring) 2009, 17: 842-62). Hospital mortality, complications, and length of stay are significantly lower for patients undergoing laparoscopic RYGB when compared to the open procedure, although higher than patients undergoing sleeve gastrectomy or adjustable banding (Banka et al., Arch Surg 2012, 147: 550-6; Hutter et al., Ann Surg 2011, 254: 410-20; discussion 20-2).

(6)
With adjustable gastric banding (AGB), an adjustable gastric band or collar is placed around the upper stomach to create a small pouch, limiting the amount of food that can be consumed. The weight loss that occurs with AGB is gradual and patients can expect to achieve 40% excess weight loss at 12 months and 50% at 24 months (Dumon and Murayama, Surg Clin North Am 2011, 91: 1313-38). A long-term study confirmed a sustainable 47% excess weight loss up to 15 years after AGB. This weight loss was comparable to that found after Roux-en-Y gastric bypass (RYGB) (O'Brien et al., Ann Surg 2013, 257: 87-94). AGB has a low morbidity and mortality

compared with RYGB and laparoscopic sleeve gastrectomy. AGB is technically easier to perform, is reversible, and results in durable weight loss. Complications include band erosion or slippage, pouch dilation, esophageal motility disorders, and failure to achieve or maintain weight loss. It is estimated that failure rates may be as high as 40% to 50% (Ee and Nottle, ANZ J Surg 2013, 83: 571-4; Elnahas et al., Surg Endosc 2013, 27: 740-5; Hutter et al., Ann Surg 2011, 254: 410-20; discussion 20-2). Although other bariatric procedures may result in significantly greater weight loss, AGB is associated with fewer adverse outcomes, decreased operative time, and shorter hospital length of stay (Chakravarty et al., Surgeon 2012, 10: 172-82; Angrisani et al., Surg Obes Relat Dis 2007; 3(2): 127-132; discussion 132-123).

(7)

Sleeve gastrectomy creates a tubular conduit along the lesser curve of the stomach via a left partial gastrectomy and is technically less complex than Roux-en-Y gastric bypass (RYGB) or biliopancreatic diversion with duodenal switch. A large retrospective analysis of inpatient data reported an increase from 6.7% to 24% of patients undergoing sleeve gastrectomy during the study period (Pallati et al., Surg Endosc 2012, 26: 3077-81). Historically, sleeve gastrectomy was performed in combination with malabsorptive procedures but is now most often performed as a standalone procedure.

Several studies showed that sleeve gastrectomy demonstrated durable weight loss, improvement in medical comorbidities, long-term patient satisfaction, and improved quality of life (Mechanick et al., Obesity (Silver Spring) 2013, 21 Suppl 1: S1-S27; Neff and le Roux, J Clin Pathol 2013, 66: 90-8; Rawlins et al., Surg Obes Relat Dis 2013, 9: 21-5; Trastulli et al., Surg Obes Relat Dis 2013, 9: 816-29; van Rutte et al., ISRN Surg 2012, 2012: 674042; Hutter et al., Ann Surg 2011, 254: 410-20; discussion 20-2). Complications associated with sleeve gastrectomy include hemorrhage, anastomotic leaks and stenosis, and increased rates of gastroesophageal reflux. Patients who undergo sleeve gastrectomy may experience nutritional deficiencies postoperatively (Beckman and Earthman, J Acad Nutr Diet 2013, 113: 398-9).

(8)

InterQual® Procedures criteria are derived from the systematic, continuous review and critical appraisal of the most current evidence-based literature and include input from our independent panel of clinical experts. To generate the most appropriate recommendations, a comprehensive literature review of the clinical evidence was conducted. Sources searched included PubMed, Agency for Healthcare Research and Quality (AHRQ) Comparative Effectiveness Reviews, the Cochrane Library, Choosing Wisely, Centers for Medicare &Medicaid Services (CMS) National Coverage Determinations, the National Institute of Health and Care Excellence (NICE), and the National Guideline Clearinghouse. Other medical literature databases, medical content providers, data sources, regulatory body websites, and specialty society resources may also have been used. Relevant studies were assessed for risk of bias following principles described in the Cochrane Handbook. The resulting evidence was assessed for consistency, directness, precision, effect size, and publication bias. Observational trials were also evaluated for the presence of a dose-response gradient and the likely effect of plausible confounders.

