

# Action Brief

## BARIATRIC SURGERY

### A FRESH LOOK AT BENEFIT DESIGN CONSIDERATIONS

*When combined with lifestyle modification, bariatric surgery can be effective in addressing obesity*



#### EPIDEMIOLOGY AND ECONOMICS OF OBESITY

The prevalence of obesity among adults in the United States is approximately 40%, with rates varying based on age, gender and race/ethnicity.<sup>1</sup> State and regional variations in adult obesity rates also have been identified.<sup>2</sup>

The clinical consequences of obesity are well recognized. People with obesity, in comparison with those at a healthy weight, are at significantly increased risk for mortality, as well as many chronic conditions including diabetes, hypertension, heart disease, stroke, gallbladder disease, osteoarthritis, some cancers, depression and other mental health disorders, body pain, and sleep apnea.<sup>3</sup>

As a result, obesity is a significant driver of direct and indirect costs (lost productivity) in employed populations. A large-scale study found that the costs of medical utilization, short-term disability, and workers' compensation claims combined with absence was \$8,067 for morbidly obese employees (BMI>40) in comparison with \$3,830 for normal weight employees, in 2011 dollars.<sup>4</sup> A recent review found that "estimated mean annual per capita health care expenses attributable to obesity are \$1,160 for men and \$1,525 for

women. Workers who were obese had more than double the work limitation of those who were of normal weight."<sup>5</sup>

In 2013, the American Medical Association recognized obesity as "a disease state with multiple pathophysiological aspects requiring a range of interventions to advance obesity treatment and prevention." Lifestyle programs, pharmacologic interventions, and surgery all are important tools to help manage a highly prevalent, high-impact disease. In this Action Brief we focus on bariatric surgery and considerations for surgical benefit design.

#### WHY COVER BARIATRIC SURGERY?

*Bariatric surgery can be an important tool in employer efforts to address obesity and chronic conditions.* Current guidelines indicate that individuals with BMI>40, and those with BMI>35 who also have chronic conditions associated with obesity such as diabetes and hypertension, should be considered candidates for surgical intervention.

#### PROCEDURES:

There are a variety of bariatric procedures, all of which seek to produce weight loss by either restricting the volume of food the stomach can hold or

#### ACTION STEPS FOR EMPLOYERS:

- 1. Know your data.** Look at the obesity rates in your population, as well as utilization and outcome measures.
- 2. Review your benefits.** Offer bariatric surgery benefits that are truly accessible to employees.
- 3. Review your provider network and payment mechanisms.** Choose accredited surgery centers and/or ask providers for quality and outcomes data; consider implementing bundled payments; understand complication rates.



*“Complications and mortality have decreased to the extent that the risk-benefit ratio clearly favors a broader application in the medically complicated obese population.”*

causing malabsorption of nutrients (or both). The four most common procedures in use today are:

- ▶ Roux-en-Y gastric bypass
- ▶ Sleeve gastrectomy
- ▶ Adjustable gastric band
- ▶ Bileopancreatic diversion with duodenal switch (BP/DS)

Information on what these procedures do and their relative advantages and disadvantages can be found through the [American Society for Bariatric and Metabolic Surgery website \(asmb.org\)](http://www.asmb.org).

### **EFFECTIVENESS:**

Most published studies have demonstrated the effectiveness of bariatric surgery procedures as a treatment for morbid obesity. A 2017 review and meta-analysis found that gastric bypass and sleeve gastrectomy were equally effective, and both were more effective than gastric banding.<sup>6</sup> Weight loss from bariatric surgery also appears to be sustained over long periods of time. A 2017 review found that five years after gastric bypass, excess

weight loss was 62.6% and after 10 years it was 63.5%. For sleeve gastrectomy, excess weight loss was 53.3% after five years (10-year data is not yet available).<sup>7</sup> Numerous studies have demonstrated that weight loss associated with bariatric surgery results in reversals or reductions in severity of obesity-associated chronic diseases. For example, one study in a population with established diabetes found that over 88% of patients undergoing gastric bypass or sleeve gastrectomy were able to maintain healthy blood glucose levels without the use of insulin.<sup>8</sup> Another published study shows that bariatric surgery lowered the risk of developing any cancer by one-third, and obesity-associated cancers by more than 40%.<sup>9</sup>

