Medical Coverage Policy | Bariatric Surgery

EFFECTIVE DATE: 06|01|2023
POLICY LAST REVIEWED: 02|05|2025

OVERVIEW

Surgery for obesity, termed bariatric surgery, is a treatment for morbid obesity in patients who fail to lose weight with conservative measures. There are numerous different surgical techniques available. These different techniques have heterogenous mechanisms of action, with varying degrees of gastric restriction that creates a small gastric pouch, malabsorption of nutrients, and metabolic changes that result from gastric and intestinal surgery.

This policy only address services that are not covered for Medicare Advantage Plans and not medically necessary for Commercial Products.
For all other services, please refer to the Prior Authorization via Web-Based Tool for Procedures policy listed in the Related Policies section below.

MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Not applicable

POLICY STATEMENT

Medicare Advantage Plans
The bariatric surgery procedures listed below are considered not covered as the evidence is insufficient to determine the effects of the technology on health outcomes:

- Open adjustable gastric banding
- Open sleeve gastrectomy
- Open and laparoscopic vertical banding gastroplasty
- Gastric balloon for treatment of obesity
- Intestinal bypass

Note: Blue Cross & Blue Shield of Rhode Island (BCBSRI) must follow Centers for Medicare and Medicaid Services (CMS) guidelines, such as national coverage determinations or local coverage determinations for all Medicare Advantage Plans policies. Therefore, Medicare Advantage Plans policies may differ from Commercial products. In some instances, benefits for Medicare Advantage Plans may be greater than what is allowed by CMS.

Commercial Products

The bariatric surgery procedures listed below are considered not medically necessary for the treatment of morbid obesity in adults who have failed weight loss by conservative measures as the evidence is insufficient to determine the effects of the technology on health outcomes:

- Vertical-banded gastroplasty
- Gastric bypass using a Billroth II type of anastomosis (mini-gastric bypass)
- Biliopancreatic bypass without duodenal switch
- Long-limb gastric bypass procedure (i.e., >150 cm)
- Two-stage bariatric surgery procedures (e.g., sleeve gastrectomy as initial procedure followed by biliopancreatic diversion at a later time)

- Laparoscopic gastric plication
- Single anastomosis duodeno-ileal bypass with sleeve gastrectomy

The following endoscopic procedures are not medically necessary as a primary bariatric procedure or as a revision procedure (i.e., to treat weight gain after bariatric surgery to remedy large gastric stoma or large gastric pouches), as the evidence is insufficient to determine the effects of the technology on health outcomes:

- Insertion of the StomaphyX™ device
- Endoscopic gastroplasty
- Use of an endoscopically placed duodenojejunal sleeve
- Intragastric balloons
- Aspiration therapy device
- Esophagogastroduodenoscopy - flexible, transoral, with volume adjustment of intragastric bariatric balloon

COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage or Subscriber Agreement for applicable surgery benefits/coverage or for applicable not medically necessary/not covered benefits/coverage.

BACKGROUND

Bariatric surgery is performed to treat obesity and obesity-related comorbid conditions. The first treatment of class III obesity is dietary and lifestyle changes. Although this strategy may be effective in some patients, only a few individuals with class III obesity can reduce and control weight through diet and exercise. Most patients find it difficult to comply with these lifestyle modifications on a long-term basis. When conservative measures fail, some patients may consider surgical approaches.

Intragastric balloon is unproven as a treatment for obesity. Further studies are needed to determine the safety and efficacy of intragastric balloon as a treatment option for obesity. Adverse effects associated with the intragastric balloon include gastric erosion, reflux, and obstruction (Fernandes, 2007). Currently, the available evidence in the published, peer-reviewed scientific literature is insufficient to establish the safety and efficacy of this procedure.

Vertical-banded gastroplasty was formerly one of the most common gastric restrictive procedures performed in the United States but has now been essentially replaced by other restrictive procedures due to high rates of revisions and reoperations. In this procedure, the stomach is segmented along its vertical axis. To create a durable reinforced and rate-limiting stoma at the distal end of the pouch, a plug of stomach is removed, and a propylene collar is placed through this hole and then stapled to itself. Because the normal flow of food is preserved, metabolic complications are uncommon. Complications include esophageal reflux, dilation, or obstruction of the stoma, with the latter two requiring reoperation. Dilation of the stoma is a common reason for weight regain. Vertical-banded gastroplasty may be performed using an open or laparoscopic approach.

Gastric Bypass Using a Billroth II Type of Anastomosis (mini-gastric bypass):
Recently, a variant of the gastric bypass, called the mini-gastric bypass, has been popularized. Using a laparoscopic approach, the stomach is segmented, similar to a traditional gastric bypass, but instead of creating a Roux-en-Y anastomosis, the jejunum is anastomosed directly to the stomach, similar to a Billroth II procedure. This unique aspect of this procedure is not based on its laparoscopic approach but rather the type of anastomosis used. It should also be noted that CPT code 43846 explicitly describes a Roux-en-Y gastroenterostomy, which is not used in the mini-gastric bypass.

Biliopancreatic Bypass (BPB) Without Duodenal Switch (~~CPT code 43847-~~ gastric restrictive procedure, with gastric bypass for morbid obesity; with small intestine reconstruction to limit absorption):
Biliopancreatic bypass procedure (also known as the Scopinaro procedure) was developed and used extensively in Italy. It was designed to address some of the drawbacks of the original intestinal bypass procedures that have been abandoned due to unacceptable metabolic complications. Many of the complications were thought to be related to bacterial overgrowth and toxin production in the blind, bypassed segment.-In contrast, BPB consists of a subtotal gastrectomy and diversion of the biliopancreatic juices into the distal ileum by a long Roux-en-Y procedure. The procedure consists of the following components:

- A distal gastrectomy induces a temporary early satiety and/or the dumping syndrome in the ear1y postoperative period, both of which limit food intake.
- A 200-cm long "alimentary tract" consists of 200 cm of ileum connecting the stomach to a common distal segment.
- A 300- to 400-cm "biliary tract" connects the duodenum, jejunum, and remaining ileum to the common distal segment.
- A 50- to 100-cm "common tract" is where food from the alimentary tract mixes with biliopancreatic juices from the biliary tract. Food digestion and absorption, particularly of fats and starches, are therefore limited to this small segment of bowel, i.e., creating a selective malabsorption. The length of the common segment will influence the degree of malabsorption.

Because of the high incidence of cholelithiasis associated with the procedure, patients typically undergo an associated cholecystectomy.

Many potential metabolic complications are related to biliopancreatic bypass, including most prominently, iron deficiency anemia, protein malnutrition, hypocalcemia, and bone demineralization. Protein malnutrition may require treatment with total parenteral nutrition. In addition, there have been several case reports of liver failure resulting in death or liver transplant.