(9)

If Age ≥ 18, refer to the adult guideline for this procedure.

(10)

These criteria address adolescent diagnoses or indications. Although there may be diagnoses or indications that are medically appropriate in individuals < 13, these are not currently addressed.

(11)

Patients with a body mass index (BMI) of greater than 30 kg/m^2 are considered obese. Clinically severe obesity is defined as a BMI greater than 35 kg/m^2 or 100 or more pounds over ideal body weight.

(12)

The most widely used indicator to measure obesity is the body mass index. There are four classes of obesity: Class I (30.0 to 34.9 kg/m^2), Class II (35.0 to 39.9 kg/m^2), Class III (greater than or equal to 40 kg/m^2), and Class IV (greater than or equal to 50 kg/m^2).

(13)

Body mass index (BMI) is a safe, simple, and inexpensive method for gauging general adiposity. In adolescents, BMI is not a static number because of ongoing growth. Therefore, BMI should be considered as a percentile, in relation to age and sex-matched populations. All adolescents, less than 18 years of age, with a BMI of greater than 35 kg/m^2 are above the 99th percentile for BMI (Michalsky et al., Surg Obes Relat Dis 2012, 8: 1-7).

(14)

Obesity is associated with multiple complications and comorbidities. Bariatric surgery has been shown to induce significant and sustained weight loss, improve comorbid conditions, reduce mortality, and decrease the risk of developing new comorbid conditions (Colquitt et al., Cochrane Database Syst Rev 2014, 8: CD003641; Messiah et al., Surg Obes Relat Dis 2013, 9: 503-13; Blackburn et al., Obesity (Silver Spring) 2009, 17: 842-62).

(15)

Obesity is a primary risk factor for the development of type 2 diabetes mellitus (DM). For those patients who are severely obese, it is estimated that their risk of developing diabetes is increased 93-fold for women and 42-fold for men (Dixon et al., Surg Obes Relat Dis

2011, 7: 433-47). Multiple studies have compared intensive or conventional medical treatment to bariatric surgery in patients with type 2 DM, and the research unequivocally demonstrated that surgical patients were significantly more likely to achieve remission of their DM when compared with medically treated patients (Ricci et al., Obes Surg 2014, 24: 522-8; Sjostrom et al., JAMA 2014, 311: 2297-304; Courcoulas et al., JAMA 2013, 310: 2416-25; Ikramuddin et al., JAMA 2013, 309: 2240-9; Mingrone et al., N Engl J Med 2012, 366: 1577-85).
Additionally, several studies have confirmed the long-term remission of type 2 DM. The researchers noted that patients who were preoperatively treated with insulin or who had poor preoperative glycemic control and a longer history of diabetes were more likely to have lower remission rates or experience more relapses of their DM. This suggests that earlier surgical intervention is likely to be more effective in achieving durable diabetes remission (Puzziferri et al., JAMA 2014, 312: 934-42; Schauer et al., N Engl J Med 2014, 370: 2002-13; Courcoulas et al., JAMA 2013, 310: 2416-25).

(16)
Success in treating type 2 diabetes mellitus (DM) in the short to intermediate term is greater in adolescents than in adults. A study of obese and severely obese adolescents reported complete remission or major improvements in glycemic control in all patients one year after Roux-en-Y gastric bypass (Inge et al., Pediatrics 2009; 123(1): 214-222). Two other studies of patients who underwent laparoscopic sleeve gastrectomy also showed similar improvements in diabetes remission with rates over 90% one to two years after surgery (Alqahtani et al., Ann Surg 2012, 256: 266-73; Boza et al., Surg Obes Relat Dis 2012, 8: 133-7; discussion 7-9). Long-term data has demonstrated remission of type 2 DM in 95% of patients with diabetes prior to surgery and remission of prediabetes in 76% of patients (Inge et al., N Engl J Med 2015:).

(17)
Long-term data demonstrated a remission of hypertension in 74% of adolescent patients that underwent either Roux-en-Y gastric bypass or sleeve gastrectomy (Inge et al., N Engl J Med 2015:).