### **SAFETY:**

Bariatric surgery is relatively safe and the risk of surgical complications is significantly lower than the risks associated with morbid obesity. A recent review found that “in certified centers, the risks of primary bariatric procedures have been reported to be identical to gallbladder surgery and joint replacement.”<sup>10</sup> The overall complication rate for bariatric procedures has been reported to be less than 4%, with overall mortality rates estimated between 0.1% and 0.3%. Adjustable gastric band procedures are less commonly being done today because of higher rates of complications including band slipping requiring adjustment or removal and lower rates of effectiveness. A 2015 review of the literature on complication rates concluded: “Bariatric surgery is safe and has become more so as surgeons gain experience in the evaluation and treatment of the obese patient. Although there are several surgical options, each has its own technical and metabolic issues that should be considered when choosing a weight-loss surgery for each patient. Complications and mortality have decreased to the extent that the risk-benefit ratio clearly favors a broader application in the medically complicated obese population.”<sup>11</sup>

### **ECONOMIC EVALUATION:**

Costs of bariatric surgery depend on numerous factors including type of procedure, geography and, of course, payor contracts. Obesitycoverage.com, a consumer-facing website, estimates costs of gastric bypass at \$23,000, sleeve gastrectomy at \$14,900, and laparoscopic banding at \$14,500.<sup>12</sup> Studies have estimated that costs of surgery are typically recovered within two to four years after surgery.

## **TAKING A FRESH LOOK AT BARIATRIC SURGERY BENEFIT DESIGN: ACTION STEPS FOR EMPLOYERS**

Review of the literature and discussion with clinical experts and benefits consultants has yielded the following recommended action steps for employers committed to addressing the obesity epidemic and its health and economic consequences:

### **1. KNOW YOUR DATA:**

- ▶ Look at obesity rates in your population, overall and by demographic subgroup, and geographic location.
- ▶ Review data on bariatric surgery utilization and outcomes (weight loss, costs) if you already offer a bariatric surgery benefit. Make sure the majority of bariatric procedures being reimbursed are those that are currently recommended based on higher effectiveness and lower rates of complication (sleeve gastrectomy, Roux-en-Y gastric bypass).
- ▶ Determine the proportion of the population that could be eligible for bariatric surgery based on clinical criteria (BMI >=40 or BMI >=35 with diabetes or other chronic conditions exacerbated by obesity). Recognize that not all will be candidates or will want surgery.

## 2. REVIEW YOUR BENEFITS:

- ▶ Consider offering a bariatric surgery benefit if not already offered.
- ▶ Review your current bariatric surgery benefit, if offered. Consider plan document language that relies on standard medical practice as specified by the American Society for Metabolic and Bariatric Surgery (ASMBS). Consider not covering gastric banding or ensure that prior authorization has appropriate criteria in place to determine when this procedure will be approved.
- ▶ Discuss current coverage and utilization management criteria with health plans and benefits consultants. Ask how the plan currently authorizes and manages surgery, including ensuring that appropriate medical and behavioral healthcare services are in place for both the pre- and post-surgical periods.
- ▶ Consider reducing or eliminating waiting periods for those seeking surgery. Require counseling and education so the surgical candidate fully understands the benefits and risks and is physically and emotionally prepared to make lifestyle changes needed to support a successful outcome.
- ▶ Offer employees educational resources that include the bariatric surgery benefit as one option within the full spectrum of weight-loss benefits and programs.
- ▶ Review current plan out-of-pocket payments for individuals seeking bariatric surgery. Consider reducing out-of-pocket expenses for all candidates or candidates at high risk of morbid obesity complications,

using established clinical criteria (i.e., a value-based insurance design approach to the bariatric surgery benefit to ensure access for those for whom bariatric surgery is a high-value service).