Single Anastomosis Duodenoileal Bypass with Sleeve Gastrectomy (SADI-S) (~~no specific CPT code~~):
No controlled trials of single anastomosis duodenoileal bypass with SG, (SADI-S), were identified. Some case series have been published that report on weight loss and other clinical outcomes up to 5 years post-surgery. One of the larger series was published in 2015 and reported on 97 patients with obesity and type 2 diabetes mellitus (DM). The authors reported that control of DM, defined as HgA1c <6.0%, was achieved in between 70% and 84% of patients at the different time points. Remission rates were higher for patients on oral therapy than those on insulin, and were higher in patients with a shorter duration of DM.

Long-Limb Gastric Bypass (le, >150 cm) (Gastric restrictive procedure with gastric bypass for morbid obesity; with small intestine reconstruction to limit absorption):
Recently, variations of gastric bypass procedures have been described, consisting primarily of long-limb Roux-en-Y procedures, which vary in the length of the alimentary and common limbs. For example, the stomach may be divided with a long segment of the jejunum (instead of ileum) anastomosed to the proximal gastric stump, creating the alimentary limb. The remaining pancreaticobiliary limb, consisting of stomach remnant, duodenum, and length of proximal jejunum, is then anastomosed to the ileum, creating a common limb of variable length in which the ingested food mixes with the pancreaticobiliary juices.

While the long alimentary limb permits absorption of most nutrients, the short common limb primarily limits absorption of fats. The stomach may be bypassed in a variety of ways, i.e., either by resection or stapling along the horizontal or vertical axis. Unlike the traditional gastric bypass, which is essentially a gastric restrictive procedure, these very long-limb Roux-en-Y gastric bypasses combine gastric restriction with some element of malabsorptive procedure, depending on the location of the anastomoses. Note that CPT code for gastric bypass (43846) explicitly describes a short limb (<150 cm Roux-en-Y gastroenterostomy, and thus would not apply to long-limb gastric bypass.

Two-Stage Procedure:

The evidence on the comparative efficacy of different bariatric surgery approaches consists largely of low-quality evidence, with a lack of long-term, high-quality randomized controlled trials (RCTs). Compared with gastric bypass, the evidence is sufficient to conclude that laparoscopic adjustable gastric banding is associated with lower short-term complications and lower medium- to long-term weight loss. The evidence is also sufficient to conclude that sleeve gastrectomy has similar or lower short-term complications, with medium- to long-term weight loss that is somewhat less than for gastric bypass. The evidence on other types of bariatric surgery procedures is insufficient to form conclusions on the impact on health outcomes. For biliopancreatic bypass, the weight loss is similar or greater than gastric bypass but the complications rates, especially for nutritional complications, may also be higher. The evidence base for other types of procedures is insufficient to form conclusions.

Laparoscopic Gastric Plication (~~no specific CPT code~~):
Laparoscopic gastric plication is a bariatric surgery procedure that involves laparoscopic placement of sutures over the greater curvature (laparoscopic greater curvature plication) or anterior gastric region (laparoscopic anterior curvature plication) to create a tube-like stomach. The procedure involves two main steps, mobilization of the greater curvature of the stomach and suture plication of the stomach for achieving gastric restriction, but specifics of the technique are not standardized.

Endoscopic Procedures:
Endoscopic procedures (e.g., insertion of the StomaphyX™ device) as a primary bariatric procedure or as a revision procedure (i.e., to treat weight gain after bariatric surgery to remedy large gastric stoma or large gastric pouches): Some of these procedures use devices that are also being evaluated for endoscopic treatment of gastroesophageal reflux (GERD) (policy No. 2.01.38). The published data concerning use of these devices for treatment of regained weight is quite limited. Published case series have reported results using a number of different devices and procedures (including sclerosing injections) as treatment for this condition. The largest series found involved 28 patients treated with a sclerosing agent (sodium morrhuate). Reported trials that used one of the suturing devices had fewer than 10 patients. For example, Herron et al. reported on a feasibility study in animals. Thompson et al. reported on a pilot study with changes in anastomotic diameter and weight loss in 8 patients who had weight regain and dilated gastrojejunal anastomoses after RYGB. No comparative trials were identified; comparative trials are important because of the known association between an intervention and short-term weight loss. The StomaphyX™ device, which has been used in this approach, was cleared by the U.S. Food and Drug Administration (FDA) through the 510(k) process. It was determined be equivalent to the EndoCinch™ system, which has 510(k) marketing clearance for endoscopic suturing for gastrointestinal tract surgery. In summary, the published scientific literature on use of these devices in patients who regain weight after bariatric surgery is very limited. No comparative studies were identified. These endoscopic procedures are considered investigational.

Esophagogastroduodenoscopy with Bariatric Surgery
For Individuals with obesity undergoing bariatric surgery who receive esophagogastroduodenoscopy (EGD), the evidence includes systematic reviews of observational studies. Relevant outcomes are OS, change in disease status, functional outcomes, health status measures, quality of life, and treatment-related mortality and morbidity. Current research has focused on pre-operative utility of EGD. The evidence evaluating the scope of EGD in both intraoperative and postoperative settings is lacking in comparison. Systematic reviews have found that only one-fifth of patients had findings from EGD that either altered their operative management or postponed their bariatric surgery. There is a need for direct comparative homogenous studies assessing whether EGD should be routine before bariatric surgery, and whether it is judicious to expose many patients to an invasive procedure that has potential risk and insufficient evidence of effectiveness. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Bariatric Surgery in Patients with a BMI less than 35 KG/M2:
Limited evidence is available on bariatric surgery in patients with a BMI of less than 35 kg/m2. Case series report a high rate of remission of diabetes in undergoing gastric bypass surgery, and this indication was judged to meet the TEC criteria in 2012. However, bariatric surgery for diabetes in patients with a BMI less than 35 is not currently considered standard of care and is not supported in current specialty society

guidelines. For patients without diabetes, there is limited evidence on outcomes of surgery and no evidence that health outcomes are improved. As a result, bariatric surgery for patients with a BMI less than 35 is investigational.

The evidence on other types of bariatric surgery procedures is insufficient to form conclusions on the impact on health outcomes. For biliopancreatic bypass, the weight loss is similar or greater than gastric bypass but the complications rates, especially for nutritional complications, may also be higher. The evidence base for other types of procedures is insufficient to form conclusions.

For individuals who are preadolescent children with morbid obesity and receive bariatric surgery, the evidence includes no studies focused on this population. Relevant outcomes are overall survival, change in disease status, functional outcomes, health status measures, quality of life, and treatment related mortality and morbidity. Several studies of bariatric surgery in adolescents also included some children younger than 12 years old, but findings were not reported separately for preadolescent children. Moreover, clinical practice guidelines have recommended that bariatric surgery not be performed in preadolescent children. The evidence is insufficient to determine the effects of the technology on health outcomes.