(18)
Sleep apnea is common in obese patients. Patients who have obstructive sleep apnea due to obesity may benefit from bariatric surgery (Aguiar et al., Multidiscip Respir Med 2014, 9: 43; Sarkhosh et al., Obes Surg 2013, 23: 414-23; Alqahtani et al., Ann Surg 2012, 256: 266-73; Messiah et al., Surg Obes Relat Dis 2012; Fleetham et al., Can Respir J 2011, 18: 25-47; Buchwald et al., JAMA 2004, 292: 1724-37).

(19)
Non-alcoholic fatty liver disease is associated with obesity and metabolic syndrome. It is one of the most common causes of liver disease and may advance to end stage liver disease, known as non-alcoholic steatohepatitis. Weight loss may result in improvement of these conditions. Bariatric surgery offers patients significant and durable weight loss; however, the use of this procedure for the treatment of non-alcoholic steatohepatitis remains controversial, due to limited high quality evidence. Although there is limited evidence, current guidelines recommend that patients with non-alcoholic fatty liver disease or non-alcoholic steatohepatitis be considered for bariatric surgery (Mechanick et al., Obesity (Silver Spring) 2013, 21 Suppl 1: S1-S27; Michalsky et al., Surg Obes Relat Dis 2012, 8: 1-7; Baur and Fitzgerald, J Paediatr Child Health 2010, 46: 704-7; Pratt et al., Obesity (Silver Spring) 2009, 17: 901-10).

(20)
Idiopathic intracranial hypertension (pseudotumor cerebri) is a disease characterized by headache, visual changes or loss of vision, and pulsatile tinnitus. It is most commonly seen in obese women. The cause of the intracranial hypertension is believed to be secondary to chronically increased intra-abdominal pressure. The condition is known to respond favorably to weight loss and bariatric surgery may be a more appropriate treatment than cerebral spinal fluid peritoneal shunting. Two systematic reviews reported significant improvement or resolution of symptoms in 92% of patients and complete resolution of papilledema in 97% to 100% of patients who underwent surgical management of their obesity (Handley et al., Surg Obes Relat Dis 2015, 11: 1396-403; Fridley et al., J Neurosurg 2011, 114: 34-9).

(21)
Prior to bariatric surgery, patients should participate in a comprehensive treatment program for weight management. This supervised program should include both dietary modifications, as well as physical activity. Techniques that may be used to teach behavioral skills to patients include, but are not limited to, self-monitoring, goal setting, positive reinforcement, social support, and relapse prevention. Pharmacologic therapy may also be tried but is not required prior to consideration for bariatric surgery (Fried et al., Obes Surg 2014, 24: 42-55; Jensen et al., J Am Coll Cardiol 2014, 63: 2985-3023; Kelly et al., Circulation 2013, 128: 1689-712). Unsupervised commercial-based programs are not a substitution for a supervised, comprehensive weight loss program.

(22)
Adolescents should participate, for a minimum of 6 months, in a comprehensive and supervised weight loss program (Fried et al., Obes Surg 2014, 24: 42-55).

(23)
One randomized controlled study compared the effects of gastric banding with lifestyle changes in obese adolescents and found 79% excess body weight lost (EBWL) compared with 13% EBWL in the lifestyle changes group (O'Brien et al., JAMA 2010, 303: 519-26).

A single center longitudinal outcome study suggests that late referral for extremely obese patients with a body mass index greater than 55 kg/m^2 may prevent reversal of obesity within the first postoperative year and that these patients are at risk for regaining weight (Inge et al., Pediatrics 2009; 123(1): 214-222).

(24)
A comprehensive preoperative evaluation is essential in the work-up of the obese patient. The goals of screening are to identify comorbidities best managed before surgery (thus reducing perioperative morbidity and mortality) and to diagnose previously unrecognized comorbid conditions. The multidisciplinary team should also evaluate noncompliance, psychiatric illness, substance abuse, medical and surgical history, and unreasonable postoperative expectations (Fried et al., Obes Surg 2014, 24: 42-55; Mechanick et al., Obesity (Silver Spring) 2013, 21 Suppl 1: S1-S27; Tariq and Chand, Gastrointest Endosc Clin N Am 2011, 21: 229-40). Screening may include fasting lipid panel, noninvasive cardiac testing, and sleep studies (Mechanick et al., Obesity (Silver Spring) 2013, 21 Suppl 1: S1-S27).