## 3. REVIEW YOUR PROVIDER NETWORK AND PAYMENT MECHANISMS:

- ▶ Review the current credentialed network for bariatric surgery offered by your health plan. Ensure that, at a minimum, the health plan limits the network to surgery centers that have been accredited by the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP)
- ▶ Ask your health plan how bariatric surgery programs and surgeons are currently reimbursed. Review your claims to determine current costs. Consider implementing case rates/bundled payments that include pre-assessment, surgery, and post-surgical monitoring and support services.
- ▶ Ask your health plan to report on complication rates including infections and repeat procedure rates for surgical centers in the network.

## ENDNOTES

1. Hales CM, Carroll MD, Fryar CD, Ogden CL. Prevalence of obesity among adults and youth: United States 2015-2016. NCHS Data Brief No. 228. October 2017. <https://www.cdc.gov/nchs/databriefs/db288.pdf>
2. Trust for America's Health. The State of Obesity 2018. Better Policies for a Healthier America. Issue Brief. TFAH-2018 Obesity Report-Final-1.pdf. [pp 18-19] <https://www.tfah.org/stateofobesity2018/>
3. Centers for Disease Control and Prevention. The Health Effects of Overweight and Obesity. <https://www.cdc.gov/healthyweight/effects/index.html>
4. Van Nuys K, Globe G, Ng-Mak D, Sullivan J, Goldman D. The association between employee obesity and employer costs: Evidence from a panel of U.S. employers. *Am J Health Promot.* 2014;28(5):277-285
5. Yarbrough CM 3rd, Brethauer S, Burton WN et al. Obesity in the workplace: Impact, outcomes, and recommendations. *J Occup Environmental Med.* 2018;60(1):97-107. p. 100. doi:10.1097/JOM.0000000000001220

6. Kang JH, Le QA. Effectiveness of bariatric surgery procedures: A systematic review and network meta-analysis of randomized controlled trials. *Medicine (Baltimore).* 2017;96(46):e8632 doi: 10.1097/MD.0000000000008632
7. Golzarand M, Toolabi K, Farid R. The bariatric surgery and weight losing: a meta-analysis in the long- and very long-term effects of laparoscopic adjustable gastric banding, laparoscopic Roux-en-Y gastric bypass and laparoscopic sleeve gastrectomy on weight loss in adults. *Surg Endosc.* 2017;31(11):4331-4345
8. Schauer PR, Bhatt DL, Kashyap SR et al., Bariatric surgery versus intensive medical therapy for diabetes 5-year outcomes. *NEJM.* 2017;376(20):1997. Doi: 10.1056/NEJMc1703377.
9. Schauer DP, Feigelson HS, Koebnick C, et al. Association between weight loss and the risk of cancer after bariatric surgery. *Obesity (Silver Spring).* 2017;25 Suppl 2(S52-S57). doi: 10.1002/oby.22002.
10. Yarbrough CM 3rd, Brethauer S, Burton WN, Fabius RJ et al. Obesity in the workplace: Impact, outcomes, and recommendations. *J Occup Environmental Med.* 2018;60(1):97-107. p. 103. doi:10.1097/JOM.0000000000001220
11. Ma IT, Madura JA 2nd. Gastrointestinal complications after bariatric surgery. *Gastroenterol Hepatol.* 2015;11(8):526-535.
12. <https://www.obesitycoverage.com/weight-loss-surgery-insurance-coverage-and-costs/>.

## FOR MORE INFORMATION

- American Society for Metabolic and Bariatric Surgery
- Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP)
- Obesity Action Coalition: Overview of Bariatric Surgery

## ACKNOWLEDGMENTS

Development of this Action Brief was supported by Ethicon. Ethicon provided reference materials and general guidance, but final content was determined by the National Alliance. Some content is based on a panel discussion at the National Alliance's November 2018 Fall Forum, moderated by Neil Goldfarb, president and CEO of the Greater Philadelphia Business Coalition on Health, with panelists including: Dr. Janine Kyrillos, director of Thomas Jefferson University's Comprehensive Weight Management Program; Dr. Samuel Wasser, bariatric surgeon at Virtua; and John Dawson, chief actuary at Healthstat.