

Clinical Policy: Bariatric Surgery

Reference Number: CP.MP.37

Last Review Date: 10/20

Coding Implications
Revision Log

See <u>Important Reminder</u> at the end of this policy for important regulatory and legal information.

Description

There are two categories of bariatric surgery: restrictive procedures and malabsorptive procedures. Gastric restrictive procedures include procedures where a small pouch is created in the stomach to restrict the amount of food that can be eaten, resulting in weight loss. The laparoscopic adjustable gastric banding (LAGB) and laparoscopic sleeve gastrectomy (LSG) are examples of restrictive procedures. Malabsorptive procedures bypass portions of the stomach and intestines causing incomplete digestion and absorption of food. Duodenal switch is an example of a malabsorptive procedure. Roux-en-y gastric bypass (RYGB), biliopancreatic diversion with duodenal switch (BPD-DS), and biliopancreatic diversion with gastric reduction duodenal switch (BPD-GRDS) are examples of restrictive and malabsorptive procedures.

LAGB devices are currently not FDA approved for adolescents less than 18 years, and are being used less for adolescents in favor of SG.

Policy/Criteria

It is the policy of health plans affiliated with Centene Corporation[®] that bariatric surgery is **medically necessary** when the following criteria under **section I** *and* **II** are met:

- **I. Medical history**, meets all of the following:
 - A. Age and body mass index (BMI) (meet criteria in 1 or 2)
 - 1. Age ≥ 18 and: Obesity has continued despite previous weight loss attempts, or waiting for attempted weight loss could result in worsening of a health condition and one of the following (a, b, or c):
 - a. BMI ≥ 40 kg/m² and LABG, LSG, laparoscopic RYGB or laparoscopic BPD DS/BPD-GRDS is requested;
 - b. BMI \geq 35 and \leq 40 kg/m² and both of the following:
 - i. LAGB, LSG, laparoscopic RYGB or BPD-DS/BPD-GRDS is requested;
 - ii. One of the following comorbidities is present:
 - a) Type 2 diabetes mellitus (DM)
 - b) Poorly controlled hypertension
 - c) Dyslipidemia
 - d) Obstructive sleep apnea
 - e) Obesity-hypoventilation syndrome/Pickwickian syndrome
 - f) Nonalcoholic fatty liver disease or nonalcoholic steatohepatitis
 - g) Coronary artery disease
 - c. BMI ≥ 30 and ≤ 35 kg/m² and both of the following:
 - i. Type 2 DM;
 - ii. LAGB, LSG or laparoscopic RYGB is requested;

- h) Gastroesophageal reflux disease
- i) Asthma
- j) Venous stasis disease
- k) Severe urinary incontinence
- Osteoarthritis (hip, knees and/or ankles)
- m) Idiopathic intracranial hypertension

CENTENE® Corporation

- 2. Age < 18 years, LSG or laparoscopic RYGB is requested, and one of the following (a or b):
 - a. $BMI \ge 40 \text{ kg/m}^2 \text{ or } 140\% \text{ of the 95th percentile (whichever is lower)};$
 - b. BMI \geq 35 kg/m² or 120% of the 95th percentile with \geq 1 severe comorbidity listed below that has significant short-term effects on health and that is uncontrolled with lifestyle or pharmacotherapy management:
 - i. Type 2 DM
 - ii. Obstructive sleep apnea
 - iii. Idiopathic intracranial hypertension
 - iv. Nonalcoholic steatohepatitis
 - v. Blount's disease

- vi. Slipped capital femoral epiphysis (SCFE)
- vii. Gastroesophageal reflux disease
- viii. Hypertension
- ix. Hyperlipedemia
- x. Insulin resistance
- **II.** Preoperative evaluation and medical clearance requirements within 6 months of the scheduled surgery include *all* of the following:
 - A. Cardiac evaluation includes an electrocardiogram and *one* of the following categories (1 *or* 2):
 - 1. LOW CARDIAC RISK candidates, with *none* of the risk factors listed in section 2, need cardiac clearance by a PCP or cardiologist. If additional testing is needed, it should be conducted by a cardiologist.
 - 2. HIGH CARDIAC RISK candidates need consultation/evaluation and cardiac clearance from a cardiologist. High risk candidates include those with *any* of the following:
 - a. History of ischemic heart disease;
 - b. History of congestive heart failure;
 - c. History of cerebrovascular disease;
 - d. Glomerular filtration rate < 30 mL/min⁻¹;
 - e. High-grade arrhythmia;
 - f. Hemodynamically significant valvular heart disease.
 - B. Glycemic control should be optimized as evidenced by *one* of the following (not required if qualifying for surgery based on BMI \geq 30 kg/m2 and < 35 kg/m2 with type 2 DM):
 - 1. HbA1c < 7.0%;
 - 2. Fasting blood glucose level of $\leq 110 \text{ mg/dL}$;
 - 3. 2-hour postprandial blood glucose concentration of $\leq 140 \text{ mg/dL}$;
 - 4. HbA1c of 7 8% in candidates with advanced microvascular or macrovascular complications, extensive co-morbid conditions, or long-standing diabetes in which the general goal has been difficult to attain despite intensive efforts.
 - C. Pulmonary Evaluation:
 - 1. Chest x-ray;
 - 2. Screening for obstructive sleep apnea;
 - 3. Pulmonary function testing and arterial blood gas analysis for candidates with intrinsic lung disease or disordered sleep patterns;