(25)
There is no evidence to support routinely performing endoscopy on all preoperative bariatric surgery patients or that it has an impact on surgical outcomes (Anderson et al., Gastrointest Endosc 2008, 68: 1-10). However, clinically significant gastrointestinal symptoms should be evaluated with upper GI series or endoscopy and treated prior to bariatric surgery (Mechanick et al., Obesity (Silver Spring) 2013, 21 Suppl 1: S1-S27).

(26)
Endocrine causes of weight gain (e.g., hypothyroidism, Cushing syndrome) account for a small proportion of obesity. Laboratory testing and imaging need only be done if there is a strong clinical suspicion of disease.

(27)
The Tanner Scale is a tool that describes the progression of puberty in boys and girls using a 5-point scale. Girls are rated on breast development and pubic hair growth and boys are rated on genital development and pubic hair growth. Stage I is pre-pubertal and Stage V is mature or adult-like. In stage IV development, pubic hair is similar to adult in type but in lesser amounts, female breasts form secondary mounds, and there is further development of the male genitals. Patients that are having bariatric surgery need to have attained Stage IV or V development (Baur and Fitzgerald, J Paediatr Child Health 2010, 46: 704-7; Pratt et al., Obesity (Silver Spring) 2009, 17: 901-10).

(28)
It is well documented that Roux-en-Y gastric bypass (RYGB) will result in the loss of mineral bone content. The impact of this on still developing bones of adolescents is unknown and, therefore, it is required that patients who are undergoing RYGB have attained at least 95% skeletal growth completion. Patients being considered for RYGB should have a radiographic study documenting 95% skeletal growth completion (Baur and Fitzgerald, J Paediatr Child Health 2010, 46: 704-7; International Pediatric Endosurgery Group (IPEG), J Laparoendosc Adv Surg Tech A 2009; 19 Suppl 1: vii-ix; Pratt et al., Obesity (Silver Spring) 2009, 17: 901-10).

(29)
A psychosocial evaluation should be performed to assess for current drug and alcohol misuse which is considered a contraindication to surgery (Mechanick et al., Obesity (Silver Spring) 2013, 21 Suppl 1: S1-S27). Patients who have a history of substance misuse should demonstrate one year or more of continuous sobriety before weight loss surgery is considered.

(30)
A significant percentage of bariatric surgery patients have a history of diagnosed or undiagnosed psychopathology, including mood or anxiety disorders, post-traumatic stress disorder, and eating disorders. Although none of these conditions are exclusionary, all patients should be screened to assess stability and understanding of both the procedure and the postoperative follow-up. Patients with unstable disease should be referred to a behavioral health provider and surgery deferred until the patient is stabilized (Fried et al., Obes Surg 2014, 24: 42-55; Mechanick et al., Obesity (Silver Spring) 2013, 21 Suppl 1: S1-S27). The presence of a pre-existing psychological illness (e.g., binge eating disorder, night eating syndrome, grazing) has been associated with decreased weight loss postoperatively and these patients, therefore, warrant close follow-up (Mechanick et al., Obesity (Silver Spring) 2013, 21 Suppl 1: S1-S27; Mitchell et al., Surg Obes Relat Dis 2012, 8: 533-41; Blackburn et al., Obesity (Silver Spring) 2009, 17: 842-62). Additionally, a systematic review reported that patients who undergo bariatric surgery have an increased risk for suicide compared with the general population (Peterhansel et al., Obes Rev 2013, 14: 369-82).

(31)
Cigarette smoking cessation should occur at least 6 weeks prior to bariatric surgery, as smoking has been associated with an increased risk of impaired wound healing, anastomotic ulcer, and general poor health (Mechanick et al., Obesity (Silver Spring) 2013, 21 Suppl 1: S1-S27; Blackburn et al., Obesity (Silver Spring) 2009, 17: 842-62).