CODING

Medicare Advantage Plans and Commercial Products

The following CPT code(s) are not covered for Medicare Advantage Plans and not medically necessary for Commercial Products:

43290 Esophagogastroduodenoscopy, flexible, transoral; with deployment of intragastric bariatric balloon
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
0813T Esophagogastroduodenoscopy, flexible, transoral, with volume adjustment of intragastric bariatric balloon (New code 1/01/2024)

There are no specific CPT code(s) for the not covered/not medically necessary indications listed in this policy. Claims should be filed using the unlisted CPT code(s):

43659 Unlisted laparoscopy procedure, stomach
43999 Unlisted procedure, stomach

The following HCPCS code(s) is not separately reimbursed:

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

RELATED POLICIES

Non-Reimbursable Health Service Codes
Prior Authorization via Web-Based Tool for Procedures
Unlisted Procedures

PUBLISHED

Provider Update, April 2025
Provider Update, June 2024
Provider Update, April 2023
Provider Update, May 2022
Provider Update, June 2021

REFERENCES

1. Garvey WT, Mechanick JI, Brett EM, et al. AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS AND AMERICAN COLLEGE OF ENDOCRINOLOGY COMPREHENSIVE CLINICAL PRACTICE GUIDELINES FOR MEDICAL CARE OF PATIENTS WITH OBESITYEXECUTIVE SUMMARYComplete Guidelines available at https://www.aace.com/publications/guidelines. Endocr Pract. Jul 2016; 22(7): 842-84. PMID 27472012

2. Centers for Disease Control and Prevention. Overweight & Obesity. Last Reviewed: June 3, 2022; https://www.cdc.gov/obesity/basics/adult-defining.html. Accessed March 29, 2024.
3. Buchwald H, Avidor Y, Braunwald E, et al. Bariatric surgery: a systematic review and meta-analysis. JAMA. Oct 13 2004;292(14):1724-1737. PMID 15479938
4. Maggard MA, Shugarman LR, Suttorp M, et al. Meta-analysis: surgical treatment of obesity. Ann Intern Med. Apr 5 2005;142(7):547-559. PMID 15809466
5. Gomes-Rocha SR, Costa-Pinho AM, Pais-Neto CC, et al. Roux-en-Y Gastric Bypass Vs Sleeve Gastrectomy in Super Obesity: a Systematic Review and Meta-Analysis. Obes Surg. Jan 2022; 32(1): 170-185. PMID 34642872
6. Currie AC, Askari A, Fangueiro A, et al. Network Meta-Analysis of Metabolic Surgery Procedures for the Treatment of Obesity and Diabetes. Obes Surg. Oct 2021; 31(10): 4528-4541. PMID 34363144
7. Wilhelm SM, Young J, Kale-Pradhan PB. Effect of bariatric surgery on hypertension: a meta-analysis. Ann Pharmacother. Jun 2014;48(6):674-682. PMID 24662112
8. Ricci C, Gaeta M, Rausa E, et al. Early impact of bariatric surgery on type II diabetes, hypertension, and hyperlipidemia: a systematic review, meta-analysis and meta-regression on 6,587 patients. Obes Surg. Apr 2014;24(4):522-528. PMID 24214202
9. Cuspidi C, Rescaldani M, Tadic M, et al. Effects of bariatric surgery on cardiac structure and function: a systematic review and meta-analysis. Am J Hypertens. Feb 2014;27(2):146-156. PMID 24321879
10. Kwok CS, Pradhan A, Khan MA, et al. Bariatric surgery and its impact on cardiovascular disease and mortality: a systematic review and meta-analysis. Int J Cardiol. Apr 15 2014;173(1):20-28. PMID 24636546
11. Afshar S, Kelly SB, Seymour K, et al. The effects of bariatric surgery on colorectal cancer risk: systematic review and meta-analysis. Obes Surg. Oct 2014;24(10):1793-1799. PMID 25015708
12. Andersen JR, Aasprang A, Karlsen TI, et al. Health-related quality of life after bariatric surgery: a systematic review of prospective long-term studies. Surg Obes Relat Dis. Mar-Apr 2015; 11(2): 466-73. PMID 25820082
13. Arterburn DE, Olsen MK, Smith VA, et al. Association between bariatric surgery and long-term survival. JAMA. Jan 6 2015;313(1):62-70. PMID 25562267
14. Bower G, Toma T, Harling L, et al. Bariatric Surgery and Non-Alcoholic Fatty Liver Disease: a Systematic Review of Liver Biochemistry and Histology. Obes Surg. Dec 2015; 25(12): 2280-9. PMID 25917981
15. Cheung D, Switzer NJ, Ehmann D, et al. The impact of bariatric surgery on diabetic retinopathy: a systematic review and meta-analysis. Obes Surg. Sep 2015;25(9):1604-1609. PMID 25515499
16. Driscoll S, Gregory DM, Fardy JM, et al. Long-term health-related quality of life in bariatric surgery patients: A systematic review and meta-analysis. Obesity (Silver Spring). Jan 2016; 24(1): 60-70. PMID 26638116
17. Groen VA, van de Graaf VA, Scholtes VA, et al. Effects of bariatric surgery for knee complaints in (morbidly) obese adult patients: a systematic review. Obes Rev. Feb 2015;16(2):161-170. PMID 25487972
18. Hachem A, Brennan L. Quality of Life Outcomes of Bariatric Surgery: A Systematic Review. Obes Surg. Feb 2016; 26(2): 395-409. PMID 26494369
19. Lindekilde N, Gladstone BP, Lubeck M, et al. The impact of bariatric surgery on quality of life: a systematic review and meta-analysis. Obes Rev. Aug 2015; 16(8): 639-51. PMID 26094664
20. Lopes EC, Heineck I, Athaydes G, et al. Is Bariatric Surgery Effective in Reducing Comorbidities and Drug Costs? A Systematic Review and Meta-Analysis. Obes Surg. Sep 2015; 25(9): 1741-9. PMID 26112137
21. Ricci C, Gaeta M, Rausa E, et al. Long-term effects of bariatric surgery on type II diabetes, hypertension and hyperlipidemia: a meta-analysis and meta-regression study with 5-year follow-up. Obes Surg. Mar 2015;25(3):397-405. PMID 25240392
22. Yang XW, Li PZ, Zhu LY, et al. Effects of bariatric surgery on incidence of obesity-related cancers: a meta-analysis. Med Sci Monit. May 11 2015; 21: 1350-7. PMID 25961664