CENTENE

- 4. Polysomnography (PSG) for evaluation of obstructive sleep apnea when at least *one* of the following criteria for PSG is met:
 - a. Recurrent witnessed apnea during sleep > 10 seconds in duration;
 - b. Excessive or inappropriate daytime sleepiness such as falling asleep while driving or eating;
 - Sleepiness that interferes with daily activities not explained by other conditions, such as poor sleep hygiene, medication, drugs, alcohol, psychiatric or psychological disorders;
 - d. Having an Epworth Sleepiness Scale score > 10;
 - e. Persistent or frequent disruptive snoring, choking or gasping episodes associated with awakenings;
- 5. Specialist should be consulted for interpretation of any abnormal findings.
- D. Nutritional evaluation, including micronutrient measurements and treatment of insufficiencies/deficiencies prior to surgery.
- E. Nutritional therapy/counseling
 - 1. Initial comprehensive diet history to include assessment of current pattern of nutrition and exercise and steps to modify problem eating behaviors;
 - 2. Monthly nutritional counseling until the date of the surgery;
 - 3. Prescribed exercise program;
 - 4. Must provide documentation that counseling has been conducted regarding the potential for success of weight loss surgery dependent on post-op diet modification (if patient < 18 years of age, consultation must be with adolescent AND parent/guardian).
- F. Age appropriate psychiatry/psychology consultation including all of the following:
 - 1. An in-person psychological evaluation to assess for major mental health disorders which would contradict surgery and determine ability to comply with post-operative care and guidelines;
 - 2. If history is positive for alcohol or drug abuse, meets both of the following:
 - a. Must provide documentation of alcohol and drug abstinence for ≥ 1 year prior to surgery;
 - b. Negative urine drug screen within 3 months of request;
 - 3. If age < 18 years: evaluation must also include assessment of emotional maturity, decisional capacity, family support and family willingness to participate in lifestyle changes.
- G. Screened with a TSH level if signs or symptoms of hypothyroidism (other than obesity) are present, and treated if found to be hypothyroid.
- H. A fasting lipid panel must be obtained and treatment initiated for dyslipidemia.
- I. Screening for *Helicobacter pylori* with a urea breath test or stool antigen test if signs or symptoms of active peptic ulcer disease are present, with documentation of treatment if positive for *H.pylori*.



- J. Prophylactic treatment for gouty attacks in patients with a history of gout.
- K. If tobacco user, must stop use > 6 weeks prior to surgery.

III. Repeat Surgeries

- A. Repeat bariatric surgery is considered medically necessary for one of the following:
 - 1. To correct complications from a previous bariatric surgery, such as obstruction or strictures (could include conversion surgeries to LSG or RYGB for adults or adolescents; or BPD-DS for adults);
 - 2. Conversion from LAGB to a LSG, RYGB or BPD-DS; or revision of a primary procedure that has failed due to dilation of the gastric pouch when all of the following criteria are met:
 - a. All criteria listed above for the initial bariatric procedure must be met again;
 - b. Previous surgery for morbid obesity was at least 2 years prior to repeat procedure;
 - c. Weight loss from the initial procedure was less than 50% of the member/enrollee's excess body weight at the time of the initial procedure;
 - d. If the conversion is requested due to removal of an eroded laparoscopic adjustable band, at least two months have passed between the band removal and the subsequent bariatric procedure;
 - e. Documented compliance with previously prescribed postoperative nutrition and exercise program. If non-compliant with postoperative regimen, member/enrollee will be required to take part in an established multidisciplinary bariatric program to meet all of the initial surgery criteria listed above;
 - f. Supporting documentation from the provider should also include a clinical explanation of the circumstances as to why the procedure failed and if initial procedure failure was related to non-compliance with diet then why the requesting provider feels member/enrollee will be compliant with diet after repeat surgery.
 - 3. Conversion of sleeve gastrectomy to Roux-en-Y gastric bypass for the treatment of gastro-esophageal reflux disease (GERD) when anti-reflux medical therapy has been tried and failed.

IV. Contraindications for surgical weight loss procedures include:

- A. Medically correctable causes of obesity;
- B. Current or planned pregnancy within 12 to 18 months of the procedure;
- C. Severe coagulopathy.
- **V.** It is the policy of health plans affiliated with Centene Corporation[®] that the following bariatric surgery procedures are considered **investigational**, because the medical literature indicates that studies have been inadequate to determine their efficacy and long-term outcomes:
 - A. Distal gastric bypass (very long limb gastric bypass);
 - B. Loop Gastric Bypass ("Mini-Gastric Bypass");
 - C. Laparoscopic re-sleeve gastrectomy (LRSG) performed after the resulting gastric pouch is primarily too large or dilates after the original LSG;
 - D. Fobi pouch;

CENTENE® Orporation

CLINICAL POLICY Bariatric Surgery

- E. Laparoscopic greater curvature plication (Gastric Imbrication);
- F. LAP-BAND when BMI is 30 to 35 with or without comorbid conditions;
- G. AspireAssist;
- H. Endoscopic Suture Revisions post bariatric surgery;
- I. Single anastomosis duodenoileal bypass (SADI);
- J. Gastric plication/ Endoluminal vertical gastroplasty;
- K. Endoscopic gastrointestinal bypass devices (EGIBD (barrier devices);
- **VI.** It is the policy of health plans affiliated with Centene Corporation[®] that the following bariatric surgery procedures are considered **not medically necessary**, due to potential complications and a lack of positive outcomes:
 - A. Biliopancreatic diversion (BPD) procedure (also known as the Scopinaro procedure);
 - B. Jejunoileal bypass (jejuno-colic bypass);
 - C. Vertical Banded Gastroplasty (VBG);
 - D. Gastric balloon;
 - E. Gastric pacing;
 - F. Gastric wrapping.