(32)
Nutritional counseling is essential for the patient who is undergoing bariatric surgery. All procedures involve a lifelong commitment to changed eating patterns and sufficient protein consumption; some may require nutrient supplementation postoperatively. Failure to adhere to eating plans can result in nausea, vomiting, pain, nutritional deficiencies (e.g., iron, vitamin B_{12}), metabolic bone disease,

and failure to achieve desired weight loss (Beckman and Earthman, J Acad Nutr Diet 2013, 113: 398-9; Mechanick et al., Obesity (Silver Spring) 2013, 21 Suppl 1: S1-S27; Tariq and Chand, Gastrointest Endosc Clin N Am 2011, 21: 229-40; Blackburn et al., Obesity (Silver Spring) 2009, 17: 842-62).

(33)

Recent long-term data of adolescents showed that 57% of patients who underwent Roux-en-Y gastric bypass or sleeve gastrectomy had iron deficiency and 8% had B_{12} deficiency. Other micronutrient deficiencies were also noted, underscoring the need for ongoing nutritional support (Inge et al., N Engl J Med 2015:).

(34)

The patient should be assessed before surgery and demonstrate an understanding of the surgical procedure, including options and outcomes, as well as the need for long-term follow-up care, including attendance at planned follow-up appointments, behavioral modifications, physical exercise, dietary changes, and micronutrient supplementation (Fried et al., Obes Surg 2014, 24: 42-55; Mechanick et al., Obesity (Silver Spring) 2013, 21 Suppl 1: S1-S27; Michalsky et al., Surg Obes Relat Dis 2012, 8: 1-7; Baur and Fitzgerald, J Paediatr Child Health 2010, 46: 704-7; Pratt et al., Obesity (Silver Spring) 2009, 17: 901-10).
It is also recommended that female patients be informed that bariatric surgery is associated with increased fertility and subsequent increased risk of pregnancy. Pregnancy should be avoided during the first 18 months after surgery (Mechanick et al., Obesity (Silver Spring) 2013, 21 Suppl 1: S1-S27; Pratt et al., Obesity (Silver Spring) 2009, 17: 901-10).

(35)

Both the adolescent patient and their caregiver should be formally evaluated prior to bariatric surgery. The team should assess the patient's emotional, cognitive, and social development, as well as their understanding of the procedure and importance of follow-up care (Pratt et al., Obesity (Silver Spring) 2009, 17: 901-10). The caregiver should be assessed for their ability to support the patient postoperatively (International Pediatric Endosurgery Group (IPEG), J Laparoendosc Adv Surg Tech A 2009; 19 Suppl 1: vii-ix).

(36)

Bariatric surgery should be performed at a surgical center that is equipped for obese patients, employs surgeons skilled in bariatric surgical techniques, provides long-term follow-up, and provides a multidisciplinary approach that includes medical management of comorbidities, specialized nursing care, dietary instruction, exercise training, and psychological expertise. The trend of improved perioperative outcomes has been confirmed in a study that demonstrated that patients who did not undergo bariatric surgery at a center of excellence had similar rates of complications compared with patients who did. These results are attributed to a shift from open to laparoscopic surgery and the multidisciplinary approach, not to surgery in a center of excellence (Dimick et al., JAMA 2013, 309: 792-9).

ICD-10-CM (circle all that apply): E11.00, E11.01, E11.21, E11.29, E11.311, E11.319, E11.36, E11.39, E11.40, E11.51, E11.618, E11.620, E11.621, E11.622, E11.628, E11.630, E11.638, E11.641, E11.649, E11.65, E11.69, E11.8, E11.9, G47.33, G93.2, I10, K74.1, K76.0, K76.89, K76.9, Z68.35, Z68.36, Z68.37, Z68.38, Z68.39, Z68.41, Z68.42, Z68.43, Z68.44, Z68.45, Other_____

ICD-10-PCS (circle all that apply): 0DV60CZ, 0DV60DZ, 0DV60ZZ, 0DV63CZ, 0DV63DZ, 0DV63ZZ, 0DV64CZ, 0DV64DZ, 0DV64ZZ, 0DV67DZ, 0DV67ZZ, 0DV68DZ, 0DV68ZZ, Other_____

CPT® (circle all that apply): 43770, Other_____