23. Madadi F, Jawad R, Mousati I, et al. Remission of Type 2 Diabetes and Sleeve Gastrectomy in Morbid Obesity: a Comparative Systematic Review and Meta-analysis. Obes Surg. Dec 2019; 29(12): 4066-4076. PMID 31655953
24. Yan G, Wang J, Zhang J, et al. Long-term outcomes of macrovascular diseases and metabolic indicators of bariatric surgery for severe obesity type 2 diabetes patients with a meta-analysis. PLoS One. 2019; 14(12): e0224828. PMID 31794559
25. Castellana M, Procino F, Biacchi E, et al. Roux-en-Y Gastric Bypass vs Sleeve Gastrectomy for Remission of Type 2 Diabetes. J Clin Endocrinol Metab. Mar 08 2021; 106(3): 922-933. PMID 33051679
26. Carmona MN, Santos-Sousa H, Lindeza L, et al. Comparative Effectiveness of Bariatric Surgeries in Patients with Type 2 Diabetes Mellitus and BMI ≥ 25 kg/m 2 : a Systematic Review and Network Meta-Analysis. Obes Surg. Dec 2021; 31(12): 5312-5321. PMID 34611827
27. Chen ZW, Jin T, Liang PP, et al. Incidence of cancer for patients after bariatric surgery: evidence from 33 cohort studies. Surg Obes Relat Dis. May 2024; 20(5): 467-481. PMID 38151417
28. Sjostrom L, Lindroos AK, Peltonen M, et al. Lifestyle, diabetes, and cardiovascular risk factors 10 years after bariatric surgery. N Engl J Med. Dec 23 2004;351(26):2683-2693. PMID 15616203
29. Sjöström L. Surgical intervention as a strategy for treatment of obesity. Endocrine. Oct 2000; 13(2): 213-30. PMID 11186223
30. Sjostrom CD, Lissner L, Wedel H, et al. Reduction in incidence of diabetes, hypertension and lipid disturbances after intentional weight loss induced by bariatric surgery: the SOS Intervention Study. Obes Res. Sep 1999;7(5):477-484. PMID 10509605
31. Sjostrom L, Narbro K, Sjostrom CD, et al. Effects of bariatric surgery on mortality in Swedish obese subjects. N Engl J Med. Aug 23 2007;357(8):741-752. PMID 17715408
32. Sjöholm K, Carlsson LMS, Svensson PA, et al. Association of Bariatric Surgery With Cancer Incidence in Patients With Obesity and Diabetes: Long-term Results From the Swedish Obese Subjects Study. Diabetes Care. Feb 01 2022; 45(2): 444-450. PMID 34799430
33. Courcoulas AP, Christian NJ, Belle SH, et al. Weight change and health outcomes at 3 years after bariatric surgery among individuals with severe obesity. JAMA. Dec 11 2013;310(22):2416-2425. PMID 24189773
34. Arterburn D, Wellman R, Emiliano A, et al. Comparative Effectiveness and Safety of Bariatric Procedures for Weight Loss: A PCORnet Cohort Study. Ann Intern Med. Dec 04 2018; 169(11): 741-750. PMID 30383139
35. Arterburn DE, Johnson E, Coleman KJ, et al. Weight Outcomes of Sleeve Gastrectomy and Gastric Bypass Compared to Nonsurgical Treatment. Ann Surg. Dec 01 2021; 274(6): e1269-e1276. PMID 32187033
36. Wadden TA, Chao AM, Bahnson JL, et al. End-of-Trial Health Outcomes in Look AHEAD Participants who Elected to have Bariatric Surgery. Obesity (Silver Spring). Apr 2019; 27(4): 581-590. PMID 30900413
37. Blue Cross Blue Shield Association Technology Evaluation Center (TEC). Laparoscopic adjustable gastric banding for morbid obesity. TEC Assessment. 2006;Vol 21:Tab 13. Nov 3, 2024.
38. Ibrahim AM, Thumma JR, Dimick JB. Reoperation and Medicare Expenditures After Laparoscopic Gastric Band Surgery. JAMA Surg. Sep 01 2017; 152(9): 835-842. PMID 28514487
39. Chakravarty PD, McLaughlin E, Whittaker D, et al. Comparison of laparoscopic adjustable gastric banding (LAGB) with other bariatric procedures; a systematic review of the randomised controlled trials. Surgeon. Jun 2012;10(3):172-182. PMID 22405735
40. Dixon JB, O'Brien PE, Playfair J, et al. Adjustable gastric banding and conventional therapy for type 2 diabetes: a randomized controlled trial. JAMA. Jan 23 2008;299(3):316-323. PMID 18212316
41. Gu L, Huang X, Li S, et al. A meta-analysis of the medium- and long-term effects of laparoscopic sleeve gastrectomy and laparoscopic Roux-en-Y gastric bypass. BMC Surg. Feb 12 2020; 20(1): 30. PMID 32050953
42. Han Y, Jia Y, Wang H, et al. Comparative analysis of weight loss and resolution of comorbidities between laparoscopic sleeve gastrectomy and Roux-en-Y gastric bypass: A systematic review and meta-analysis based on 18 studies. Int J Surg. Apr 2020; 76: 101-110. PMID 32151750