Background

There is sufficient evidence in peer-reviewed medical literature to support the use of the above mentioned bariatric surgeries for the clinically obese individual. Persons with clinically severe obesity are at risk for increased mortality and multiple co-morbidities. These co-morbidities include hypertension, hypertrophic cardiomyopathy, hyperlipidemia, diabetes, cholelithiasis, obstructive sleep apnea, hypoventilation, degenerative arthritis and psychosocial impairments.

The majority of severely obese patients losing weight through non-operative methods alone regain all the weight lost over the next five years. Surgical treatment is the only proven method of achieving long term weight control for the morbidly obese. Eating behaviors after surgery improve dramatically due to the restricted size of the stomach allowing only small amounts of food to be taken in at a time.

The success of the bariatric surgery does rely on the motivation and dedication to the program of the patient. The patient must be able to participate in the treatment and long-term follow up required after surgery. Studies have shown that about 10% of patients may have unsatisfactory weight loss or regain much of the weight they have lost. This may occur due to frequent snacking on high-calorie foods or lack of exercise. Technical problems that may occur include a stretched pouch due to overeating following surgery. Ensuring patients are motivated to lose weight can help prevent some of these issues.

Maximum weight loss usually occurs between 18 and 24 months postoperatively. The average weight loss at five years ranges from 48 to 74% after gastric bypass and 50 to 60% following gastric banding. Several studies have follow-up from 5-15 years with these patients maintaining weight loss of 50-60% of excess weight. The Lap Band is a small bracelet-like band placed around the top of the stomach to produce a small pouch about the size of a thumb. The size of the outlet is controlled by a circular balloon inside the band that can be inflated and deflated with



saline solution through an access port placed under the skin. The more inflated the balloon, the narrower the opening and slower passage of food to the rest of the stomach.

Roux-en-Y gastric bypass (RYGB) creates a small stomach pouch, bypassing most of the stomach, duodenum, and upper intestine. Weight loss occurs through restriction of food intake and by decreasing the absorption of food by re-routing food directly from the pouch into the small intestine.

Biliopancreatic diversion with duodenal switch (BPD-DS) is a complex operation that includes 1) removing a large portion of the stomach to promote smaller meal sizes, 2) re-routing of food away from much of the small intestine to prevent partial absorption of food, and 3) re-routing of bile and other digestive juices that impair digestion. The operation bypasses most of the duodenum, but leaves a small portion for food and the absorption of some vitamins and minerals. BPD-DS produces significant weight loss, but has a greater risk of long-term complications due to decreased absorption of food, vitamins, and minerals.

There are both early and later complications associated with these operations. Early complications can include bleeding, infections, leaks from suture sites and blood clots. Strictures, hernias, and malnutrition, especially when not taking prescribed vitamins and minerals, are all late complications that can occur in addition to the above mentioned stretched pouch or separated stitches. A repeat surgery is at times required to repair some of these complications.

In an updated position statement on the role of bariatric surgery in class I obesity (BMI of 30.0–34.9 kg/m ²), the American Society for Metabolic and Bariatric Surgery (ASMBS) recommend patients with BMI 30 to 35 kg/m ² and obesity- related co-morbidities who do not achieve substantial, durable weight loss and co-morbidity improvement with reasonable nonsurgical methods, bariatric surgery should be offered as an option for suitable individuals. In this population, surgical intervention should be considered after failure of nonsurgical treatments. Particularly given the presence of high-quality data in patients with type 2 diabetes, bariatric and metabolic surgery should be strongly considered for patients with BMI 30 to 35 kg/m ² and type 2 diabetes. AGB, SG, and RYGB have been shown to be well- tolerated and effective treatments for patients with BMI 30 to 35 kg/m ² Safety and efficacy of these procedures in low-BMI patients appear to be similar to results in patients with severe obesity. Currently, the best evidence for bariatric and metabolic surgery for patients with class I obesity and co-morbid conditions exists for patients in the 18 to 65 age group.³³

Bariatric Surgery in Adolescents

Weight loss surgery has been performed in small groups of adolescents since the 1970s. Recent data has shown a significant increase in the rate since 2000. It is likely that we will continue to see a rise in the rate of adolescents undergoing weight loss surgery with the current pediatric obesity epidemic. Children and adolescents who are severely obese are at risk for the same mortality and co-morbidities as adults. These co-morbidities include hypertension, hypertrophic cardiomyopathy, hyperlipidemia, diabetes, cholelithiasis, obstructive sleep apnea, depression and impaired quality of life. In addition, children in the BMI category \geq 35 kg/m² will almost always remain obese and 65% will have a BMI \geq 40 as an adult.



Changes in diet and physical activity must be attempted prior to weight loss surgery in adolescents. A multi-disciplinary, family-based approach should be undertaken to support a staged weight loss plan. However, studies suggest that dietary and behavioral interventions rarely result in significant and sustained weight loss in adolescents. This same multi-disciplinary and family approach must be taken when evaluating and planning for bariatric surgery in an adolescent.

The multi-disciplinary team should include an experienced bariatric surgeon, pediatric obesity specialist, nurse, dietician, and pediatric psychologist or psychiatrist. Additional sub-specialists must be readily available for evaluation of co-morbidities. The success of the bariatric surgery does rely on the motivation and dedication to the program of the patient and their family. The patient and family must be willing and able to participate in the treatment and long-term follow up required after surgery. The adolescent must show evidence of mature decision-making with appropriate understanding of the risks and benefits of surgery.

Current existing retrospective data on adolescent weight loss surgery demonstrate that bypass leads to clinically significant and durable decrease in weight loss and BMI. Studies have investigated LABG for the treatment of adolescent obesity, but it has fallen out of favor due to modest weight loss and high rates of revision and weight recidivism. Obesity-related diseases also improve or resolve after surgically induced weight loss in adolescents. There have not been enough studies to indicate what the long-term weight loss sustainability is in adolescents. Specific predictors of weight regain after bariatric surgery are still unknown.

Recently updated guidelines from the ASMBS on pediatric metabolic and bariatric surgery conclude that metabolic and bariatric surgery (MBS) is a proven, effective treatment for severe obesity disease in adolescents and should be considered standard of care. Treatment of severe obesity in adolescents clearly requires a multidisciplinary approach where MBS should not be consigned to the treatment of last resort. Rather, when considered appropriate and within the clinical best practice guidelines, MBS should be readily offered to adolescents with obesity to effectively reverse co-morbidities and achieve overall wellness. Prior weight loss attempts, Tanner stage, and bone age should not be barriers to definitive treatment. ³⁴

Investigational Procedures

Long-limb or Distal Gastric Bypass for Superobesity: An RCT has recently been completed by Svanevik et al., but only perioperative outcomes have been reported thus far. Svanevik et al. found that in superobese patients with BMI between 50 and 60 kg/m(2), distal gastric bypass was associated with longer operating time and more severe complications resulting in reoperation than proximal gastric bypass. There is increased risk of adverse nutritional outcomes with longer limb gastric bypass. At this time the long-limb or distal gastric bypass for superobesity is considered investigational, until more long-term studies can be done which reflect better outcomes than existing procedures.

Loop Gastric Bypass (Mini Gastric Bypass, one-anastomosis gastric bypass): The mini gastric bypass has not been universally accepted due to higher rates of alkaline bile reflux and limited



long-term research. More long-term research is needed to solidify mini gastric bypass surgery's position as a viable bariatric surgery option.

Re-Sleeve Gastrectomy for Failed Laparoscopic Sleeve Gastrectomy: Iannelli et al. (2012) noted that laparoscopic sleeve gastrectomy (LSG) was rapidly accepted as a valuable bariatric procedure before its effectiveness on weight loss in the long-term is clearly demonstrated. The authors report a feasibility study including 13 patients undergoing a redo LSG for either progressive weight regain after initial weight loss of insufficient weight loss. AlSabah et al. describe 24 patients who underwent re-sleeve laparoscopic gastrectomy after an initial LSG. Compared to 12 patients that initially had LSG, which was converted to LRYGB, results were similar, with no significant differences in percent of excess weight loss at one year. They conclude that larger and longer follow-up studies are needed to verify results.

Fobi Pouch or Silastic[®] Ring: The Fobi Pouch bariatric operation for obesity is a combination of stomach reduction and gastric bypass. The Silastic ring is placed around the vertically constructed gastric pouch above the anastomosis between the pouch and the intestinal Roux limb. Possible long term nutritional deficiencies involve fat soluble vitamin deficiencies of Calcium, Iron, B12, and Folic Acid. Patients are placed on nutritional supplements for the rest of their lives, and yearly monitoring is needed. The Fobi Pouch gastric bypass takes about double the time that a vertical banded gastroplasty operation takes. There is limited research on the outcomes of the Fobi pouch versus other bariatric surgery procedures.

Gastric Imbrication: Fried et al. (2011) completed a 3-year RCT on the safety and efficacy of laparoscopic adjustable gastric banding with and without imbrication sutures. The results of the RCT have demonstrated that SAGB combined with a conservative approach to band adjustments and limited retrogastric dissection is effective and safe with and without imbrication sutures. Not using imbrication sutures results in significant benefits in operative speed with comparable clinical weight loss and intermediate term safety. Sharma et al. conducted a randomized, double blinded trial comparing LSG and laparoscopic gastric imbrication (LGI). They found no differences in weight, age, or BMI preoperatively at 6 months or 3 years between the 2 groups.

The AspireAssist System (AspireAssist) was FDA approved in 2016. It is a weight loss device comprised of an endoscopically placed percutaneous gastrostomy tube and an external device to facilitate drainage of about 30% of each meal consumed. It is meant to be used in conjunction with diet and exercise. Thompson et al. (2017) performed a 1-year RCT comparing results of 207 patients treated with AspireAssist. The treatment group (n=137) received AspireAssist and lifestyle counseling and the control group (n=70) received lifestyle counseling alone. Compared to the control group, those who received the AspireAssist and counseling lost more weight: 58.6% of participants in the AspireAssist group and 15.3% of participants in the Lifestyle Counseling group lost at least 25% of their excess body weight (P<0.001). Additionally, Noren et al. (2016) conducted a prospective observational study on 25 patients. By the end of the 2-year observation period only 15 patients were still in the study. They concluded that AspireAssist is an efficient and safe treatment for obesity. There is no research on AspireAssist versus other bariatric surgery procedures.



To enhance weight loss, the following endoscopic procedures have been attempted to promote restriction of the pouch or stoma. These revisions have included: sclerotherapy of the site using 6 to 30 mL of sodium morrhuate injected circumferentially; tissue plication systems to reduce the size of the gastrojejunostomy and the gastric pouch; revisional surgery using a tissue plication device known as StomaPhyX to reduce the pouch size; and application of the endoclip to reduce the size of the gastrojejunal anastomosis. There is a lack of long-term outcomes for endoscopic revisions post RYGB.