43. Sharples AJ, Mahawar K. Systematic Review and Meta-Analysis of Randomised Controlled Trials Comparing Long-Term Outcomes of Roux-En-Y Gastric Bypass and Sleeve Gastrectomy. Obes Surg. Feb 2020; 30(2): 664-672. PMID 31724116
44. Shenoy SS, Gilliam A, Mehanna A, et al. Laparoscopic Sleeve Gastrectomy Versus Laparoscopic Roux-en-Y Gastric Bypass in Elderly Bariatric Patients: Safety and Efficacy-a Systematic Review and Meta-analysis. Obes Surg. Nov 2020; 30(11): 4467-4473. PMID 32594469
45. Borgeraas H, Hofsø D, Hertel JK, et al. Comparison of the effect of Roux-en-Y gastric bypass and sleeve gastrectomy on remission of type 2 diabetes: A systematic review and meta-analysis of randomized controlled trials. Obes Rev. Jun 2020; 21(6): e13011. PMID 32162437
46. Zhao H, Jiao L. Comparative analysis for the effect of Roux-en-Y gastric bypass vs sleeve gastrectomy in patients with morbid obesity: Evidence from 11 randomized clinical trials (meta-analysis). Int J Surg. Dec 2019; 72: 216-223. PMID 31756544
47. Lee Y, Doumouras AG, Yu J, et al. Laparoscopic Sleeve Gastrectomy Versus Laparoscopic Roux-en-Y Gastric Bypass: A Systematic Review and Meta-analysis of Weight Loss, Comorbidities, and Biochemical Outcomes From Randomized Controlled Trials. Ann Surg. Jan 01 2021; 273(1): 66-74. PMID 31693504
48. Elsaigh M, Awan B, Shabana A, et al. Comparing Safety and Efficacy Outcomes of Gastric Bypass and Sleeve Gastrectomy in Patients With Type 2 Diabetes Mellitus: A Systematic Review and Meta-Analysis. Cureus. Jan 2024; 16(1): e52796. PMID 38389648
49. Zevallos A, Sanches EE, Parmar C, et al. Remission of hypertension after laparoscopic sleeve gastrectomy versus Roux-en-Y-gastric bypass: a systematic review of randomized control trials. Surg Obes Relat Dis. Oct 12 2024. PMID 39477737
50. Memon MA, Osland E, Yunus RM, et al. The effect of laparoscopic vertical sleeve gastrectomy and laparoscopic roux-en-Y gastric bypass on gastroesophageal reflux disease: An updated meta-analysis and systematic review of 5-year post-operative data from randomized controlled trials. Surg Endosc. Nov 2024; 38(11): 6254-6269. PMID 39384655
51. Xu C, Yan T, Liu H, et al. Comparative Safety and Effectiveness of Roux-en-Y Gastric Bypass and Sleeve Gastrectomy in Obese Elder Patients: a Systematic Review and Meta-analysis. Obes Surg. Sep 2020; 30(9): 3408-3416. PMID 32277330
52. Osland E, Yunus RM, Khan S, et al. Weight Loss Outcomes in Laparoscopic Vertical Sleeve Gastrectomy (LVSG) Versus Laparoscopic Roux-en-Y Gastric Bypass (LRYGB) Procedures: A Meta-Analysis and Systematic Review of Randomized Controlled Trials. Surg Laparosc Endosc Percutan Tech. Feb 2017; 27(1): 8-18. PMID 28145963
53. Osland EJ, Yunus RM, Khan S, et al. Five-Year Weight Loss Outcomes in Laparoscopic Vertical Sleeve Gastrectomy (LVSG) Versus Laparoscopic Roux-en-Y Gastric Bypass (LRYGB) Procedures: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. Surg Laparosc Endosc Percutan Tech. Dec 2020; 30(6): 542-553. PMID 32658120
54. Juodeikis Z, Brimas G. Long-term results after sleeve gastrectomy: A systematic review. Surg Obes Relat Dis. Apr 2017; 13(4): 693-699. PMID 27876332
55. Zhang Y, Wang J, Sun X, et al. Laparoscopic sleeve gastrectomy versus laparoscopic Roux-en-Y gastric bypass for morbid obesity and related comorbidities: a meta-analysis of 21 studies. Obes Surg. Jan 2015;25(1):19-26. PMID 25092167
56. Trastulli S, Desiderio J, Guarino S, et al. Laparoscopic sleeve gastrectomy compared with other bariatric surgical procedures: a systematic review of randomized trials. Surg Obes Relat Dis. Sep-Oct 2013;9(5):816-829. PMID 23993246
57. Brethauer SA, Hammel JP, Schauer PR. Systematic review of sleeve gastrectomy as staging and primary bariatric procedure. Surg Obes Relat Dis. Jul-Aug 2009;5(4):469-475. PMID 19632646
58. Hofsø D, Fatima F, Borgeraas H, et al. Gastric bypass versus sleeve gastrectomy in patients with type 2 diabetes (Oseberg): a single-centre, triple-blind, randomised controlled trial. Lancet Diabetes Endocrinol. Dec 2019; 7(12): 912-924. PMID 31678062
59. Peterli R, Wölnerhanssen BK, Peters T, et al. Effect of Laparoscopic Sleeve Gastrectomy vs Laparoscopic Roux-en-Y Gastric Bypass on Weight Loss in Patients With Morbid Obesity: The SM-BOSS Randomized Clinical Trial. JAMA. Jan 16 2018; 319(3): 255-265. PMID 29340679

60. Salminen P, Helmiö M, Ovaska J, et al. Effect of Laparoscopic Sleeve Gastrectomy vs Laparoscopic Roux-en-Y Gastric Bypass on Weight Loss at 5 Years Among Patients With Morbid Obesity: The SLEEVEPASS Randomized Clinical Trial. JAMA. Jan 16 2018; 319(3): 241-254. PMID 29340676
61. Wölnerhanssen BK, Peterli R, Hurme S, et al. Laparoscopic Roux-en-Y gastric bypass versus laparoscopic sleeve gastrectomy: 5-year outcomes of merged data from two randomized clinical trials (SLEEVEPASS and SM-BOSS). Br J Surg. Jan 27 2021; 108(1): 49-57. PMID 33640917
62. Helmio M, Victorzon M, Ovaska J, et al. SLEEVEPASS: a randomized prospective multicenter study comparing laparoscopic sleeve gastrectomy and gastric bypass in the treatment of morbid obesity: preliminary results. Surg Endosc. Sep 2012;26(9):2521-2526. PMID 22476829
63. Karamanakos SN, Vagenas K, Kalfarentzos F, et al. Weight loss, appetite suppression, and changes in fasting and postprandial ghrelin and peptide-YY levels after Roux-en-Y gastric bypass and sleeve gastrectomy: a prospective, double blind study. Ann Surg. Mar 2008;247(3):401-407. PMID 18376181
64. Himpens J, Dapri G, Cadiere GB. A prospective randomized study between laparoscopic gastric banding and laparoscopic isolated sleeve gastrectomy: results after 1 and 3 years. Obes Surg. Nov 2006;16(11):1450-1456. PMID 17132410
65. Farrell TM, Haggerty SP, Overby DW, et al. Clinical application of laparoscopic bariatric surgery: an evidence- based review. Surg Endosc. May 2009;23(5):930-949. PMID 19125308
66. Esparham A, Roohi S, Mehri A, et al. Roux-en-Y gastric bypass versus duodenal switch in patients with body mass index ≥50 kg/m 2 : a systematic review and meta-analysis. Surg Obes Relat Dis. Sep 16 2024. PMID 39395846
67. Salte OBK, Olbers T, Risstad H, et al. Ten-Year Outcomes Following Roux-en-Y Gastric Bypass vs Duodenal Switch for High Body Mass Index: A Randomized Clinical Trial. JAMA Netw Open. Jun 03 2024; 7(6): e2414340. PMID 38829616
68. Thomas SM, Costa V, Holubowich C, et al. Bariatric Surgery for Adults With Class I Obesity and Difficult-to-Manage Type 2 Diabetes: A Health Technology Assessment. Ont Health Technol Assess Ser. 2023; 23(8): 1-151. PMID 38130940
69. Yan Y, Sha Y, Yao G, et al. Roux-en-Y Gastric Bypass Versus Medical Treatment for Type 2 Diabetes Mellitus in Obese Patients: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. Medicine (Baltimore). Apr 2016; 95(17): e3462. PMID 27124041
70. Wu GZ, Cai B, Yu F, et al. Meta-analysis of bariatric surgery versus non-surgical treatment for type 2 diabetes mellitus. Oncotarget. Dec 27 2016; 7(52): 87511-87522. PMID 27626180
71. Cummings DE, Cohen RV. Bariatric/Metabolic Surgery to Treat Type 2 Diabetes in Patients With a BMI 35 kg/m2. Diabetes Care. Jun 2016; 39(6): 924-33. PMID 27222550
72. Cummings DE, Rubino F. Metabolic surgery for the treatment of type 2 diabetes in obese individuals. Diabetologia. Feb 2018; 61(2): 257-264. PMID 29224190
73. Muller-Stich BP, Senft JD, Warschkow R, et al. Surgical versus medical treatment of type 2 diabetes mellitus in nonseverely obese patients: a systematic review and meta-analysis. Ann Surg. Mar 2015;261(3):421-429. PMID 25405560
74. Rao WS, Shan CX, Zhang W, et al. A meta-analysis of short-term outcomes of patients with type 2 diabetes mellitus and BMI </= 35 kg/m2 undergoing Roux-en-Y gastric bypass. World J Surg. Jan 2015;39(1):223-230. PMID 25159119
75. Mingrone G, Panunzi S, De Gaetano A, et al. Bariatric-metabolic surgery versus conventional medical treatment in obese patients with type 2 diabetes: 5 year follow-up of an open-label, single-centre, randomised controlled trial. Lancet. Sep 05 2015; 386(9997): 964-73. PMID 26369473
76. Blue Cross Blue Shield Association Technology Evaluation Center (TEC). Bariatric Surgery In Patients With Diabetes And Body Mass Index Less Than 35 kg/m2 TEC Assessments. 2012;Volume 27:Tab 2. Nov 1, 2024.
77. Slater GH, Ren CJ, Siegel N, et al. Serum fat-soluble vitamin deficiency and abnormal calcium metabolism after malabsorptive bariatric surgery. J Gastrointest Surg. Jan 2004;8(1):48-55; discussion 54-45. PMID 14746835
78. Dolan K, Hatzifotis M, Newbury L, et al. A clinical and nutritional comparison of biliopancreatic diversion with and without duodenal switch. Ann Surg. Jul 2004;240(1):51-56. PMID 15213618