The single anastomosis duodenoileal bypass (SADI), also known as single-anastomosis duodenal switch (SADS) combines restrictive, malabsorptive, and probably hormonal mechanisms for weight loss. The sleeve is created first, and the duodenum is divided after the pylorus. SADI creates an anastomosis between the side of the distal ileum and the end of the sleeve-like gastric pouch/duodenum. Data evaluating this procedure is limited. Technical complexity and long-term nutritional deficiencies have limited its acceptance. ¹⁶

Endoluminal vertical gastroplasty/gastric plication is an endoscopic approach for suturing the stomach that offers the potential to perform gastric-restrictive procedures endoluminally. The anterior and posterior walls of the stomach are suctioned together, then held in place by either a stapler or T-fastener device to create a tube of stomach similar to the sleeve gastrectomy.

Endoscopic gastrointestinal bypass devices (EGIBD) are barrier devices deployed to prevent luminal contents from being absorbed in the proximal small intestine (e.g., ValenTX, EndoBarrier). Data are still lacking about the longevity of these endobarriers and their outcomes once the barrier is removed.

Not Medically Necessary Procedures

Biliopancreatic Diversion (BPD) Procedure (Scopinaro procedure): The biliopancreatic diversion (BPD) is a malabsorptive procedure that was introduced as a solution to the high rates of liver failure resulting from bowel exclusion in the jejunoileal bypass. The procedure consists of a partial gastrectomy and gastroileostomy with a long segment of Roux limb and a short common channel, resulting in fat and starch malabsorption. BPD also has a restrictive component. The BPD/DS procedure differs from the BPD in the portion of the stomach that is removed, as well as preservation of the pylorus. This allows more forward flow of the contents of the biliopancreatic limb and avoids the complications of stasis that plagued the jejunoileal bypass (JIB). It is associated with fewer complications than BPD alone. BPD/DS is a complex procedure that is only performed at a few centers in the U.S.

Jejunoileal Bypass or Jejunoileal Intestinal Bypass (JIB): The jejunoileal bypass (also called the intestinal bypass) is performed by dividing the jejunum close to the ligament of Treitz and connecting it a short distance proximal to the ileocecal valve, thereby diverting a long segment of small bowel, resulting in malabsorption. This procedure is no longer performed due to the high complication rate and frequent need for revisional surgery. Per the American Society for Metabolic & Bariatric Surgery, the JIB is no longer a recommended bariatric surgical procedure. The lessons learned from the JIB include the crucial importance of long-term follow-up and the dangers of a permanent, severe and global malabsorption.



Vertical Banded Gastroplasty (VBG): VBG has fallen out of favor as a restrictive procedure for severe obesity, due largely to the advantages of adjustable gastric banding. VBG requires division of the stomach or intestinal resection, while LAGB does not. In addition, the staples used in VBG may break down and cause weight regain, and VBG requires the use of prosthetic mesh that may increase the incidence of stomach stenosis. Thus, CMS says in their National Coverage Determination for Bariatric Treatment for Morbid Obesity that "VBG procedures are essentially no longer performed."

Gastric Balloon: Previous endoscopic technologies used to treat obesity endoscopically, such as the gastric balloon, had limited exposure in the U.S. and were removed from the market because of associated complications, such as balloon deflation with migration and resultant small intestinal obstruction.

Gastric Pacing: A number of procedures have been investigated for weight loss surgery but have not been totally accepted by the surgical community. Gastric pacing has been performed in several trials but has not been shown to have any long-term effect and has been abandoned.

Gastric Wrapping: A gastric wrap is minimally invasive surgery and involves folding the stomach in on itself and then the edges are stitched to turn the stomach into a narrow tube therefore restricting the amount of food that can be consumed. As this surgery is very new and not widely offered. There is a paucity of peer-reviewed scientific literature on this procedure.

Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2020, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT codes that support medical necessity

CPT®*	Description
Codes	
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
43770*	Laparoscopy, surgical, gastric restrictive procedure; placement of adjustable gastric restrictive device (eg, 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



CPT®*	Description
Codes	
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, gastric restrictive procedure; longitudinal gastrectomy (ie, sleeve gastrectomy)
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
43848*	Revision, open, of gastric restrictive procedure for morbid obesity, other than adjustable gastric restrictive device (separate procedure)
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

^{*}Some codes may be used for both medically necessary and not medically necessary indications.

CPT codes that do not support medical necessity

CPT®*	Description
Codes	
43647	Laparoscopy, surgical; implantation or replacement of gastric neurostimulator electrodes, antrum
43842	Gastric restrictive procedure, without gastric bypass, for morbid obesity; vertical-banded gastroplasty
43847	Gastric restrictive procedure, with gastric bypass for morbid obesity; with small intestine reconstruction to limit absorption
43881	Implantation or replacement of gastric neurostimulator electrodes, antrum, open
64590	Insertion or replacement of peripheral or gastric neurostimulator pulse generator or receiver, direct or inductive coupling

HCPCS codes that support medical necessity



HCPCS	Description
Codes	
S2083	Adjustment of gastric band diameter via subcutaneous port by injection or
	aspiration of saline