79. Blue Cross Blue Shield Association Technology Evaluation Center (TEC). TEC Special Report: The relationship between weight loss and changes in morbidity following bariatric surgery for morbid obesity. TEC Assessments. 2003;Vol 18:Tab 18. Nov 5, 2024.
80. Coffin B, Maunoury V, Pattou F, et al. Impact of Intragastric Balloon Before Laparoscopic Gastric Bypass on Patients with Super Obesity: a Randomized Multicenter Study. Obes Surg. Apr 2017; 27(4): 902-909. PMID 27664095
81. Cottam D, Qureshi FG, Mattar SG, et al. Laparoscopic sleeve gastrectomy as an initial weight-loss procedure for high-risk patients with morbid obesity. Surg Endosc. Jun 2006;20(6):859-863. PMID 16738970
82. Alexandrou A, Felekouras E, Giannopoulos A, et al. What is the actual fate of super-morbid-obese patients who undergo laparoscopic sleeve gastrectomy as the first step of a two-stage weight-reduction operative strategy? Obes Surg. Jul 26 2012;22(10):1623-1628. PMID 22833137
83. Silecchia G, Rizzello M, Casella G, et al. Two-stage laparoscopic biliopancreatic diversion with duodenal switch as treatment of high-risk super-obese patients: analysis of complications. Surg Endosc. May 2009;23(5):1032-1037. PMID 18814005
84. Li H, Wang J, Wang W, et al. Comparison Between Laparoscopic Sleeve Gastrectomy and Laparoscopic Greater Curvature Plication Treatments for Obesity: an Updated Systematic Review and Meta-Analysis. Obes Surg. Sep 2021; 31(9): 4142-4158. PMID 34227019
85. Sullivan S, Swain JM, Woodman G, et al. Randomized sham-controlled trial evaluating efficacy and safety of endoscopic gastric plication for primary obesity: The ESSENTIAL trial. Obesity (Silver Spring). Feb 2017; 25(2): 294-301. PMID 28000425
86. Esparham A, Roohi S, Ahmadyar S, et al. The Efficacy and Safety of Laparoscopic Single-Anastomosis Duodeno-ileostomy with Sleeve Gastrectomy (SADI-S) in Mid- and Long-Term Follow-Up: a Systematic Review. Obes Surg. Dec 2023; 33(12): 4070-4079. PMID 37880461
87. Axer S, Al-Tai S, Ihle C, et al. Perioperative Safety and 1-Year Outcomes of Single-Anastomosis Duodeno-Ileal Bypass (SADI) vs. Biliopancreatic Diversion with Duodenal Switch (BPD/DS): A Randomized Clinical Trial. Obes Surg. Sep 2024; 34(9): 3382-3389. PMID 39042310
88. Chen W, Feng J, Dong S, et al. Efficacy and safety of duodenal-jejunal bypass liner for obesity and type 2 diabetes: A systematic review and meta-analysis. Obes Rev. Nov 2024; 25(11): e13812. PMID 39191438
89. Rohde U, Hedback N, Gluud LL, et al. Effect of the EndoBarrier Gastrointestinal Liner on obesity and type 2 diabetes: a systematic review and meta-analysis. Diabetes Obes Metab. Mar 2016; 18(3): 300-5. PMID 26537317
90. Courcoulas A, Abu Dayyeh BK, Eaton L, et al. Intragastric balloon as an adjunct to lifestyle intervention: a randomized controlled trial. Int J Obes (Lond). Mar 2017; 41(3): 427-433. PMID 28017964
91. Genco A, Cipriano M, Bacci V, et al. BioEnterics Intragastric Balloon (BIB): a short-term, double-blind, randomised, controlled, crossover study on weight reduction in morbidly obese patients. Int J Obes (Lond). Jan 2006;30(1):129-133. PMID 16189503
92. Kotzampassi K, Grosomanidis V, Papakostas P, et al. 500 intragastric balloons: what happens 5 years thereafter? Obes Surg. Jun 2012;22(6):896-903. PMID 22287051
93. Saber AA, Shoar S, Almadani MW, et al. Efficacy of First-Time Intragastric Balloon in Weight Loss: a Systematic Review and Meta-analysis of Randomized Controlled Trials. Obes Surg. Feb 2017; 27(2): 277-287. PMID 27465936
94. Moura D, Oliveira J, De Moura EG, et al. Effectiveness of intragastric balloon for obesity: A systematic review and meta-analysis based on randomized control trials. Surg Obes Relat Dis. Feb 2016; 12(2): 420-9. PMID 26968503
95. Zheng Y, Wang M, He S, et al. Short-term effects of intragastric balloon in association with conservative therapy on weight loss: a meta-analysis. J Transl Med. Jul 29 2015; 13: 246. PMID 26219459
96. Kotinda APST, de Moura DTH, Ribeiro IB, et al. Efficacy of Intragastric Balloons for Weight Loss in Overweight and Obese Adults: a Systematic Review and Meta-analysis of Randomized Controlled Trials. Obes Surg. Jul 2020; 30(7): 2743-2753. PMID 32300945