+ Indicates a code requiring an additional character

+ Indicates a code i	requiring an additional character
ICD-10 Codes	Description
E10.10-E13.9	Diabetes Mellitus
E66.01-E66.9	Overweight and obesity
E74.00-E74.9	Other disorders of carbohydrate metabolism
E78.00-E78.9	Disorders of lipoprotein metabolism
G47.00-G47.9	Sleep disorder
G93.2	Benign intracranial hypertension
I10.0-I15.9	Hypertensive diseases
I20.0-I20.9	Angina pectoris
I25.10-I25.9	Chronic ischemic heart disease
I27.0-I27.9	Other pulmonary heart disease
I42.0-I42.9	Cardiomyopathy
I50.1-I50.9	Heart failure
I67.0-I67.9	Other cerebrovascular diseases
I83.001-I83.93	Varicose veins of lower extremities
K21.00-K21.9	Gastro-esophageal reflux disease
K31.1	Adult hypertrophic pyloric stenosis
K31.6	Fistula of stomach and duodenum
K56.50-K56.52	Intestinal adhesions [bands] with obstruction (post-procedural) (post-
	infection)
K68.11- K68.9	Disorders of retroperitoneum
K91.0-K91.89	Intraoperative and postprocedural complications and disorders, not
	elsewhere classified
M16.0-M16.9	Osteoarthritis of hip
M17.0-M17.9	Osteoarthritis of knee
M19.171-	Post-traumatic osteoarthritis, ankle and foot
M19.179	
M19.271-	Secondary osteoarthritis, ankle and foot
M19.279	
M24.00-M24.9	Other specific joint derangements
M25.80 -	Other specified joint disorders
M25.879	
M50.00-M50.93	Cervical disc disorders
M51.04-M51.9	Thoracic, thoracolumbar, and lumbosacral intervertebral disc disorders
M53.0-M53.9	Other and unspecified dorsopathies, not elsewhere classified
M54.00 - M54.9	Dorsalgia
R06.00-R06.9	Dyspnea
R09.01-R09.89	Other symptoms and signs involving the circulatory and respiratory
	systems



ICD-10 Codes	Description
R26.0-R26.9	Abnormalities of gait and mobility
T81.10X+-	Complications of procedures, not elsewhere classified
T81.9XX+	
T85.590+-	Other mechanical complication of gastrointestinal prosthetic devices,
T85.598+	implants and grafts

Reviews, Revisions, and Approvals	Date	Approval Date
Added gastric reduction duodenal switch	08/14	08/14
Removed bariatric surgery center requirement		
Added Investigational and Not Medically Necessary procedures, as well as	08/16	08/16
supporting background information.		
Added that the psychological evaluation must be done in-person. Clarified		
requirement for documentation of at least 1 year free of drugs and alcohol if		
history of abuse; added requirement for negative UDS within 3 months of		
request if history of abuse.		
Added uncontrolled and untreated eating disorders (eg, bulimia) under	08/17	08/17
contraindications. Added AspireAssist to investigational procedures and		
added related background information.		
Modified Sections I.B. and I.C. requiring a 6 month trial of an	11/17	11/17
exercise/weight loss program, or a medical condition that would supercede		
the need for such a program, and instead required "previous attempts at		
weight loss" per the American Society for Metabolic and Bariatric Surgery		
updated position statement on insurance mandated preoperative weight loss		
requirements (2016). Removed requirement in II.F. for 6 months of		
nutritional counseling, while still requiring monthly nutritional counseling		
until date of surgery. Removed requirement for documented compliance with		
exercise program in section II.G.		
Modified II.A.2 removing requirement for specific cardiac testing (stress		
test, echocardiogram) for high cardiac risk candidates and revised to state		
they require consultation/evaluation and cardiac clearance from a		
cardiologist.		
Replaced cardiac risk qualifiers with that from the reconstructed RCRI, in	06/18	06/18
addition to significant arrhythmias and valvular heart disease. Reworded		
hypothyroidism screening criteria to require testing if signs/symptoms of		
hypothyroidism other than obesity. For H. Pylori testing: removed		
requirement for screening in high prevalence areas; added requirement for		
treatment if positive.		
Revised and reorganized section I.A.1 by BMI and type of procedures	05/19	06/19
considered medically necessary. I.A.1.c, added medically necessary BMI		
category of > 30- < 35 when criteria is met. Revised I.A.2, a and b,		
clarifying weight parameters to reflect current terminology. I.A.2.a, removed		
requirement for co-morbidities. I.A.2.c, added comorbidities to this section.		



Reviews, Revisions, and Approvals	Date	Approval Date
Removed II.D, requirement that Tanner stage, or bone age should be completed. III.V, added single anastomosis duodenoileal bypass (SADI); gastric plication/ endoluminal vertical gastroplasty; and endoscopic gastrointestinal bypass devices (barrier devices) as investigational. Updated background. Coding updates		
In section IV, removed contraindications that are addressed elsewhere in the policy for clarity.	06/19	
Restructured criteria in section I. Medical History. Moved codes 43842 and 43847 to table of codes that do not support medical necessity. Added the following codes to the table that does not support medical necessity: 43647, 43881, 64590.	08/19	
In glycemic control section, changed HbA1C requirement to <7% instead of 6.5-7%. Noted that glycemic control requirement doesn't apply to those who qualify for surgery based on BMI between 30 and 35 with type 2 DM.	09/19	09/19
Changes to section III. Repeat surgeries: Clarified in III.A.1. that repair of complications could include revisions to LSG or RYGB for adults or adolescents, or to BPD-DS for adults. Added to III.A.2 that LSG was an acceptable revision procedure. Edited III.A.2.b. to say that previous surgery was 2 years prior, instead of 3. Added criteria to III.A.2.d. that if the conversion is requested due to removal of an eroded laparoscopic adjustable band, at least two months have passed between the band removal and the subsequent bariatric procedure. Added indication in III.A.3 for conversion of sleeve gastrectomy to Roux-en-Y gastric bypass for the treatment of gastroesophageal reflux disease (GERD) when anti-reflux medical therapy has been tried and failed. Updated description and background information regarding gastric banding in adolescents.	01/20	01/20
Added Coronary artery disease as a comorbidity under A.1.b.ii. Edits made to ICD-10 codes; M54-M54.9 now M54.00-M54.9; T81.1X+-T81.9X now T81.10X+ - T81.9XX+; and T85.59 – T85.59 now T85.590+ - T85.598+. References reviewed and updated.	05/20	06/20
Specified that H. Pylori screening should be conducted using a urea breath test or stool antigen test. Added the following ICD-10 code ranges: M17.0-M17.9, M19.171-M19.179 and M19.271-M19.279. 10/1/20 ICD 10 updates: Replaced category K21.0-K21.9 with K21.00- K21.9. Removed "member" from II.C.4. and II.G. Reworded II.G with no impact on criteria. Replaced "member" with "member/ enrollee" in all other instances.	10/20	10/20

References

1. August GP, et al. Prevention and treatment of pediatric obesity: An endocrine society clinical practice guideline based on expert opinion. J Clin Endocrinol Metab. Jan 2017, 102(3):709-757.