97. Thompson CC, Abu Dayyeh BK, Kushner R, et al. Percutaneous Gastrostomy Device for the Treatment of Class II and Class III Obesity: Results of a Randomized Controlled Trial. Am J Gastroenterol. Mar 2017; 112(3): 447-457. PMID 27922026
98. Noren E, Forssell H. Aspiration therapy for obesity; a safe and effective treatment. BMC Obes. 2016; 3: 56. PMID 28035287
99. Ataya K, Al Jaafreh AM, El Bourji H, et al. Roux-en-Y Gastric Bypass Versus One Anastomosis Gastric Bypass as Revisional Surgery After Failed Sleeve Gastrectomy: A Systematic Review and Meta-analysis. J Metab Bariatr Surg. Dec 2023; 12(2): 57-66. PMID 38196783
100. Matar R, Monzer N, Jaruvongvanich V, et al. Indications and Outcomes of Conversion of Sleeve Gastrectomy to Roux-en-Y Gastric Bypass: a Systematic Review and a Meta-analysis. Obes Surg. Sep 2021; 31(9): 3936-3946. PMID 34218416
101. Parmar CD, Gan J, Stier C, et al. One Anastomosis/Mini Gastric Bypass (OAGB-MGB) as revisional bariatric surgery after failed primary adjustable gastric band (LAGB) and sleeve gastrectomy (SG): A systematic review of 1075 patients. Int J Surg. Sep 2020; 81: 32-38. PMID 32738545
102. Brethauer SA, Kothari S, Sudan R, et al. Systematic review on reoperative bariatric surgery: American Society for Metabolic and Bariatric Surgery Revision Task Force. Surg Obes Relat Dis. Sep-Oct 2014;10(5):952-972. PMID 24776071
103. Dang JT, Vaughan T, Mocanu V, et al. Conversion of Sleeve Gastrectomy to Roux-en-Y Gastric Bypass: Indications, Prevalence, and Safety. Obes Surg. May 2023; 33(5): 1486-1493. PMID 36922465
104. Petrucciani N, Martini F, Benois M, et al. Revisional One Anastomosis Gastric Bypass with a 150-cm Biliopancreatic Limb After Failure of Adjustable Gastric Banding: Mid-Term Outcomes and Comparison Between One- and Two-Stage Approaches. Obes Surg. Dec 2021; 31(12): 5330-5341. PMID 34609712
105. Sudan R, Nguyen NT, Hutter MM, et al. Morbidity, mortality, and weight loss outcomes after reoperative bariatric surgery in the USA. J Gastrointest Surg. Jan 2015;19(1):171-178; discussion 178-179. PMID 25186073
106. Catalano MF, Rudic G, Anderson AJ, et al. Weight gain after bariatric surgery as a result of a large gastric stoma: endotherapy with sodium morrhuate may prevent the need for surgical revision. Gastrointest Endosc. Aug 2007;66(2):240-245. PMID 17331511
107. Herron DM, Birkett DH, Thompson CC, et al. Gastric bypass pouch and stoma reduction using a transoral endoscopic anchor placement system: a feasibility study. Surg Endosc. Apr 2008;22(4):1093-1099. PMID 18027049
108. Thompson CC, Slattery J, Bundga ME, et al. Peroral endoscopic reduction of dilated gastrojejunal anastomosis after Roux-en-Y gastric bypass: a possible new option for patients with weight regain. Surg Endosc. Nov 2006;20(11):1744-1748. PMID 17024527
109. Eid GM, McCloskey CA, Eagleton JK, et al. StomaphyX vs a sham procedure for revisional surgery to reduce regained weight in Roux-en-Y gastric bypass patients: a randomized clinical trial. JAMA Surg. Apr 2014;149(4):372-379. PMID 24554030
110. Dakin GF, Eid G, Mikami D, et al. Endoluminal revision of gastric bypass for weight regain--a systematic review. Surg Obes Relat Dis. May-Jun 2013;9(3):335-342. PMID 23561960
111. Cohen RV, Oliveira da Costa MV, Charry L, et al. Endoscopic gastroplasty to treat medically uncontrolled obesity needs more quality data: A systematic review. Surg Obes Relat Dis. Jul 2019; 15(7): 1219-1224. PMID 31130406
112. Oei K, Johnston BC, Ball GDC, et al. Effectiveness of surgical interventions for managing obesity in children and adolescents: A systematic review and meta-analysis framed using minimal important difference estimates based on GRADE guidance to inform a clinical practice guideline. Pediatr Obes. Nov 2024; 19(11): e13119. PMID 39362833
113. Qi L, Guo Y, Liu CQ, et al. Effects of bariatric surgery on glycemic and lipid metabolism, surgical complication and quality of life in adolescents with obesity: a systematic review and meta-analysis. Surg Obes Relat Dis. Dec 2017; 13(12): 2037-2055. PMID 29079384
114. Black JA, White B, Viner RM, et al. Bariatric surgery for obese children and adolescents: a systematic review and meta-analysis. Obes Rev. Aug 2013;14(8):634-644. PMID 23577666