CENTENE

- 2. AlSabah S, Alsharqawi N, Almulla A, et al. Approach to Poor Weight Loss After Laparoscopic Sleeve Gastrectomy: Re-sleeve Vs. Gastric Bypass. Obes Surg. 2016 Mar 14. [Epub ahead of print].
- 3. Buchwald H. Bariatric surgery for morbid obesity: Health implications for patients, health professionals, and third-party payers. 2004 American Society for Bariatric Surgery Consensus Conference Statement. Surgery for Obesity and Related Disease, 2005:1:371-381.
- 4. Centers for Medicare and Medicaid Services. National Coverage Determination (NCD) for Bariatric Surgery for Treatment of Co-morbid Conditions Related to Morbid Obesity (100.1). Effective 9/24/13. Accessed 5/27/20.
- 5. Cohn SL. Fleisher LA. Evaluation of cardiac risk prior to noncardiac surgery. In: UpToDate, Pellikka PA (Ed), UpToDate, Waltham, MA. Accessed 5/29/20.
- 6. Colquitt J, Pickett K, Loveman E, Frampton GK. Surgery for weight loss in adults. Cochrane Database of Systematic Reviews, 2014. DOI: 10.1002/14651858.CD003641.pub4
- 7. Committee, ASMBS Clinical Issues. "Bariatric Surgery in Class I Obesity (Body Mass Index 30-35 kg/m²)." Surgery for Obesity and Related Diseases, vol. 9, no. 1, 2013, doi:10.1016/j.soard.2012.09.002.
- 8. Concetto Spampinato (1995): Skeletal bone age assessment. University of Catania, Viale Andrea Doria, 6 95125.
- 9. Davis C, Tait G, Carroll J, Wijeysundera DN, Beattie WS. The Revised Cardiac Risk Index in the new millennium: a single-centre prospective cohort re-evaluation of the original variables in 9,519 consecutive elective surgical patients. Can J Anaesth. 2013 Sep; 60(9):855-63.
- 10. Fried M, Dolezalova K, Sramkova P. Adjustable gastric banding outcomes with and without gastrogastric imbrication sutures: a randomized controlled trial. Surg Obes Relat Dis. 2011 Jan-Feb;7(1):23-31. doi: 10.1016/j.soard.2010.09.018. Epub 2010 Oct 30.
- 11. Hayes Medical Technology Directory. Comparative effectiveness review: Bariatric surgeries for treatment of obesity in adolescents. June 7, 2007. Updated January 21, 2019 Accessed May 29, 2020.
- 12. Hayes Medical Technology Directory. Intragastric balloons for the treatment of obesity. March 29, 2018. Accessed May 29, 2020.
- 13. Iannelli A, Schneck AS, Noel P, Ben Amor I, Krawczykowski D, Gugenheim J. Re-sleeve gastrectomy for failed laparoscopic sleeve gastrectomy: a feasibility study. Obes Surg. 2011 Jul;21(7):832-5. doi: 10.1007/s11695-010-0290-0.
- 14. Jensen MD, Ryan DH, Apovian CM, er al. 2013 AHA/ACC/TOS guideline for the management of overweight and obesity in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and The Obesity Society. J Am Coll Cardiol. 2014 Jul 1;63(25 Pt B):2985-3023.
- 15. Lim RB. Bariatric operations for management of obesity: Indications and preoperative preparation. In: UpToDate, Jones D (Ed), UpToDate, Waltham, MA. Accessed 05/29/20.
- 16. Lim RB. Bariatric procedures for the management of severe obesity: Descriptions. In: UpToDate, Jones D (Ed), UpToDate, Waltham, MA. Accessed 05/29/20.
- 17. Kim JJ, Rogers AM, Ballem N, Schirmer B. ASMBS updated position statement on insurance mandated preoperative weight loss requirements. *Surg Obes Relat Dis.* 2016 Jun;12(5):955-9. doi: 10.1016/j.soard.2016.04.019.