115. Treadwell JR, Sun F, Schoelles K. Systematic review and meta-analysis of bariatric surgery for pediatric obesity. Ann Surg. Nov 2008;248(5):763-776. PMID 18948803
116. Roebroek YGM, Paulus GF, Talib A, et al. Weight Loss and Glycemic Control After Bariatric Surgery in Adolescents With Severe Obesity: A Randomized Controlled Trial. J Adolesc Health. Mar 2024; 74(3): 597-604. PMID 38069930
117. Shah A, Liang NE, Bruzoni M, et al. Outcomes after metabolic and bariatric surgery in preteens versus teens using the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program database and center-specific data. Obesity (Silver Spring). Jan 2024; 32(1): 150-155. PMID 37800184
118. Alqahtani AR, Elahmedi M, Abdurabu HY, et al. Ten-Year Outcomes of Children and Adolescents Who Underwent Sleeve Gastrectomy: Weight Loss, Comorbidity Resolution, Adverse Events, and Growth Velocity. J Am Coll Surg. Dec 2021; 233(6): 657-664. PMID 34563670
119. Greenstein RJ, Nissan A, Jaffin B. Esophageal anatomy and function in laparoscopic gastric restrictive bariatric surgery: implications for patient selection. Obes Surg. Apr 1998;8(2):199-206. PMID 9730394
120. Pilone V, Vitiello A, Hasani A, et al. Laparoscopic adjustable gastric banding outcomes in patients with gastroesophageal reflux disease or hiatal hernia. Obes Surg. Feb 2015;25(2):290-294. PMID 25030091
121. Kohn GP, Price RR, DeMeester SR, et al. Guidelines for the management of hiatal hernia. Surg Endosc. Dec 2013;27(12):4409-4428. PMID 24018762
122. Chen W, Feng J, Wang C, et al. Effect of Concomitant Laparoscopic Sleeve Gastrectomy and Hiatal Hernia Repair on Gastroesophageal Reflux Disease in Patients with Obesity: a Systematic Review and Meta-analysis. Obes Surg. Sep 2021; 31(9): 3905-3918. PMID 34254259
123. Malaussena Z, Mhaskar R, Richmond N, et al. Hernia repair in the bariatric patient: a systematic review and meta-analysis. Surg Obes Relat Dis. Feb 2024; 20(2): 184-201. PMID 37973424
124. Muir D, Choi B, Holden M, et al. Preoperative Oesophagogastroduodenoscopy and the Effect on Bariatric Surgery: a Systematic Review and Meta-Analysis. Obes Surg. Aug 2023; 33(8): 2546-2556. PMID 37314649
125. El Ansari W, El-Menyar A, Sathian B, et al. Is Routine Preoperative Esophagogastroduodenoscopy Prior to Bariatric Surgery Mandatory? Systematic Review and Meta-analysis of 10,685 Patients. Obes Surg. Aug 2020; 30(8): 3073-3083. PMID 32468339
126. Campos GM, Mazzini GS, Altieri MS, et al. ASMBS position statement on the rationale for performance of upper gastrointestinal endoscopy before and after metabolic and bariatric surgery. Surg Obes Relat Dis. May 2021; 17(5): 837-847. PMID 33875361
127. Mechanick JI, Apovian C, Brethauer S, et al. CLINICAL PRACTICE GUIDELINES FOR THE PERIOPERATIVE NUTRITION, METABOLIC, AND NONSURGICAL SUPPORT OF PATIENTS UNDERGOING BARIATRIC PROCEDURES - 2019 UPDATE: COSPONSORED BY AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS/AMERICAN COLLEGE OF ENDOCRINOLOGY, THE OBESITY SOCIETY, AMERICAN SOCIETY FOR METABOLIC BARIATRIC SURGERY, OBESITY MEDICINE ASSOCIATION, AND AMERICAN SOCIETY OF ANESTHESIOLOGISTS - EXECUTIVE SUMMARY. Endocr Pract. Dec 2019; 25(12): 1346-1359. PMID 31682518
128. Eisenberg D, Shikora SA, Aarts E, et al. 2022 American Society for Metabolic and Bariatric Surgery (ASMBS) and International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO): Indications for Metabolic and Bariatric Surgery. Surg Obes Relat Dis. Dec 2022; 18(12): 1345-1356. PMID 36280539
129. Blonde L, Umpierrez GE, Reddy SS, et al. American Association of Clinical Endocrinology Clinical Practice Guideline: Developing a Diabetes Mellitus Comprehensive Care Plan-2022 Update. Endocr Pract. Oct 2022; 28(10): 923-1049. PMID 35963508
130. Department of Veterans Affairs/Department of Defense. Clinical Practice Guidelines. Management of Adult Overweight and Obesity (OBE) (2020). https://www.healthquality.va.gov/guidelines/CD/obesity/. Accessed April 2, 2024
131. Daly S, Kumar SS, Collings AT, et al. SAGES guidelines for the surgical treatment of hiatal hernias. Surg Endosc. Sep 2024; 38(9): 4765-4775. PMID 39080063

132. Childerhose JE, Alsamawi A, Mehta T, et al. Adolescent bariatric surgery: a systematic review of recommendation documents. Surg Obes Relat Dis. Oct 2017; 13(10): 1768-1779. PMID 28958402
133. Armstrong SC, Bolling CF, Michalsky MP, et al. Pediatric Metabolic and Bariatric Surgery: Evidence, Barriers, and Best Practices. Pediatrics. Dec 2019; 144(6). PMID 31656225
134. Hampl SE, Hassink SG, Skinner AC, et al. Clinical Practice Guideline for the Evaluation and Treatment of Children and Adolescents With Obesity. Pediatrics. Jan 09 2023. PMID 36622115
135. Michalsky M, Reichard K, Inge T, et al. ASMBS pediatric committee best practice guidelines. Surg Obes Relat Dis. Jan-Feb 2012;8(1):1-7. PMID 22030146
136. Pratt JSA, Browne A, Browne NT, et al. ASMBS pediatric metabolic and bariatric surgery guidelines, 2018. Surg Obes Relat Dis. Jul 2018; 14(7): 882-901. PMID 30077361
137. August GP, Caprio S, Fennoy I, et al. Prevention and treatment of pediatric obesity: an Endocrine Society clinical practice guideline based on expert opinion. J Clin Endocrinol Metab. Dec 2008;93(12):4576-4599. PMID 18782869
138. Styne DM, Arslanian SA, Connor EL, et al. Pediatric Obesity-Assessment, Treatment, and Prevention: An Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab. Mar 01 2017; 102(3): 709-757. PMID 28359099
139. Nagula S, Parasa S, Laine L, et al. AGA Clinical Practice Update on High-Quality Upper Endoscopy: Expert Review. Clin Gastroenterol Hepatol. May 2024; 22(5): 933-943. PMID 38385942
140. Centers for Medicare and Medicaid Services (CMS). Decision Memo for Bariatric Surgery for the Treatment of Morbid Obesity (CAG-00250R). 2006; https://www.cms.gov/medicare-coverage-database/details/nca-decision-memo.aspx?NCAId=160. Accessed April 1, 2024.
141. Gloy VL, Briel M, Bhatt DL, et al. Bariatric surgery versus non-surgical treatment for obesity: a systematic review and meta-analysis of randomised controlled trials. BMJ. Oct 22 2013;347:f5934. PMID 24149519
142. Puzziferri N, Roshek TB, 3rd, Mayo HG, et al. Long-term follow-up after bariatric surgery: a systematic review. JAMA. Sep 3 2014;312(9):934-942. PMID 25182102
143. Colquitt JL, Pickett K, Loveman E, et al. Surgery for weight loss in adults. Cochrane Database Syst Rev. 2014;8:CD003641. PMID 25105982
144. Kang JH, Le QA. Effectiveness of bariatric surgical procedures: A systematic review and network meta-analysis of randomized controlled trials. Medicine (Baltimore). Nov 2017; 96(46): e8632. PMID 29145284
145. Park CH, Nam SJ, Choi HS, et al. Comparative Efficacy of Bariatric Surgery in the Treatment of Morbid Obesity and Diabetes Mellitus: a Systematic Review and Network Meta-Analysis. Obes Surg. Jul 2019; 29(7): 2180-2190. PMID 31037599
146. Cosentino C, Marchetti C, Monami M, et al. Efficacy and effects of bariatric surgery in the treatment of obesity: Network meta-analysis of randomized controlled trials. Nutr Metab Cardiovasc Dis. Sep 22 2021; 31(10): 2815-2824. PMID 34348877