CENTENE

- 18. Mechanick JI, et al. Clinical practice guidelines for the perioperative nutritional, metabolic, and nonsurgical support of the bariatric surgery patient 2013 update: Cosponsored by American Association of Clinical Endocrinologist, The Obesity Society, and American Society for Metabolic & Bariatric Surgery. Surgery for Obesity and Related Diseases 9 (2013) 159-191.
- 19. Michalsky M, Reichard K, Inge T, Pratt J, Lenders C. ASMBS pediatric committee best practice guidelines. January 2012. Accessed at: https://asmbs.org/resources/pediatric-best-practice-guidelines.
- National Clinical Guideline Centre. Obesity: identification, assessment and management of overweight and obesity in children, young people and adults. 2006 (revised Nov 2014). NGC: 010611.
- 21. National Institute of Diabetes and Digestive and Kidney Diseases. Bariatric Surgery. Updated July 2016. Accessed at: https://www.niddk.nih.gov/health-information/weight-management/bariatric-surgery/all-content . Accessed 05/27/20.
- 22. Niemeijer M, van Ginneken B, Maas C, Beek, F. and Viergever, M. Assessing the skeletal age from a hand radiograph: automating the tanner-whitehouse method. In: Sonka, M., Fitzpatrick, J. (Eds.), Proceedings of SPIE on Medical Imaging, vol. 5032. SPIE. pp. 1197-1205.
- 23. Noren, Erik, and Henrik Forssell. "Aspiration Therapy for Obesity; a Safe and Effective Treatment." BMC Obesity. 2016:3(1). doi:10.1186/s40608-016-0134-0.
- 24. Parikh M, Chung M, Sheth S, et al. Randomized pilot trial of bariatric surgery versus intensive medical weight management on diabetes remission in type 2 diabetic patients who do NOT meet NIH criteria for surgery and the role of soluble RAGE as a novel biomarker of success. Ann Surg. 2014;260(4):617-622; discussion 622-624.
- 25. Sharma S, Nararia M, Cottam DR, Cottam S. Randomized double-blinded trial of laparoscopic gastric imbrication v laparoscopic sleeve gastrectomy at a single Indian institution. Obes Surg. 2015 May;25(5):800-4. doi: 10.1007/s11695-014-1497-2.
- 26. Spear BA, Barlow SE, et al. Recommendations for treatment of child and adolescent overweight and obesity. Pediatrics 2007;120;S254-S288. Accessed at: http://pediatrics.aappublications.org/cgi/reprint/120/Supplement_4/S254
- 27. Strauss RS, Bradley LJ, Brolin RE. Gastric bypass surgery in adolescents with morbid obesity. J Pediatr. 2001; 138(4):499-504. Medline Abstract.
- 28. Sugerman HJ, et al., Bariatric surgery for severely obese adolescents. Journal of Gastrointestinal Surgery, 2003;7(1):102-108.
- 29. Sugerman HJ, et al., Gastric bypass for treating severe obesity. Am J Clin Nutr, 1992. 55(2 Suppl): p. 550S-566S.
- 30. Svanevik M, Risstad H, Hofsø D, et al. Perioperative outcomes of proximal and distal gastric bypass in patients with BMI ranged 50-60 kg/m2 a double-blind, randomized controlled trial. Obes Surg. 2015; 25(10): 1788–1795. doi: 10.1007/s11695-015-1621-y
- 31. Thompson, Christopher C, et al. "Percutaneous Gastrostomy Device for the Treatment of Class II and Class III Obesity: Results of a Randomized Controlled Trial." The American Journal of Gastroenterology. 2016 June 6:112(3): 447-457. doi:10.1038/ajg.2016.500.
- 32. Xanthakos SA, Inge TH. Surgical management of severe obesity in adolescents. In: UpToDate, Jones D, Heyman MB (Ed), UpToDate, Waltham, MA. Accessed 05/29/20.



- 33. Aminian A, Chang J, Brethauer, et al. ASMBS updated position statement on bariatric surgery in class I obesity (BMI 30–35 kg/m2). Surg Obes Relat Dis. 2018 Aug;14(8):1071-1087. doi: 10.1016/j.soard.2018.05.025. Epub 2018 Jun 9
- 34. Pratt JSA, Browne A, Browne NT, et al. ASMBS pediatric metabolic and bariatric surgery guidelines, 2018. Surg Obes Relat Dis. 2018 Jul;14(7):882-901. doi: 10.1016/j.soard.2018.03.019. Epub 2018 Mar 23
- 35. Styne DM, Arslanian SA, Connor EL, et al. Pediatric Obesity-Assessment, Treatment, and Prevention: An Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab. 2017 Mar 1;102(3):709-757. doi: 10.1210/jc.2016-2573.
- 36. Armstrong SC, Bolling CF, Michaelsky MP, et al. AAP Section on Obesity, Section on Surgery. Pediatric Metabolic and Bariatric Surgery: Evidence, Barriers, and Best Practices. Pediatrics. 2019;144(6):e20193223.
- 37. Hayes Comparative Effectiveness Review of Mini Gastric Bypass-One Anastomosis Gastric Bypass For the Treatment of Obesity: A Review of Reviews. May 30, 2019. Accessed 5/29/20.
- 38. Mechanick JI, Kushner RF, Sugerman HJ, et al. American Association of Clinical Endocrinologists, The Obesity Society, and American Society for Metabolic & Bariatric Surgery Medical guidelines for clinical practice for the perioperative nutritional, metabolic, and nonsurgical support of the bariatric surgery patient. Endocr Pract. 2008 Jul-Aug;14 Suppl 1:1-83.

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan's affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.



This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members/enrollees. This clinical policy is not intended to recommend treatment for members/enrollees. Members/enrollees should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members/enrollees and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members/enrollees and their representatives agree to be bound by such terms and conditions by providing services to members/enrollees and/or submitting claims for payment for such services.

Note: For Medicaid members/enrollees, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

Note: For Medicare members/enrollees, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs and Medicare Coverage Articles should be reviewed <u>prior to</u> applying the criteria set forth in this clinical policy. Refer to the CMS website at http://www.cms.gov for additional information.

©2016 Centene Corporation. All rights reserved. All materials are exclusively owned by Centene Corporation and are protected by United States copyright law and international copyright law. No part of this publication may be reproduced, copied, modified, distributed, displayed, stored in a retrieval system, transmitted in any form or by any means, or otherwise published without the prior written permission of Centene Corporation. You may not alter or remove any trademark, copyright or other notice contained herein. Centene® and Centene Corporation® are registered trademarks exclusively owned by Centene Corporation.